#### (12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

## (19) World Intellectual Property **Organization**

International Bureau





(10) International Publication Number WO 2018/218261 A4

(51) International Patent Classification:

G06F 21/30 (2013.01) H04L 29/06 (2006.01) G06Q 50/26 (2012.01) H04W 4/02 (2018.01)

(21) International Application Number:

PCT/ZA2018/050018

(22) International Filing Date:

26 April 2018 (26.04.2018)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

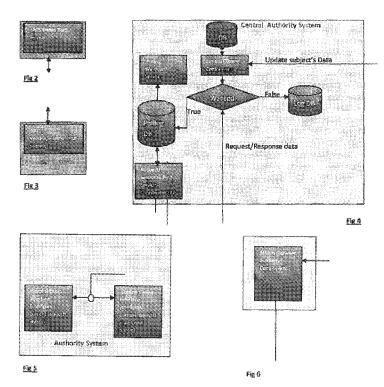
2017/002811

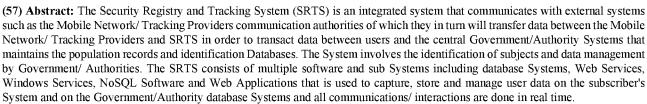
21 April 2017 (21.04.2017)

ZA

- (72) Inventor; and
- (71) Applicant: UDOH, Kenneth [ZA/ZA]; 108, Leicester road, Kensington, 2094 Johannesburg (ZA).
- (81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BN, BR, BW, BY, BZ, CA, CH, CL, CN, CO, CR, CU, CZ, DE, DJ, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IR, IS, JO, JP, KE, KG, KH, KN, KP, KR, KW, KZ, LA, LC, LK, LR, LS, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PA, PE, PG, PH, PL, PT, QA, RO, RS, RU, RW, SA, SC, SD, SE, SG, SK, SL, SM, ST, SV, SY, TH, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW.
- (84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LR, LS, MW, MZ, NA, RW, SD, SL, ST, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, RU, TJ, TM), European (AL, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV, MC, MK, MT, NL, NO, PL, PT, RO, RS, SE, SI, SK, SM,

#### (54) Title: SECURITY REGISTRY AND TRACKING SYSTEM (SRTS)





# 

TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, KM, ML, MR, NE, SN, TD, TG).

#### **Declarations under Rule 4.17:**

— as to the identity of the inventor (Rule 4.17(i))

#### **Published:**

- with international search report (Art. 21(3))
- with amended claims (Art. 19(1))
- the filing date of the international application is within two months from the date of expiration of the priority period (Rule 26bis.3)

## (88) Date of publication of the international search report:

07 February 2019 (07.02.2019)

## Date of publication of the amended claims:

21 March 2019 (21.03.2019)

## AMENDED CLAIMS

received by the International Bureau on 29 January 2019 (29.01.2019)

# **Security Registry and Tracking System (SRTS)**

#### Claim 1

The SRTS is an integrated system that communicates with external systems such as the Provider's communication authorities of which they in turn will transfer data between the Providers and SRTS in order to transact data between users and the Government/Entity Systems that maintains the population records and identification Databases.

## Claim 2

The SRTS involves the identification of subjects and data management by Government/Entity.

#### Claim 3

The SRTS consists of multiple software and sub Systems including database Systems, Web Services, Windows Services, Search enhancement Software and Web Applications that is used to capture, store and manage user data on the subscriber's System and on the Government/Entity database Systems and all communications/interactions are done in real time.

### Claim 4

The SRTS aims to address the needs for security within the Global Community by helping law enforcements to identify Subjects by tracking their movements through cellphone/device tracking and location tracking by registering identifications of a person entering the subscriber's premises, which is then sent to the authorities/Entity for data management.

## Claim 5

The SRTS can also be used by Government/Entity to profile Individuals by their movements, it can also be used to help find missing persons by identifying their last known locations and can be used for general population management and control.

#### Claim 6

The SRTS can also be used to track/control objects e.g. Cars, Aircrafts or any other machines that are programmable or have programmable embedded devices.

## Claim 7

The SRTS will also be used to generate revenue by charging subscribers/Vendors of the System a premium.

PCT/ZA2018/050018

# 24

## Claim 8

It does not store subject's data but simply transfers the data between the Government/Entity Systems and the Subscriber's/Vendor's Systems and will be transferred securely via network or the internet by using the available and most efficient data security technologies.

#### Claim 9

It will store transactional data in order to invoice the subscriber on an agreed interval, and manage the subscriber's information and access.

### Claim 10

SRTS will be integrated into an existing IMS System (Enterprise Studio), which then can be provided as a complete solution to an Enterprise to manage their business activities in one integrated System that consists of other web applications (Modules).

#### Claim 11

SRTS will have a landing page with Advert feeds(slides) that will allow businesses to market their product by providing a link to their web site on which will be available to all users across the world that are integrated to SRTS.

#### Claim 12

The Subscriber, which could be any enterprise that requires access control to their premises, will establish an environment of which the system will operate.

## Claim 13

The System consists of a Database of which the response data from the Government/Entity Systems will be stored, managed and reports can be generated from the records of data residing in the Database.

#### Claim 14

A web Application integrated with a Component will integrate the Government/Entity Systems and the Subscriber's System by transferring data between the two environments in real-time.

#### Claim 15

The Subscriber's User interface will be a web application, written using a JavaScript Framework for performance optimization and scalability, which can be accessed via the subscriber's network, if the subscriber has franchises, branches or substructures then the Application will be installed and configured to suit their environments.

25

PCT/ZA2018/050018

## Claim 16

SRTS will be lightweight and will transmit data in real-time, but Load balancers and other network technologies and configuration tools will be used to optimize the performance on large Subscriber's Networks if needed.

#### Claim 17

The Subscriber will register every individual or groups requesting entry to their premises by requesting their identification number (ID, Passport, Cellphone numbers or any other form of identification), capturing it into the system and then forwarding the data including the Address and GPS coordinates of the Subscriber's premises for verification by the Government/Entity Systems.

### Claim 18

The Government/Entity Systems will respond with data including the registered details and Official Image of the Individuals on the Government/Entity Systems. If the Subject is wanted by the Government/Entity, then SRTS will initiate the tracking process and will not alert the System user of the initiated process, but will alert the Control Center of the Subject's current GPS location and physical address.

## Claim 19

If there is a security bridge at the premises the subscriber will have the ability to identify the perpetrators on their system and forward their details including their picture, reasons for submissions and comments regarding the submissions to the Government/Entity immediately, they will then analyze the data received from the Subscriber and flag the Subject/s for tracking if required.

## Claim 20

The Subscriber will be able to capture visitors by groups or individually for data accuracy. When the Data is returned from the Government/Entity Systems, the user will be able to validate the visitor's details and picture in person with the image displayed on the user interface to ensure that security is not compromised.

#### Claim 21

The SRTS Bridge Rest Service provides an integration Bridge between the SRTS Client (Enterprise Studio) and the Central Control Rest Service or SRTS Vendors/International providers and their Systems. The Vendors will have access by subscriptions and will be able to render services to their subscribers by sending/receiving requests/responses through the SRTS Bridge Rest Service.

## Claim 22

The SRTS Bridge Rest Service will be used as an administrative tool to manage/record traffics from the Subscribers and Vendors, record usage and provide a secure gateway to the Central Control Component.

26

#### Claim 23

SRTS Vendors/ International providers is an external system that provides SRTS services to its users by transmitting data to and from the SRTS Bridge Component. The Vendor could be an organization that validates or evaluates data by its identity e.g. Banks could use SRTS to validate or evaluate customer's transactions.

#### Claim 24

Marketing agencies could use SRTS to collect and profile subjects' information or a Point of Sale (POS) System could validate or evaluate Customers' identity when purchasing an item.

## Claim 25

The international provider could be another SRTS implementation in another country and integrates to the national SRTS via the SRTS Bridge or an international authority System that could use the National SRTS to validate or evaluate subjects' information.

#### Claim 26

If the subject's data is transmitted between SRTS implementations or law enforcements, then the subject's data will be in depth data transmission or as per configuration by the subject's hosting SRTS implementation.

### Claim 27

The Central authority system is the main part of the SRTS; it will integrate with the National Population database via a Search Enhancement application Server that is maintained by the Government/Entity.

## Claim 28

The Government/Entity System will respond with the requested data to a request by the Central Control Component.

#### Claim 29

The Central Control Component is part of the SRTS, which will integrate with the Government/Entity System and will manage the communication between the Polling System, the Subscriber's System, the Communication Registrar's Registry System and the Government/Entity System.

## Claim 30

The Central Control Component also determines if the data received should be sent for polling to the Providers or logged on the log Database based on the instructions from the Government/Entity System.

## Claim 31

The Log Database stores records of individuals not flagged for polling by the Government/Entity System.

#### Claim 32

The Log Database contains request data from the Subscribers, Vendors, and International Providers and can be used for analysis and profiling of Subjects.

#### Claim 33

The Polling Windows Service retrieves instruction data of Subjects flagged for Tracking from the Polling Database and transmits them to the Providers.

#### Claim 34

The Request/Response Component retrieves the flagged Subject's data including GPS Coordinates from the Providers and stores it in the Polling Database

#### Claim 35

Request/Response Component also responds to requests from the Tracking Interfaces and the Control Centers Interfaces that are tracking the flagged subject.

### Claim 36

The Polling Database stores all requests and response records to and from the Providers.

## <u>Claim 37</u>

The Polling Database also stores the polling interval and number of polling as instructed by the Central Control Component.

## Claim 38

The Authority system consists of the Tracking and control center interfaces which requests and transmits data to and from the Request/Response Component.

PCT/ZA2018/050018

## Claim 39

The Tracking Interface is part of the SRTS and will transmit data to and from the Request/Response Component. It will have the capability to configure basic data requirements, but major configurations is done by the Control Center.

# Claim 40

The Control Center is part of the SRTS and will manage and configure all data transmitted between SRTS and the Providers.

## Claim 41

The Control Center is the Admin interface of the Central Authority Interface which will be used to configure data e.g. polling intervals, number of polling requests and Polling Terminations.

## Claim 42

If the Tracking Interface is not available, the Control Center Interface can be used to fulfill the required functionality.

## Claim 43

The Provider's Routing Component is part of the SRTS and will transmit Subject's data between SRTS and the Providers and will be managed and maintained by the Providers, and they will configure the service and determine the information SRTS will receive.