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PTO/SB/05 (04-04)

Approved for use through 07/31/2006. OMB 0651-0032  
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UTILITY  
PATENT APPLICATION  
TRANSMITTAL

(Only for new nonprovisional applications under 37 CFR 1.53(b))

Attorney Docket No.

First Inventor

Title

Express Mail Label No.

MUNDI FOMUKONG

ER-830826162 US

TRIEU VAN THANH

## APPLICATION ELEMENTS

See MPEP chapter 600 concerning utility patent application contents.

ADDRESS TO:

Commissioner for Patents  
P.O. Box 1450  
Alexandria VA 22313-1450

1. ☒ Fee Transmittal Form (e.g., PTO/SB/17)  
(Submit an original and a duplicate for fee processing)
2. ☒ Applicant claims small entity status.  
See 37 CFR 1.27.
3. ☒ Specification [Total Pages 27]  
(preferred arrangement set forth below)  
- Descriptive title of the invention  
- Cross Reference to Related Applications  
- Statement Regarding Fed sponsored R & D  
- Reference to sequence listing, a table,  
or a computer program listing appendix  
- Background of the Invention  
- Brief Summary of the Invention  
- Brief Description of the Drawings (if filed)  
- Detailed Description  
- Claim(s)  
- Abstract of the Disclosure
4. ☒ Drawing(s) (35 U.S.C. 113) [Total Sheets 7]
5. Oath or Declaration [Total Sheets 2]  
a. ☒ Newly executed (original or copy)  
b. ☐ Copy from a prior application (37 CFR 1.63(d))  
(for continuation/divisional with Box 18 completed)  
i. ☐ DELETION OF INVENTOR(S)  
Signed statement attached deleting inventor(s)  
name in the prior application, see 37 CFR  
1.63(d)(2) and 1.33(b).
6. ☐ Application Data Sheet. See 37 CFR 1.76

7. ☐ CD-ROM or CD-R in duplicate, large table or  
Computer Program (Appendix)
8. Nucleotide and/or Amino Acid Sequence Submission  
(if applicable, all necessary)  
a. ☐ Computer Readable Form (CRF)  
b. Specification Sequence Listing on:  
i. ☐ CD-ROM or CD-R (2 copies); or  
ii. ☐ Paper  
c. ☐ Statements verifying identity of above copies

## ACCOMPANYING APPLICATION PARTS

9. ☐ Assignment Papers (cover sheet & document(s))  
37 CFR 3.73(b) Statement of Attorney  
(when there is an assignee) ☐ Power of Attorney
10. ☐ English Translation Document (if applicable)
11. ☐ Information Disclosure Statement (IDS)/PTO-1449 ☐ Copies of IDS Citations
12. ☒ Preliminary Amendment
13. ☐ Return Receipt Postcard (MPEP 503)  
(Should be specifically itemized)
14. ☐ Certified Copy of Priority Document(s)  
(if foreign priority is claimed)
15. ☐ Nonpublication Request under 35 U.S.C. 122  
(b)(2)(B)(i). Applicant must attach form PTO/SB/35  
or its equivalent.
16. ☐ Other: .....
17. ☐ Other: .....

18. If a CONTINUING APPLICATION, check appropriate box, and supply the requisite information below and in the first sentence of the specification following the title, or in an Application Data Sheet under 37 CFR 1.76:

☒ Continuation ☐ Divisional ☐ Continuation-in-part (CIP)of prior application No.: 10/11991829

Prior application information:

Examiner TRIEU VAN THANHArt Unit: 2636

For CONTINUATION OR DIVISIONAL APPS only: The entire disclosure of the prior application, from which an oath or declaration is supplied under Box 5b, is considered a part of the disclosure of the accompanying continuation or divisional application and is hereby incorporated by reference. The incorporation can only be relied upon when a portion has been inadvertently omitted from the submitted application parts.

## 19. CORRESPONDENCE ADDRESS

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Name (Print/Type) MUNDI FOMUKONG Registration No. (Attorney/Agent) \_\_\_\_\_

Signature [Signature] Date 6/27/04

This collection of information is required by 37 CFR 1.53(b). The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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U.S. PTO

PTO/SB/17 (10-03)  
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# FEE TRANSMITTAL for FY 2004

Effective 10/01/2003. Patent fees are subject to annual revision.

☒ Applicant claims small entity status. See 37 CFR 1.27

TOTAL AMOUNT OF PAYMENT (\$)

## Complete if Known

Application Number  
Filing Date  
First Named Inventor **MUNDI FOMUKONG**  
Examiner Name **TRIEU VAN THANH**  
Art Unit **2636**  
Attorney Docket No.

## METHOD OF PAYMENT (check all that apply)

☐ Check ☒ Credit card ☐ Money Order ☐ Other ☐ None

☐ Deposit Account:

Deposit Account Number  
Deposit Account Name

The Director is authorized to: (check all that apply)

☒ Charge fee(s) indicated below ☐ Credit any overpayments

☐ Charge any additional fee(s) or any underpayment of fee(s)

☐ Charge fee(s) indicated below, except for the filing fee to the above-identified deposit account.

## FEE CALCULATION

### 1. BASIC FILING FEE

| Large Entity Fee Code (\$) | Small Entity Fee Code (\$) | Fee Description        | Fee Paid |
|----------------------------|----------------------------|------------------------|----------|
| 1001 770                   | 2001 385                   | Utility filing fee     | 385      |
| 1002 340                   | 2002 170                   | Design filing fee      |          |
| 1003 530                   | 2003 265                   | Plant filing fee       |          |
| 1004 770                   | 2004 385                   | Reissue filing fee     |          |
| 1005 160                   | 2005 80                    | Provisional filing fee |          |

SUBTOTAL (1) (\$ 385)

### 2. EXTRA CLAIM FEES FOR UTILITY AND REISSUE

| Total Claims       | Extra Claims | Fee from below | Fee Paid |
|--------------------|--------------|----------------|----------|
| 5                  | -20** = 0    | X              |          |
| 2                  | -3** = 0     | X              |          |
| Multiple Dependent |              |                |          |

| Large Entity Fee Code (\$) | Small Entity Fee Code (\$) | Fee Description                                            |
|----------------------------|----------------------------|------------------------------------------------------------|
| 1202 18                    | 2202 9                     | Claims in excess of 20                                     |
| 1201 86                    | 2201 43                    | Independent claims in excess of 3                          |
| 1203 290                   | 2203 145                   | Multiple dependent claim, if not paid                      |
| 1204 86                    | 2204 43                    | ** Reissue independent claims over original patent         |
| 1205 18                    | 2205 9                     | ** Reissue claims in excess of 20 and over original patent |

SUBTOTAL (2) (\$ 385)

\*\*or number previously paid, if greater; For Reissues, see above

## FEE CALCULATION (continued)

### 3. ADDITIONAL FEES

Large Entity Small Entity

| Fee Code (\$) | Fee Code (\$) | Fee Description                                                            | Fee Paid |
|---------------|---------------|----------------------------------------------------------------------------|----------|
| 1051 130      | 2051 65       | Surcharge - late filing fee or oath                                        |          |
| 1052 50       | 2052 25       | Surcharge - late provisional filing fee or cover sheet                     |          |
| 1053 130      | 1053 130      | Non-English specification                                                  |          |
| 1812 2,520    | 1812 2,520    | For filing a request for <i>ex parte</i> reexamination                     |          |
| 1804 920*     | 1804 920*     | Requesting publication of SIR prior to Examiner action                     |          |
| 1805 1,840*   | 1805 1,840*   | Requesting publication of SIR after Examiner action                        |          |
| 1251 110      | 2251 55       | Extension for reply within first month                                     |          |
| 1252 420      | 2252 210      | Extension for reply within second month                                    |          |
| 1253 950      | 2253 475      | Extension for reply within third month                                     |          |
| 1254 1,480    | 2254 740      | Extension for reply within fourth month                                    |          |
| 1255 2,010    | 2255 1,005    | Extension for reply within fifth month                                     |          |
| 1401 330      | 2401 165      | Notice of Appeal                                                           |          |
| 1402 330      | 2402 165      | Filing a brief in support of an appeal                                     |          |
| 1403 290      | 2403 145      | Request for oral hearing                                                   |          |
| 1451 1,510    | 1451 1,510    | Petition to institute a public use proceeding                              |          |
| 1452 110      | 2452 55       | Petition to revive - unavoidable                                           |          |
| 1453 1,330    | 2453 665      | Petition to revive - unintentional                                         |          |
| 1501 1,330    | 2501 665      | Utility issue fee (or reissue)                                             |          |
| 1502 480      | 2502 240      | Design issue fee                                                           |          |
| 1503 640      | 2503 320      | Plant issue fee                                                            |          |
| 1460 130      | 1460 130      | Petitions to the Commissioner                                              |          |
| 1807 50       | 1807 50       | Processing fee under 37 CFR 1.17(q)                                        |          |
| 1806 180      | 1806 180      | Submission of Information Disclosure Stmt                                  |          |
| 8021 40       | 8021 40       | Recording each patent assignment per property (times number of properties) |          |
| 1809 770      | 2809 385      | Filing a submission after final rejection (37 CFR 1.129(a))                |          |
| 1810 770      | 2810 385      | For each additional invention to be examined (37 CFR 1.129(b))             |          |
| 1801 770      | 2801 385      | Request for Continued Examination (RCE)                                    |          |
| 1802 900      | 1802 900      | Request for expedited examination of a design application                  |          |

Other fee (specify)

\*Reduced by Basic Filing Fee Paid

SUBTOTAL (3) (\$)

## SUBMITTED BY

Name (Print/Type) **MUNDI FOMUKONG** Registration No. (Attorney/Agent)  
Signature **[Signature]** Telephone **310.5598133**  
Date **6/27/04**

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## **TITLE**

**METHOD AND APPARATUS FOR LOCATING MOBILE UNITS TRACKING  
ANOTHER OR WITHIN A PRESCRIBED GEOGRAPHIC BOUNDARY**

## **CONTINUING DATA**

This application is a continuation application of U.S Application Serial No 10/199,829, filed July 19, 2002, which in turn is a continuation-in-part of U.S Application Serial No. 09/753,178, filed December 30, 2000 issued as U.S patent No 6,441,752. The disclosure is incorporated herein by reference.

## **BACKGROUND OF THE INVENTION**

This invention relates to telecommunication services and systems, specifically such services and systems that convey the location of a mobile unit.

The wireless industry is currently gearing towards the provision of a wide range of location based services to the general public. Such services will include utilizing the location of a subscriber's portable remote unit to channel a wide range of location-based services to the subscriber. For such a service to be successful, the remote unit must be able to obtain and relay its location information to other communication targets of the network requesting such information.

In relevant prior art such as US 5,689,245, Noreen and al, the location of a remote unit is employed to execute location specific instructions transmitted to the remote unit.

In Bird, US 5,418,537, a missing vehicle is located through the use of a GPS receiver mounted on the vehicle. When the vehicle is missing, a paging request is broadcast by the vehicle location center. Upon receiving the broadcasted message, the vehicle resolves and conveys its location to the service center.

In Buss, US 5,539,395, a remote unit is presented whereby the unit selects and displays messages matching the location of the remote unit. The network provides the unit with messages having a location signal. If the location signal picked up by the unit is within the unit's current location, the message is displayed, otherwise it is kept in memory for display at the appropriate location.

In Chapman, US 5,504,491, a global status and positioning reporting system is described. A remote unit obtains its global location and updates the network with status information and location information as required. Such status information may include an emergency condition or relevant condition of the remote unit required by the network.

In Fomukong and al, US 5,918,159 a location reporting satellite paging system with optional blocking of location reporting is disclosed. In that invention, a remote mobile unit obtains its location information and provides that information via the network to other network units requesting the information. The provision of such location information is done based on authorization information provided and routinely updated by the remote unit.

In all of the above-disclosed inventions, the location of the remote unit is utilized by the system. The deployment of location services could be quite beneficial to the general public if safely implemented. In today's market, such mobile units are usually small, compact and lightweight. These devices could easily be concealed to reveal the location

of a mobile user without the user knowing or authorizing the disclosure of their location. Most wireless consumers might not want their location disclosed to the network or general public and the thought of being tracked by a clandestine unit concealed in an object such as a car or luggage to reveal the location of an individual would be unacceptable by the general public. The risk of abuse clearly exists and must be handled appropriately by wireless vendors. In U.S patent 5,918,159 that provides authorization for location reporting, it would be almost impossible for the network to prevent a concealed location-reporting unit to provide the location of an individual being tracked, given an abuse is occurring. A need therefore exists for location reporting devices in a specific geographic region to reveal their location upon request. In situations where a user is being tracked, the network would be able to determine which units are tracking the user, by querying for the location of remote units within a specified radius of the user or tracked unit. The techniques required to provide the above result are described in the invention.

Whenever a mobile user is stranded and requires immediate help, another mobile party may exist not too far from the location of the user. The mobile user may not be aware of the presence of the other mobile party at that geographic location. By paging for the location of portable remote units (PRUs) within the stranded area, a distressed subscriber may immediately sought help at that location. If the prescribed boundary specified by the mobile user exceeds pre-specified limits, the network may split that geographic area as described hereinafter. Pages may then be sent to specific areas in order to obtain the location of portable remote units in that geographic area. The location of any mobile

location-reporting unit in a geographic area that is closest to the user will be revealed to the user.

Lots of other uses exist for such a service to be lucrative to a service provider. A wireless subscriber may opt to participate in the program and users of the system may be charged a fee each time the location of another PRU at a requested geographic boundary is provided to the user. Also, users in possession of portable remote units may be charged whenever they invoke the tracking mode in their PRU. To improve subscriber enrollment in the program, subscribers may also receive benefits each time their location is provided to a distressed individual. Subscribers not requiring their locations disclosed at any time may block such information at the network. In situations where a PRU user is being tracked by another, the network will only reveal the location of the tracking unit only after both units have traveled a certain distance over a pre-specified period of time with the tracking unit maintaining proximity to the source during that period. Such distances and elapse times could be set as a standard by the industry to clearly define tracking.

The system presented requires mobile devices to communicate their location information to the network. As the number of location enabled devices within the network increases, certain components of the system may require the location of certain mobile devices reported in a manner that would prevent the component from being overloaded. Therefore, it is required that, a method and apparatus be provided to facilitate the provision of remote unit location information to the network to prevent network overloading and also minimize power consumption of the mobile device.

From the above there is clearly a need for a system whereby a remote unit should be able to request for the location of other remote units within a specific geographic area. The components of such a system are described hereinafter.

## OBJECTS OF THE INVENTION

It is an objective of the present invention to provide a mobile telecommunication system, method and technique that could facilitate the secure provision of location information pertaining to one or more mobile communication targets that are tracking another.

It is an objective of this invention to provide a mobile telecommunication system whereby a communication source residing in a geographic location may poll for the location of communication targets that are present in another geographic area.

It is an objective of this invention to provide a technique to report the location of communication units within a pre-specified boundary.

It is an objective of the current invention to provide adequate technology that would facilitate the disclosure of location information of communication units that are present in a wider than normal geographic area.

It is an objective of this invention to provide a remote unit that could provide location information and geographic boundary information where a search could be initiated for the presence of one or more location reporting communication targets.

It is another objective of the invention to provide a portable mobile device that provides its location to the network only when the device has covered a minimum distance from a reference location prescribed by the network.

Other objects and advantages of the system will appear hereafter.

## SUMMARY OF THE INVENTION

The aforementioned objectives are achieved by an improved telecommunication system that can provide location information pertaining to other communication targets that are present within a pre-specified geographic boundary.

In the system, a communication source may query for the location of communication targets at a specified geographic boundary. The communication source may also enter into a mode to determine if another communication unit is tracking it. Communication sources and targets of the system should be able to obtain their location using any relevant location determination technique. This information is conveyed securely across the network based on system and subscriber requirements. When a communication source requires the location information of communication targets in a specific geographic area, the source obtains its location and may determine if the geographic boundary of the required targets is within its querying radii. Although the design could also be such that the network handles all queries, a communication source may poll directly for the location information of targets in a specified geographic boundary. This could happen if the communication targets are within the source's querying radii; preventing unnecessary overloading of shared network resources. For more complex and distant queries, the source may simply provide its location and geographic boundary information where targets should be interrogated for location disclosure. The network utilizes its resources and determines where and how a search for relevant communication targets should be initiated.

Once the search for possible communication targets within the specified geographic boundary is completed, the network provides the communication source with information pertaining to communication target(s) closest to the source and in the geographic region specified by the source.

## BRIEF DESCRIPTION OF DRAWINGS

Figure 1 shows a general schema depicting the invention.

Figure 2 shows a diagram of a mobile portable remote unit employed by the system.

Figure 3 shows a diagram indicating how a wider than normal geographic area is divided to locate remote units in the area.

Figure 4 shows a diagram that is employed to determine if a remote unit is within a prescribed geographic boundary.

Figure 5 shows a flow chart illustrating the steps that a communication unit may employ to determine if it is being tracked by another unit.

Figure 6 is a flow chart illustrating the steps utilized by a communication unit to disclose a global location when the unit is within a pre-specified geographic area.

Figure 7 is a flow chart illustrating how a search for the location of mobile communication units in a wider than normal pre-specified geographic boundary is carried out.

## DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENT

An overview of the present system in accordance with the invention is depicted in FIG. 1. The system consists of a network of portable remote units (PRU) 501-510 scattered throughout a wide geographic area. Mobile Users 701-709 are in possession of the portable remote units 501-509, respectively. Geographic regions 201-204 are standard geographic areas that may have present, one or more portable mobile users 701-709 as shown in FIG. 1. Mobile user 701 is in geographic region 201 and mobile users 502-506 are in geographic regions 202.

Other mobile portable users exist in the system and are scattered as shown in FIG. 1. Geographic location 201-204 may simply be defined by latitude, longitude and radius information or simply by points defining the geographic boundary as illustrated in FIG. 3.

The terrestrial network center (TNC) FIG. 1, 801 is used to control the actions of the mobile system. The TNC communicates with ground based transmitters (GBT) 401-404 and earth based satellite transmitters 301-302 to relay information pertaining to the mobile system across the network. Other functionalities of the terrestrial network center may include determining which transmitters to employ to complete a call and how to prevent portable remote units from receiving calls when they are out of jurisdiction.

Multiple terrestrial control or network centers may be employed as required by the system. Ground based transmitter stations (GBT) FIG. 1, 401-404 are employed to relay mobile information to and from the portable mobile units of the network.

Interface to a fixed telephone network such as home telephone or other communication units such as the personal computer could be achieved through the public telephone switching network (PTSN). Satellites 101-102 are employed by the system to relay

information to remote areas and also to provide referenced signals, which ground base communication units, may utilize in establishing their geographic location.

Communication between the satellites and the ground network is achieved through earth based satellite transmitters 301-302.

A general internal circuitry of a portable remote unit or PRU, FIG 1, 501-510 is shown in FIG. 2. The portable remote unit consists of an antenna 20 and a transceiver circuitry 21. The transceiver circuitry receives and transmits portable remote unit information via the antenna 20. On receipt, this information is processed and the intelligence portion is extracted and sent to the control unit 22 for further processing. The transceiver also receives portable remote unit information from the control unit 22, processes it, and forwards it as required to the network via the antenna 20. The control unit 20 controls the action of the PRU. Relevant information pertaining to the PRU could be stored in the allocated memory means 26. The memory means may include a Random Access Memory, a Read Only Memory and additional memory to store PRU data. Input panel 25 is employed to take user instructions and the display 23 is used to present PRU information to a user. The audio means 24 is used for annunciation of voice messages. A PRU may be able to assist the network in determining its global location or use any location determination technique to resolve and provide its location to the network. As a PRU is carried from one location to the other it may obtain and provide information concerning its current location to the network

As stated in one of the objectives of the invention and illustrated in FIG. 1, a portable remote unit 501, utilized by a subscriber 701, in a moving vehicle 601, could be tracked by a clandestine unit 510, such unit concealed in vehicle 601. A subscriber -let say 704 in

region 202- in another geographic region trying to keep track of the whereabouts of user 701 may have concealed unit 510 in vehicle 601 to track subscriber 701. As most portable remote units are small and compact they could easily be hidden without subscriber 701 knowing of such activity. As vehicle 601 travels from one location to the next, authorized users will be able to receive location information from PRU 510 whenever they poll for it. As PRU 510 discloses its location to the authorized party, the party may obtain the location of subscriber 701 without their authorization. It is of utmost importance that a subscriber in possession of unit 501 should be able to determine if they are being tracked by another unit. In the current invention subscriber 701 will at any point in time activate the tracking feature provided by PRU 50 I. This could be achieved by invoking the appropriate function through the input panel, FIG. 2,25 of the PRU. In tracking mode, a tracked PRU, FIG. 1,501, may simply alert a user in possession of the tracked PRU with the location information of any tracking device -PRU 510 -that has resided within a pre-specified radius of the tracked PRU, with both units having traveled a minimum distance. Parameters such as elapse time, minimum distance traveled and tracking radii could be set as a standard by the industry. The tracking feature could be invoked by the tracked PRU or a request could simply be forwarded to the closest ground control station so that the operation is performed for the tracked PRU. In tracking mode, the geographic location of the tracked unit, FIG. 1, 501, is utilized to determine the geographic boundary where a search for possible tracking units 510 could be initiated. Over a period of time and at pre-determined time intervals a page is sent to the geographic location 201 where the tracked unit 501 resides for all location-reporting units within that geographic boundary to disclose their location. The geographic boundary

required to establish tracking could be set as a standard by the industry. For instance, it could agreed upon that a unit could be deemed as tracking another it stays within a 5 meter radius of the tracked unit over a 1 mile stretch. As the tracked unit 501 is moving, that unit or an appropriate network unit, may page for the location of other communication units within the tracking boundary of the tracked unit to disclose their location. Only communication units within that geographic boundary would disclose their location. Timing information could also be included in the disclosed information to help eliminate errors that may occur when a tracked unit, FIG. 1, 501, is in a vehicle 601 that is moving at a high velocity. This exercise could be done at fixed time intervals and over a pre-determined time period. At the first time interval, a list could be maintained of all PRUs that responded within the specified geographic boundary defined for tracking. At subsequent time intervals, PRUs that where in the list at the first tracking interval and not responding in later intervals could be eliminated as possible tracking units. At the end of the tracking period, if there are any units in the tracking list and the minimum tracking distance was covered, such communication units are deemed to be tracking another and are reported to the requested party. The minimum traveling distance must be maintained to eliminate the risk of identifying communication units that reside in a fixed geographic boundary over the tracking period as possible tracking units. Also, a maximum time limit must be set for the tracking exercise such that if the minimum distance is not traveled within that time period, then tracking process is aborted. If such a time is not maintained a PRU could be in the tracking mode indefinitely. The steps for this process are shown in FIG. 5.

According to FIG. 5, once the tracking mode is invoked at a search unit, tracking is initialized, FIG. 5, 1. Note that the search unit could be any relevant mobile communication unit trying to identify possible mobile communication units that are tracking another. The search unit then operates repeatedly over pre-defined time intervals 2 until the end of the tracking period 9, 13. At each tracking interval 2, the location of the tracked unit is obtained 3. Possible tracking units within a specified geographic boundary of the tracked unit are paged to reveal their location 4. For the first tracking interval 5, all tracking units that provided their location at that interval are stored in a list 7. At subsequent tracking intervals, a tracking unit that responded in the first tracking interval and not responding in a subsequent tracking interval is eliminated 6 as a possible tracking unit. If the tracking list is empty at any tracking interval 8, the tracking process is aborted 9. A test 10 is next performed to verify that the tracking units in the list traveled the minimum pre-defined distance. If it is determined that the tracking units traveled the minimum distance 10, they are reported as tracking units to the network 11. If it is determined that the tracking units have not yet traveled the minimum distance 10, a check is done to establish if the maximum tracking time has elapsed 12. If no time is left to establish tracking 12, the process is aborted, 13, otherwise it is repeated 2. A maximum time must be set for the tracking process to ensure that a PRU is not in tracking mode indefinitely.

As previously indicated, a PRU may invoke this method directly to determine if other units residing in its immediate geographic area have been tracking it. This would help reduce network overload and, at the end of the tracking period, a status signal may simply be forwarded to the network. In circumstances where a tracked PRU cannot

perform this operation, a ground control unit may be employed to carry out the tracking operation for the PRU and report any findings to the PRU. Maintaining a list of all tracking units at the first tracking interval is efficient as it reduces storage space and processing time. It is also possible to maintain a list of all units that are within a pre-defined geographic boundary of the tracked unit throughout the entire tracking process. At the end of the process, the list could be used to determine which units reported their location over a pre-specified distance traveled by the tracked unit

For a unit to report a global location within a specified geographic boundary, the unit must be able to obtain geographic boundary information and further determine if its location is within the prescribed boundary . There are several techniques well known in the art that a remote unit may employ to resolve its geographic location or assist the network in resolving its location. Once the PRU obtains its location from whatever technique, that information is utilized to perform the functions in accordance with the invention. Apart from determining if a remote unit is being tracked, other uses exist for a remote unit to disclose its location at a particular geographic location. For instance a distress subscriber at a specific global location may simply want to know if there mobile users in the immediate geographic area. Furthermore, a subscriber might want to know if there are any individuals at their home, office or a specified geographic location. By specifying the required location and further information such as radii information, the network may provide a portable remote unit with the location of portable remote targets that are closest to the PRU and in the geographic area specified by the PRU . For a simple search where the geographic region does not exceed a pre-specified limit, a

page may simply be sent to the required region for all units in the region to disclose their location. As it would be inefficient to page for portable remote units in wider geographic boundaries to reveal their location, searches in these areas could be managed differently by the network. In this situation, the network may simply split the wider area into sub regions and recursively query for the location of PRUs, starting in sub-regions that are close to the origin before extending to geographic regions that are further away.

To disclose a global location within a prescribed geographic boundary, a PRU at the geographic location picking up the request must determine if it is within that boundary before providing its location to the network. FIG. 3 shows a geographic location with mobile units  $M_1$ - $M_N$ . This location is divided into cells ( $C_1$ - $C_N$ ) or grids ( $G_1$ - $G_N$ ) where  $N$  is the total number of cells or grids, also known as region. Each region could be defined by its latitude, longitude and radii information or by distinct points that define the grid. Looking at FIG. 3, cell  $C_1$  is defined by radius  $R$  and its latitude and longitude information is that of mobile user  $M_1$  ( $X_o, Y_o$ ). Grid  $G_1$  is defined by four points  $P_1$ ,  $P_2$ ,  $P_3$  and  $P_4$ . Subsequent cells and grids are defined in that fashion as shown in FIG. 3. FIG. 3 depicts a wide geographic area. Ground stations and control centers, not shown, may also be available in that area. Such an illustration may also be seen in a general sense in FIG. 1.

As shown in FIG. 3, a distressed mobile user  $M_1$  may need to find where another party might exist in that geographic region. The user could initiate a page from their PRU for the closest available PRUs that could be found in that geographic jurisdiction. Looking at FIG. 3, mobile user  $M_1$  will provide its location, latitude and longitude ( $X_o, Y_o$ ) to the closest available ground station serving area  $C_1$  or grid  $G_1$ . As stated earlier, appropriate terrestrial technology will be scattered in that region to serve the

PRUs in that area as shown in FIG 1. Once a ground station picks up this signal, it sends a page for all location reporting devices in the specified boundary surrounding mobile unit  $M_1$ , FIG. 3 to disclose their location. Such boundary information could simply be specified by the latitude and longitude of unit  $M_1$  and appropriate radii information. For the very first request, such radii information would be the distance  $R$  as shown in FIG 3. A PRU within that area will pick up the signal and determine if it is within the specified radii. Also, if the ground station specifies grid information for the first cell,  $G_1$ , a PRU will have to determine if it lies within the grid  $G_1$  boundary,  $P_1$ ,  $P_2$ ,  $P_3$  and  $P_4$ . According to FIG.3, when a ground station sends a page for the location of PRUs in cell  $C_1$  or grid  $G_1$  only mobile unit  $M_1$  may respond. As  $M_1$  is the PRU that initiated the search, the ground control station would make the determination and obtain the next region -radii or grid- information for a possible search. The geographic boundary information of cell  $C_2$  or grid  $G_2$  will be provided for the next search. Subsequent searches will include incrementing the radii information to from  $C_1$ - $C_N$  or grid boundary information from  $G_1$ - $G_N$  until a PRU within that geographic boundary responds or system limitations are encountered. A possible limitation may be the size of a geographic boundary to page for remote unit locations. According to FIG. 3, the radius of each cell is from the origin of mobile unit  $M_1$ ,  $(X_0, Y_0)$ . The radii of subsequent cells is a factor of the radius of the first cell,  $C_1$ . The grid is usually the tightest rectangular boundary defining the cell. As the grid or cells become larger, exclusion zones, as described hereinafter, may also be specified if it is required that PRUs in certain areas should not disclose their location. Another possibility might be not to increase the next geographic area on a subsequent page but split the entire geographic boundary into small regions of about the same size.

Each region could then be paged, starting in areas that are closed to the origin. This could be done until a PRU at a region discloses their location.

Considering that mobile unit  $M_1$  is initiating a search for possible portable remote units in its immediate area, a relevant ground control station will send three pages. The first page will cover cell  $C_1$  or grid  $G_1$ . As no units are available in the area a second page will be sent to cover cell  $C_2$  or grid  $G_2$ . Examining FIG. 3, the next PRUs exist only in cell  $C_3$  or grid  $G_3$ . Once a page is sent out for cell  $C_3$ , PRU,  $M_2$  and  $M_3$  will respond. If grid  $G_4$  is specified PRU  $M_2$ ,  $M_3$ ,  $M_4$  and  $M_5$  will respond. The ground control station will next select the unit closest to PRU  $M_1$ , which is  $M_2$ , in this instance. The location of PRU  $M_2$  will then be forwarded to PRU  $M_1$ .  $M_1$  may also choose to request for the number of PRUs in its area and the ground control station would respond again, based on system requirements. Using the system, a user in possession of a PRU may check for the existence or other PRUs at another geographic location. A user may select a geographic area from a map presented by the PRU. In FIG. 1, a mobile user 709 at location 204 may utilize this system to request for the location of mobile units in another geographic region such as 202 or 203. This could be for instance, checking to see if there are PRUs at the office or house or any location of interest. The system would simply return the appropriate information such as number of PRUs responding, location of PRUs and relevant information requested. In such a system, subscribers may choose to participate to have their location disclosed when a search is initiated. Subscribers may also opt to block or activate this feature at any time at the network. A subscriber to the service may be charged a fee each time the system is used. A possible technique utilized to implement the above is shown in FIG. 7.

According to FIG. 7, the geographic information of the area where a search for possible remote targets sought is first obtained. This information could be provided by a PRU to the network. This information may simply be the latitude and longitude of the area where the search would be performed and other relevant information to assist the network with the search. A PRU may display a map where a user may select a specific geographic area. From this information the next geographic region where a possible search for PRUs is estimated 2. This could be the latitude longitude and radii information of the searched area. Also, the tightest rectangular grid surrounding the cell having that radii information could also be calculated and utilized. Once that information is obtained a page is sent out to that geographic region for remote units in the region to reveal their location 3. If remote units are identified in the paged area 4, that information is forwarded to the network 5 and the process is aborted 7. If no remote units are identified in the area 4, a check is done to establish if there are any remaining cells or grids higher up in the chain to be searched 6. If no regions exist for a possible search, the process is aborted, otherwise, the process is repeated until all geographic cells or grids have are searched for the existence of portable remote units.

Whenever a portable remote unit receives a page to disclose its location within a specified geographic boundary, the PRU obtains its location and attempts to determine if it is within that boundary. As mentioned before, the PRU may employ any relevant location determination technique well known in the art to obtain its geographic location. If the boundary information specified by the network contains a well-defined set of points – latitude and longitude for that region - defining the geographic region, the PRU will simply establish if its location is within the geographic boundary and provide its location

to the network based on that. The points may simply define the minimum and maximum latitude and longitude values within which a PRU should respond. Such a procedure would be stored in the memory means, FIG. 2,26 of the PRU and invoked by the control unit FIG. 2,22 of the PRU as required. If the network simply provides the origin -latitude and longitude- and radii information of the region where a search is to be performed, the PRU will utilize these values to establish if it is within the area defined by the network as shown in FIG 4.

FIG. 4 shows four mobile objects, Object<sub>0</sub>, Object<sub>1</sub>, Object<sub>2</sub> and Object<sub>3</sub>. Considering that Object<sub>0</sub> is the source and needs to know if any portable remote units are available in the geographic region of radius R. The location of Object<sub>0</sub> is the origin of the region and the radii information provided by the network for that region is R. All objects within that radius must respond upon receiving the signal requesting for their location in the specified radii. Looking at FIG.4, only Object<sub>3</sub> and Object<sub>2</sub> exist in the region specified and would respond to the page. If all the mobile objects are served by the same ground station they will all receive the signal for location disclosure if in the region. To establish if they are within the region specified, each mobile object will obtain its location and calculate its tangential information from the specified geographic origin (X<sub>0</sub>,Y<sub>0</sub>) defined by the source, Object<sub>0</sub>. The tangent of an angle is usually the opposite/hypotenuse: Looking at FIG 4, the tangent is between the origin of Object<sub>0</sub> and Object<sub>1</sub>, and that angle is  $\theta$ . As Object<sub>3</sub> lie on the same line as Object<sub>1</sub> the tangent between the origin of Object<sub>0</sub> and Object<sub>3</sub> is also  $\theta$ . The tangent between the origin of Object<sub>0</sub> and Object<sub>2</sub> is  $\alpha$ . Standard trigonometric equations dictate that the tangent of an angle is the opposite / hypotenuse. According to FIG. 4,  $\tan \theta = (y_1 - y_0) / (x_1 - x_0)$  for Object<sub>1</sub> and

$(y_3 - y_0) / (x_3 - x_0)$  for Object<sub>3</sub>, for Object<sub>2</sub>  $\tan \alpha = (y_2 - y_0) / (x_2 - x_0)$ . Once the inclination or tangent of the object to the origin is calculated, the distance of the object to the origin could easily be calculated by using the sine formula -  $\sin \theta = \text{opposite} / \text{hypotenuse}$  where the opposite is  $(y_1 - y_0)$ ,  $(y_3 - y_0)$  for Object<sub>1</sub> and Object<sub>3</sub> respectively. The hypotenuse is the distance from the mobile object to the origin;  $R_{o1}$  and  $R_{o3}$  for Object<sub>1</sub> and Object<sub>3</sub> respectively. For Object<sub>2</sub>, the distance from the origin  $R_{o2} = (y_2 - y_0) / \sin \alpha$ . Once the distance from the origin ( $X_0Y_0$ ) is calculated for each mobile object, an evaluation could easily be made as to whether the mobile object lies within the specified boundary and the location of the mobile object could be provided to the network based on that. Furthermore, the network may choose to provide an exclusion region or regions to the portable mobile remote units or PRUs. A PRU in that exclusion region will not disclose its location to the network even if it lies in the network's specified geographic boundary. This exclusion zones may be specified simply as grid points anywhere in the paged region or as a direction aft the origin. A direction aft the origin contains information that will indicate to PRUs in the region not to disclose their location if they are East, West, North or South of the origin. Considering FIG. 3 as a further example, if a request is received in that region for the location of mobile units in  $G_4$  or  $C_4$  and the origin is the location of  $M_1$ , with the exclusion zone specified as East, all the mobile units in  $G_4$  or  $C_4$  will receive the request to disclose location in that area. Upon detecting the exclusion zone information in the signal only the mobile units to the West of  $M_1$  will reveal their location. Again, such exclusion zone information may simply specify sub region(s), where PRUs should not reveal their location.

FIG. 6 shows the steps utilized by a remote unit to reveal its location if it is within the geographic boundary specified by the network. The unit first obtains geographic boundary information specified by the network 1. This information may consist of latitude and longitude information defining the region's origin and radii information. The unit next obtains its location 2. This could be done in association with the network or by using any remote unit location determination techniques such as GPS. The next step is to determine if the unit is within the boundary prescribed by the network 3. Such a technique has already been described in the invention. Further checks are carried out to ensure that remote unit is not in a location reporting exclusion zone defined by the network 4. The location of the remote unit is provided to the network 7 once it is established at the remote unit that the subscriber 6 authorized such an action.

It could be made mandatory that all PRUs reveal their location once they receive a request to establish tracking. A PRU may not respond to any tracking establishing routines if it is at a fixed location. Tracking is only possible when the tracking and tracked unit are in motion. If a network's request is just to establish if a PRU is within a geographic location, the PRU's response could be based solely on the requirements of the subscriber -whether such action is authorized or not. A PRU may choose to instruct the network to relay certain information to mobile units in a specific geographic region. That information would then be appended to the geographic boundary information and beamed in the specified geographic region. The target PRUs would determine if they are in the specified boundary before alerting a subscriber as to the content of the message. In circumstances where a subscriber in possession of the PRU is in motion and a request is received for the location of the PRU if within a specified region, the PRU may provide

this information and also provide additional information such as its velocity to the network. This might help a party seeking help to establish if they would be able to catch up with another subscriber in the region which help was sought. Also, a party requesting for the location of remote units in a geographic boundary may also forward maximum velocity information. If a PRU is in the region and establishes its velocity is above what is specified, no response is sent to the network. A PRU may calculate its velocity by using the equation,  $\text{velocity} = \text{distance}/\text{time}$ . At time intervals  $T_1$  and  $T_2$ , a PRU may obtain its location,  $Y_1$  and  $Y_2$  and calculate the distance between these two points, as previously disclosed. The velocity is given by  $(\text{distance between } Y_2 \text{ and } Y_1) / (\text{Time at } Y_2 - \text{Time at } Y_1)$ . Such information could then be provided to the network. In situations where a PRU cannot perform any of the tasks described herein, the network may obtain its location information and the required functions performed at the network and forwarded to the appropriate communication target on completion.

In the invention, portable mobile remote units would find the need to routinely update the network with their location information over time. As lots of PRUs exist in the network this could prove difficult for the network to manage. Considering that most PRUs usually travel a small distance over time, it would prove insignificant if their location is continuously provided to the network. A solution will be to instruct the PRU to provide its location to the network only if the location has changed by a constant, such constant defined from a reference position provided by the network. In this scenario, an initial reference location and radii is provided to the PRU, from within which the PRU should not disclose its location to the network. So long as the PRU is within the undisclosed geographic boundary, its location will never be provided to the network. Once the PRU is

out of this boundary a new undisclosed geographic boundary is provided to the PRU.

With this technique the network will not be burdened with managing insignificant changes in the location of the mobile device, for a time. If for instance, the undisclosed radii is set to five miles, the reference coordinate would always be updated each time the PRU travels in excess of five miles off its original reference position. The network or the user may control the undisclosed radii value to ensure reasonable disclosure of location information to the network. The network may, of course, override this feature at anytime to obtain the location of a PRU at any time.

The invention also teaches a way to determine if a mobile device is tracking another by examining the location information of the tracking and tracked device over a period of time. Another possibility could be to examine the characteristics of signals emitted from tracking devices that are within close proximity of the tracked device during the tracking period. Such characteristic may include monitoring signal strength and other relevant information –such as location- provided by a tracking device to establish if the device is continuously present within proximity of the tracked unit over time. Also, tracking devices that are within proximity of the tracked device could be instructed to provide their information at predetermined time intervals over the tracking period. The intervals and tracking period could be set and forwarded to the relevant geographic location by the network. The devices picking up that information will periodically update the required information to a control unit at the network and the end of the tracking period the control unit will process the information and determine if a mobile unit is being tracked within the system.

What is claimed is:

1. A communication system comprising:
  - a portable mobile remote unit;
  - a network of communication units;
  - means to obtain the location of the portable mobile remote unit;
  - means to obtain geographic boundary information in order to disclose a global location at the network;
  - means to provide the location of the portable mobile remote unit to the network upon determination that the portable mobile remote unit is within the geographic boundary obtained at the network;
  - means to determine and report to the system upon request that, another mobile remote unit has maintained relative proximity to the mobile remote over a period of time.
2. The portable mobile remote according to claim 1, having means to further determine if location disclosure for the remote unit is prohibited at a specific geographic boundary before sending its location to the network.
3. The portable remote unit of claim 1 having means to establish its velocity at the network and having means to further determine that, its velocity is within the network's prescribed velocity before divulging its location to the network.

4. A communication system for providing the location of portable mobile remote units, in a geographic region to a wireless consumer requesting that information comprising:

i) means for the wireless consumer to specify and forward to a network, geographic boundary information describing the geographic region where the location of portable mobile remote units are required by the wireless consumer;

ii) means to request that all portable remote units within said geographic boundary (i) establish their location at the network;

iii) means to verify at the network, after said request (ii) that a portable remote unit according to (ii) responded with location information;

iv) means to provide to the wireless consumer the location of a portable mobile remote unit that exist in the geographic boundary defined by the wireless consumer after the verification of (iii) .

5. The system of claim 4, the portable mobile remote units able to establish and report their location to other communication units of the system.

## ABSTRACT OF THE DISCLOSURE

A mobile location reporting communication system consists of a network of communication sources and targets managed by one or more control stations. In the system, a communication source may request for the location of a mobile communication target from the network. The target conveys its location to the network and that information is provided to the source. In the invention a mobile communication source request for the location of mobile communication targets that are present in a prescribed geographic boundary .The network provides to the source only remote targets that are present in the prescribed boundary. Also in the invention, a concealed or clandestine mobile portable target, close to the mobile portable source, may be tracking the source. The source may invoke a method that may the result of mobile targets that have traveled a pre-specified distance with the source while maintaining proximity to the source.

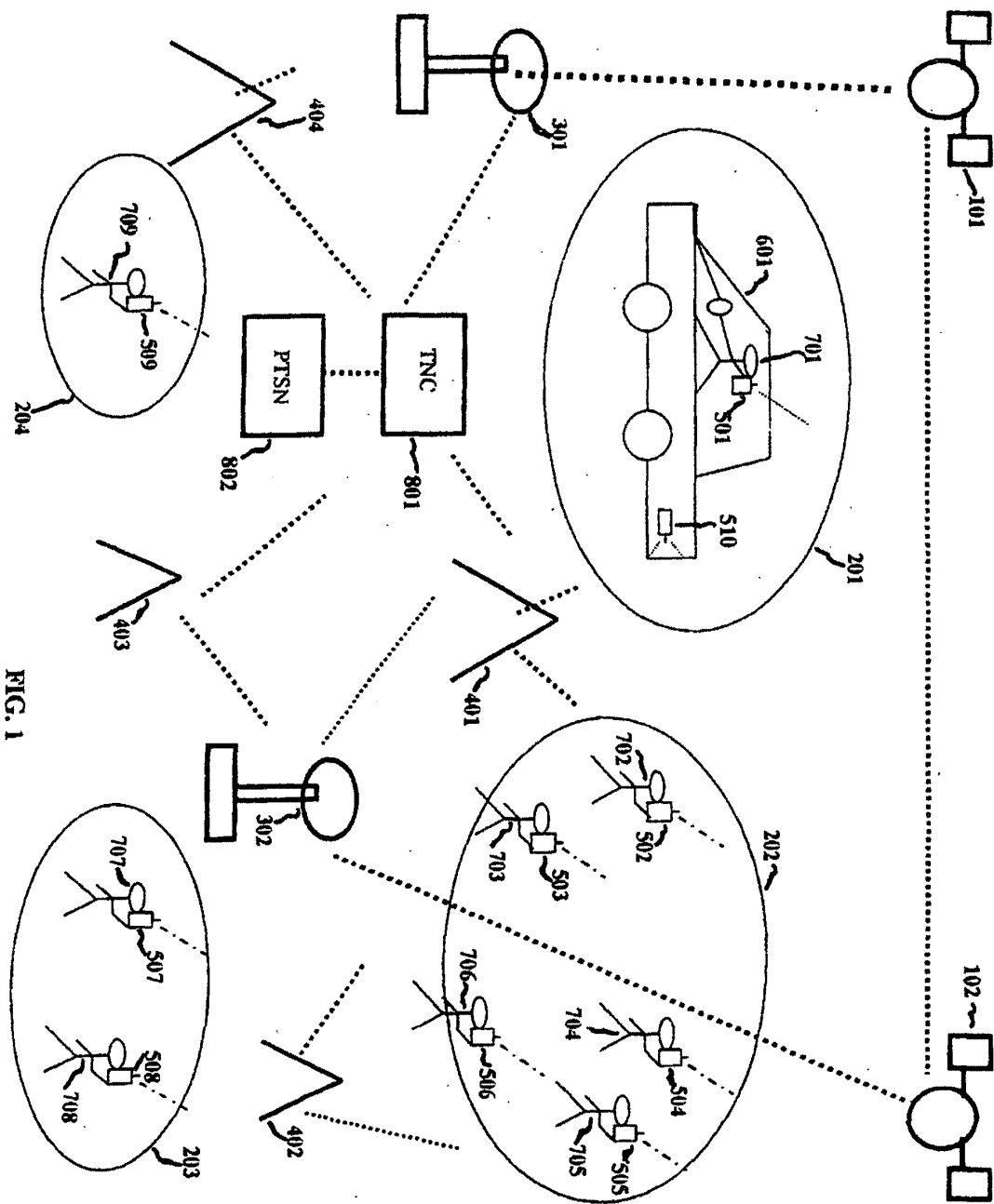


FIG. 1

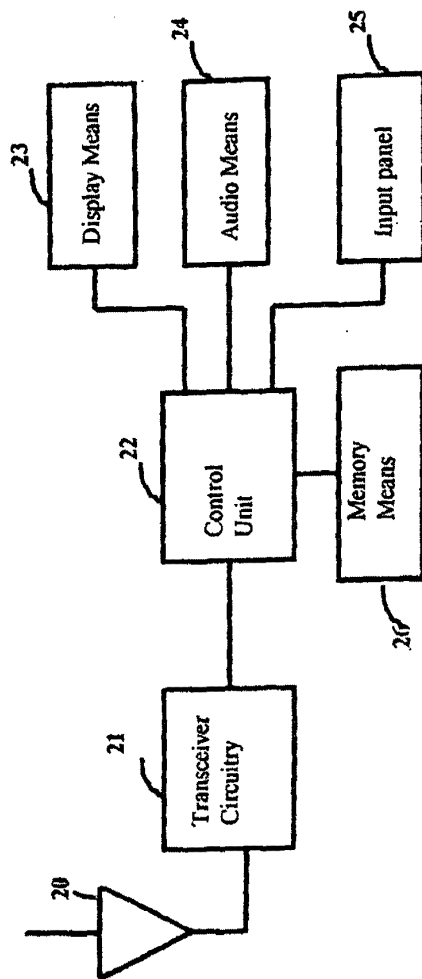


FIG. 2

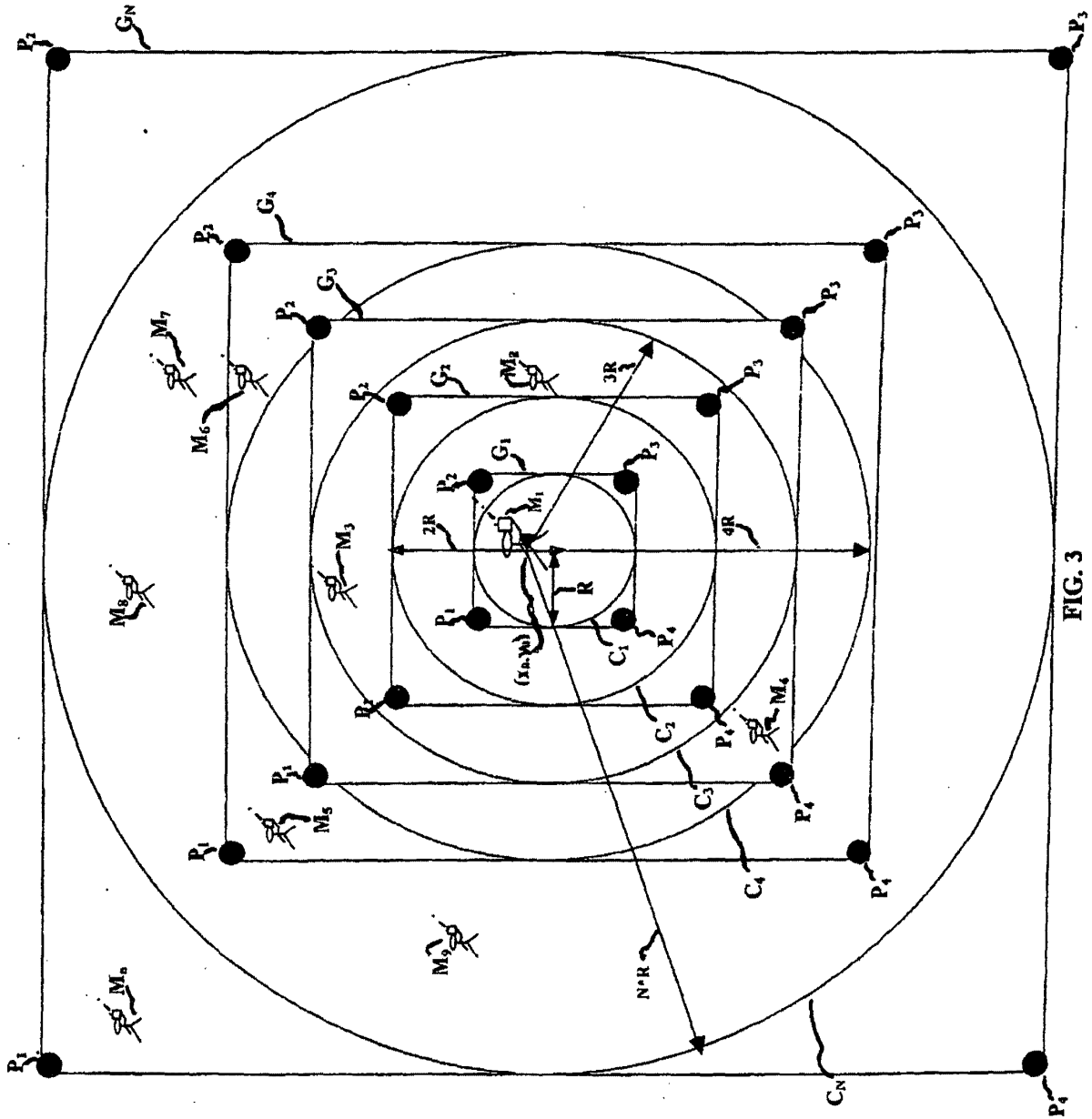


FIG. 3

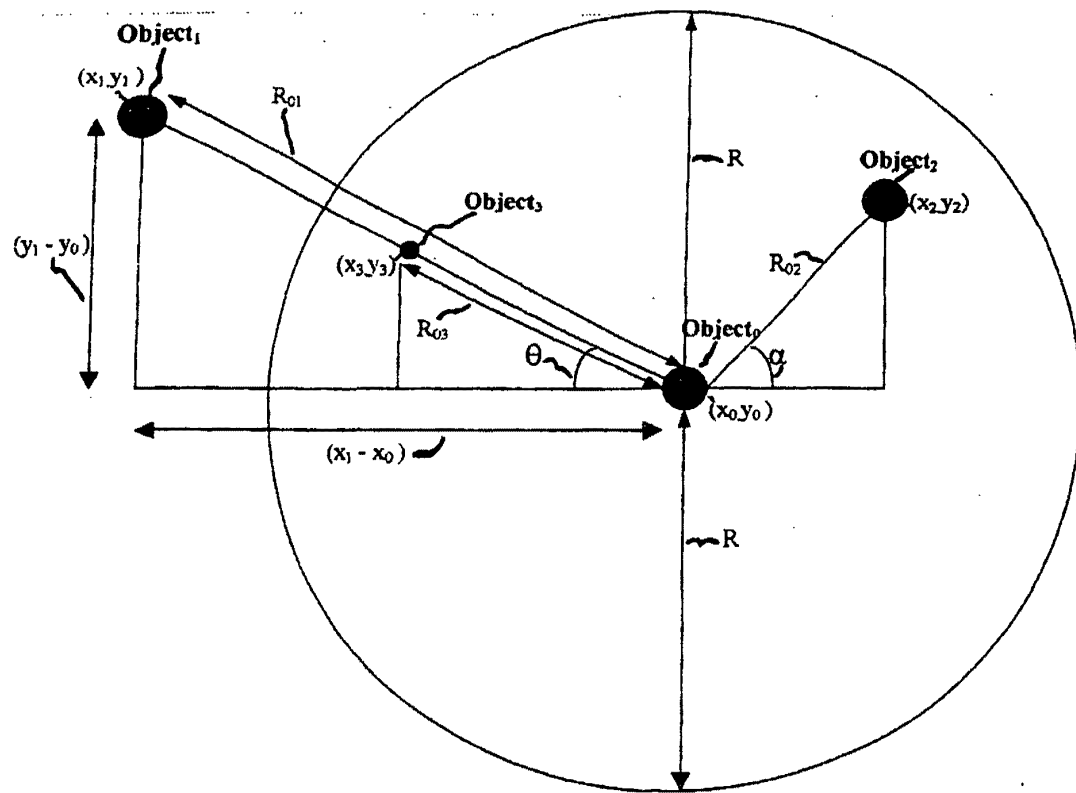


FIG. 4

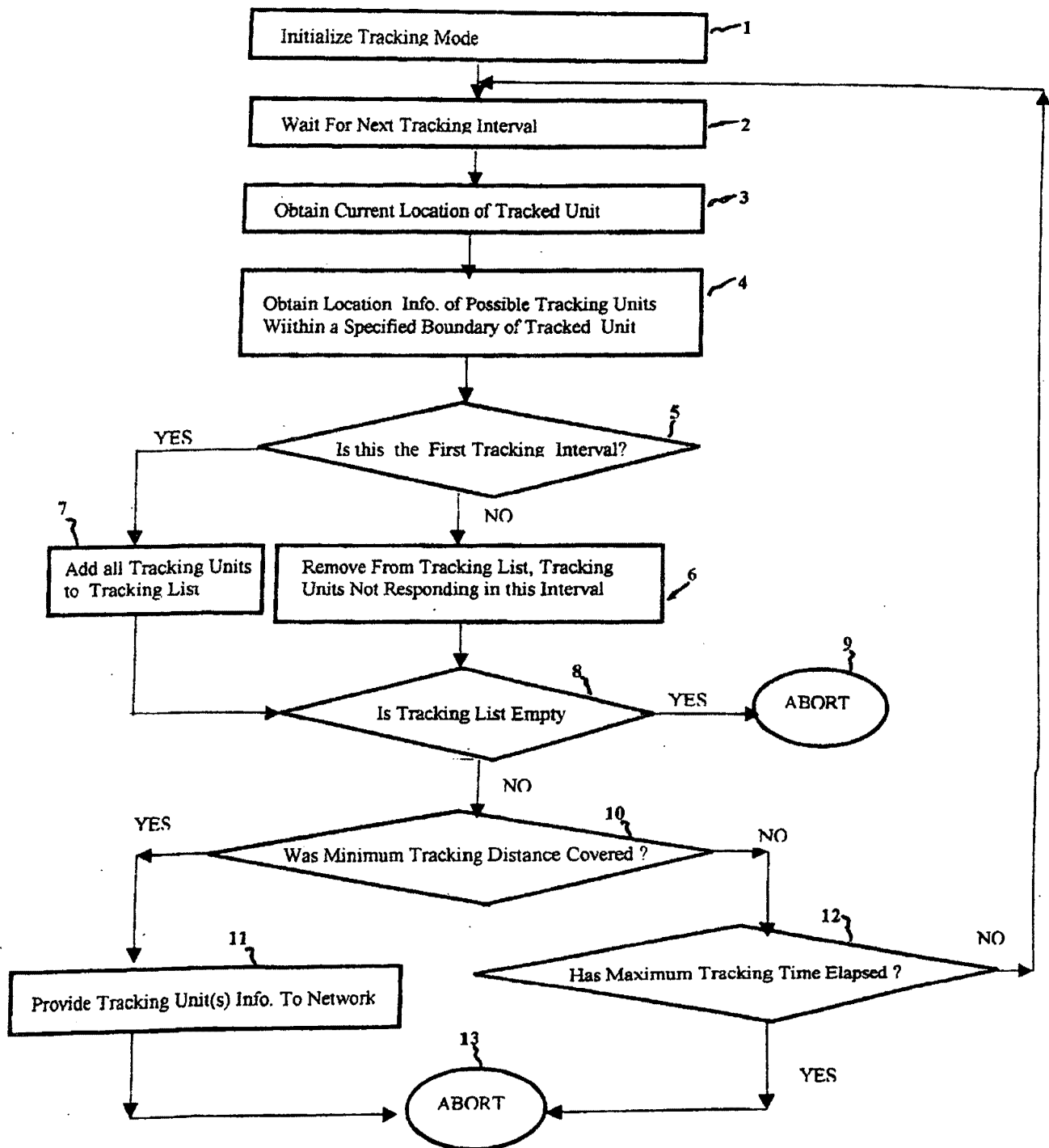


FIG. 5  
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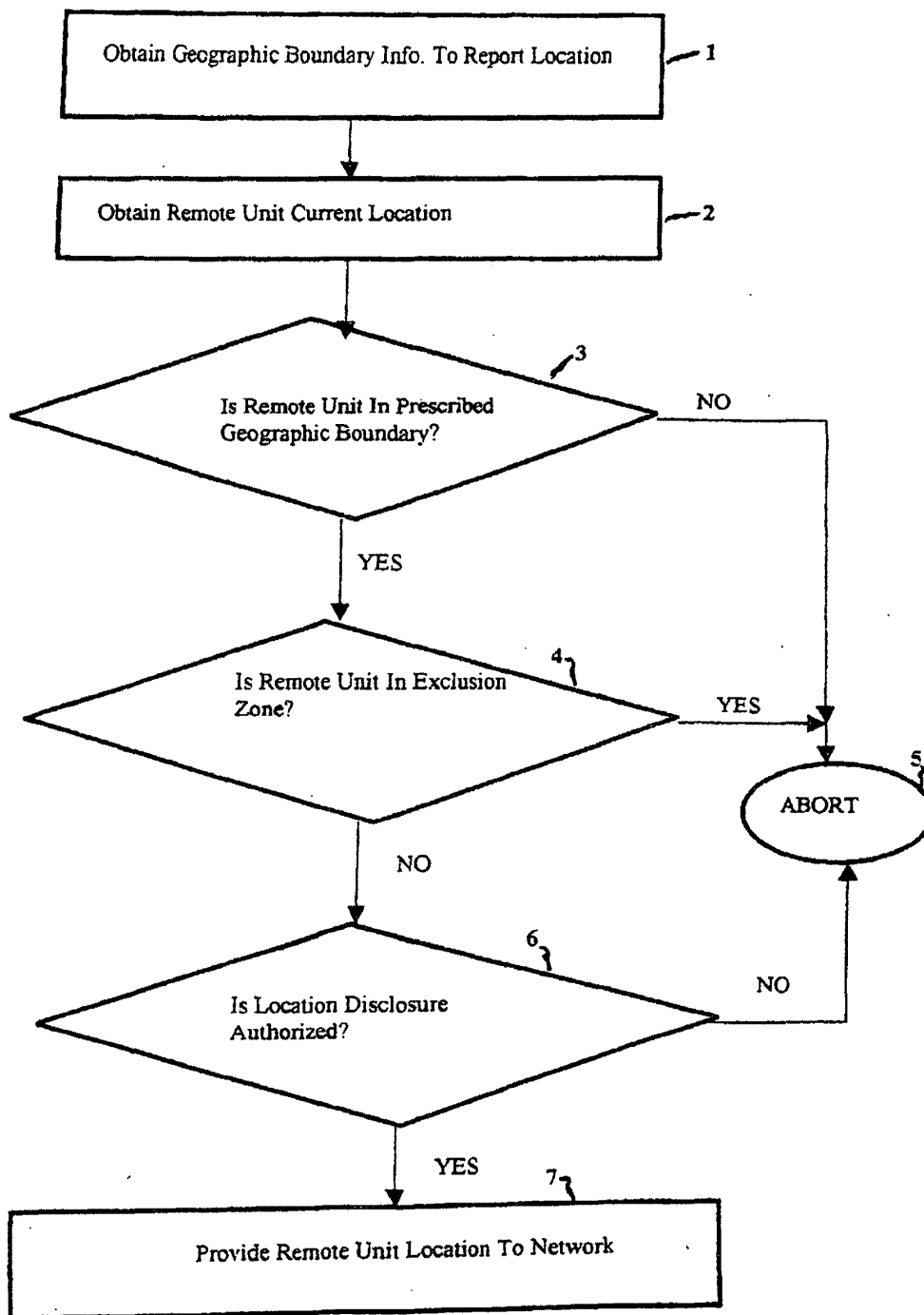


FIG. 6  
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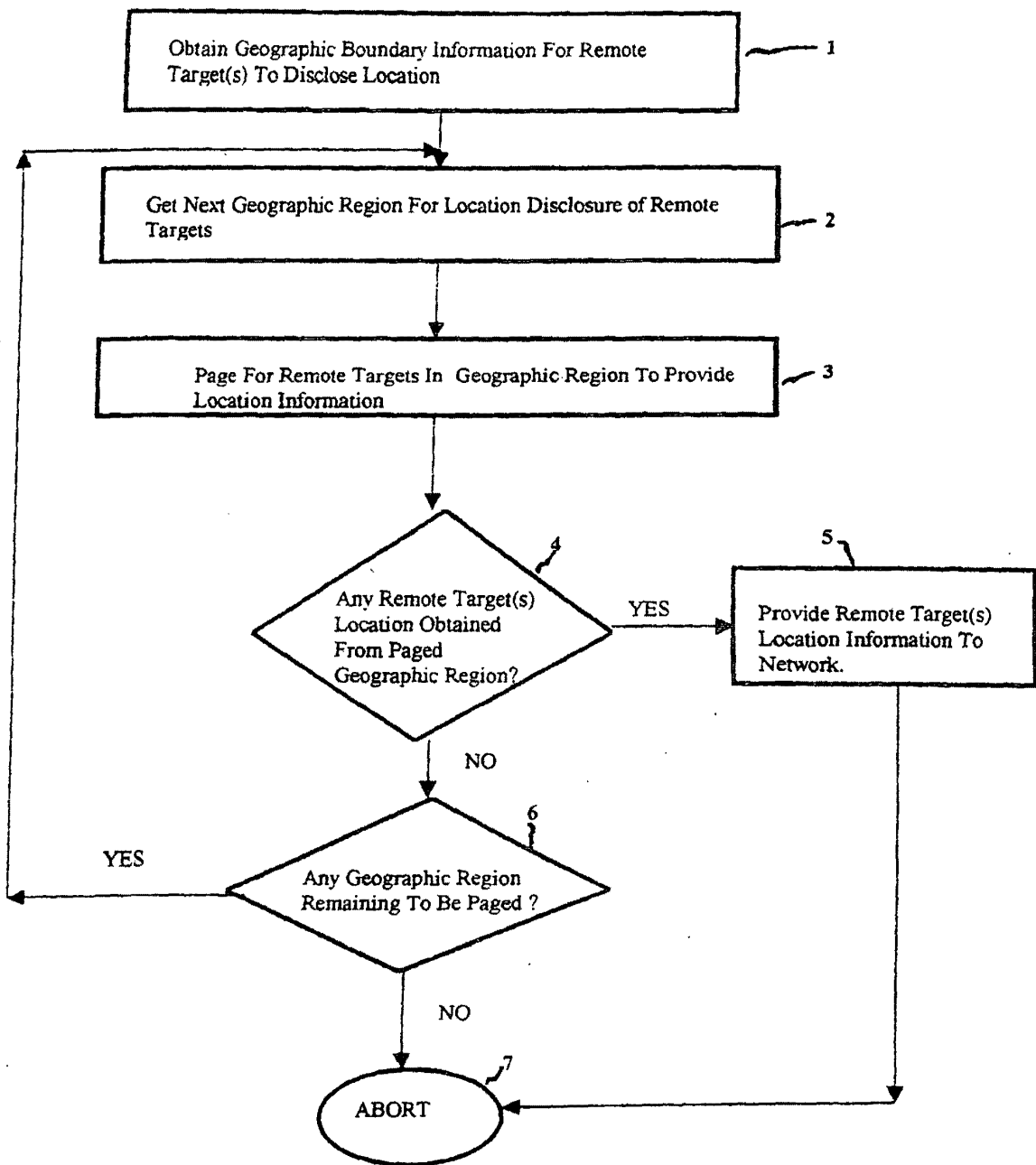


FIG. 7

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(37 CFR 1.63)**

☐ Declaration Submitted With Initial Filing      **OR**      ☐ Declaration Submitted after Initial Filing (surcharge (37 CFR 1.16 (e)) required)

|                        |                 |
|------------------------|-----------------|
| Attorney Docket Number |                 |
| First Named Inventor   |                 |
| COMPLETE IF KNOWN      |                 |
| Application Number     |                 |
| Filing Date            |                 |
| Art Unit               | 2636            |
| Examiner Name          | TRIEU VAN THANH |

I hereby declare that:

Each inventor's residence, mailing address, and citizenship are as stated below next to their name.

I believe the inventor(s) named below to be the original and first inventor(s) of the subject matter which is claimed and for which a patent is sought on the invention entitled:

METHOD AND APPARATUS FOR LOCATING  
MOBILE UNITS TRACKING ANOTHER OR  
WITHIN A PRESCRIBED GEOGRAPHIC BOUNDARY.

(Title of the Invention)

the specification of which

☒ is attached hereto

OR

☐ was filed on (MM/DD/YYYY) 07/19/2002 as United States Application Number or PCT International

Application Number 10,199,829 and was amended on (MM/DD/YYYY) (if applicable).

I hereby state that I have reviewed and understand the contents of the above identified specification, including the claims, as amended by any amendment specifically referred to above.

I acknowledge the duty to disclose information which is material to patentability as defined in 37 CFR 1.56, including for continuation-in-part applications, material information which became available between the filing date of the prior application and the national or PCT international filing date of the continuation-in-part application.

I hereby claim foreign priority benefits under 35 U.S.C. 119(a)-(d) or (f), or 365(b) of any foreign application(s) for patent, inventor's or plant breeder's rights certificate(s), or 365(a) of any PCT international application which designated at least one country other than the United States of America, listed below and have also identified below, by checking the box, any foreign application for patent, inventor's or plant breeder's rights certificate(s), or any PCT international application having a filing date before that of the application on which priority is claimed.

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☐ Additional foreign application numbers are listed on a supplemental priority data sheet PTO/SB/02B attached hereto.

[Page 1 of 2]

This collection of information is required by 35 U.S.C. 115 and 37 CFR 1.63. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 21 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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| Country<br>U.S.A                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Telephone<br>310 559 8133 | Fax<br>310 559 8173                                                           |                    |
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| NAME OF SOLE OR FIRST INVENTOR:                                                                                                                                                                                                                                                                                                                                                                                                                                           |                           | <input type="checkbox"/> A petition has been filed for this unsigned inventor |                    |
| Given Name (first and middle [if any])<br>MUNDI                                                                                                                                                                                                                                                                                                                                                                                                                           |                           | Family Name or Surname<br>FOMUKONG                                            |                    |
| Inventor's Signature<br>                                                                                                                                                                                                                                                                                                                                                                |                           | Date                                                                          |                    |
| Residence: City<br>W. Los Angeles                                                                                                                                                                                                                                                                                                                                                                                                                                         | State<br>CA               | Country<br>USA                                                                | Citizenship<br>CMB |
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| Inventor's Signature                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                           | Date                                                                          |                    |
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Substitute for form 1449/PTO

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(Use as many sheets as necessary)

Sheet 1 of 1

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| Application Number     |                 |
| Filing Date            |                 |
| First Named Inventor   | MUNDI FORMKONG  |
| Art Unit               | 2636            |
| Examiner Name          | TRIEU VAN THANH |
| Attorney Docket Number |                 |

| U. S. PATENT DOCUMENTS |                       |                                          |                             |                                                 |                                                                           |
|------------------------|-----------------------|------------------------------------------|-----------------------------|-------------------------------------------------|---------------------------------------------------------------------------|
| Examiner Initials*     | Cite No. <sup>1</sup> | Document Number                          | Publication Date MM-DD-YYYY | Name of Patentee or Applicant of Cited Document | Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear |
|                        |                       | Number-Kind Code <sup>2</sup> (if known) |                             |                                                 |                                                                           |
|                        |                       | US- 6,414,635                            | 7/21/2002                   | Stewart et al                                   |                                                                           |
|                        |                       | US- 6,263,280                            | 7/17/2001                   | Stingone Jr.                                    |                                                                           |
|                        |                       | US- 6,222,483                            | 4/24/2001                   | Twissell et al                                  |                                                                           |
|                        |                       | US- 5,689,245                            | 11-18-97                    | Morgan et al                                    |                                                                           |
|                        |                       | US- 5,418,537                            | 5-23-95                     | Bird                                            |                                                                           |
|                        |                       | US- 5,539,395                            | 7-23-96                     | Buss                                            |                                                                           |
|                        |                       | US- 5,504,491                            | 4-2-96                      | Chapman                                         |                                                                           |
|                        |                       | US- 5,918,159                            | 8-26-97                     | Formkong et al                                  |                                                                           |
|                        |                       | US- 5,669,061                            | 08-1997                     | J.F. Schipper                                   |                                                                           |
|                        |                       | US- 6,109,365                            | 08-2000                     | Rubin et al                                     |                                                                           |
|                        |                       | US- 6,221,819                            | 4-2001                      | King et al                                      |                                                                           |
|                        |                       | US- 6,181,253                            | 1-2001                      | Eschebach et al                                 |                                                                           |
|                        |                       | US- 5,517,690                            | 3-1988                      | Lingquist et al                                 |                                                                           |
|                        |                       | US- 5,731,785                            | 3-24-1998                   | Lemelson Jerome et al                           |                                                                           |
|                        |                       | US- 6,067,044                            | 5-23-2000                   | Kashani Motiri et al                            |                                                                           |
|                        |                       | US- 5,825,283                            | 10-20-1998                  | Campbell et al                                  |                                                                           |
|                        |                       | US- 5,539,395                            | 7-23-1996                   | Buss et al                                      |                                                                           |
|                        |                       | US- 5,689,245                            | 11-18-1997                  | Harper et al                                    |                                                                           |

| FOREIGN PATENT DOCUMENTS |                       |                                                                                 |                                |                                                 |                                                                           |                |
|--------------------------|-----------------------|---------------------------------------------------------------------------------|--------------------------------|-------------------------------------------------|---------------------------------------------------------------------------|----------------|
| Examiner Initials*       | Cite No. <sup>1</sup> | Foreign Patent Document                                                         | Publication Date<br>MM-DD-YYYY | Name of Patentee or Applicant of Cited Document | Pages, Columns, Lines, Where Relevant Passages Or Relevant Figures Appear | T <sup>6</sup> |
|                          |                       | Country Code <sup>3</sup> Number <sup>4</sup> Kind Code <sup>5</sup> (if known) |                                |                                                 |                                                                           |                |
|                          |                       |                                                                                 |                                |                                                 |                                                                           |                |
|                          |                       |                                                                                 |                                |                                                 |                                                                           |                |
|                          |                       |                                                                                 |                                |                                                 |                                                                           |                |
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|                          |                       |                                                                                 |                                |                                                 |                                                                           |                |

|                    |  |                 |  |
|--------------------|--|-----------------|--|
| Examiner Signature |  | Date Considered |  |
|--------------------|--|-----------------|--|

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. <sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> See Kinds Codes of USPTO Patent Documents at [www.uspto.gov](http://www.uspto.gov) or MPEP 901.04. <sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. <sup>6</sup> Applicant is to place a check mark here if English language translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.

**PATENT APPLICATION FEE DETERMINATION RECORD**  
Effective October 1, 2003

Application or Docket Number

10878951

**CLAIMS AS FILED - PART I**

|                                                           | (Column 1)     | (Column 2)   |
|-----------------------------------------------------------|----------------|--------------|
| TOTAL CLAIMS                                              | 5              |              |
| FOR                                                       | NUMBER FILED   | NUMBER EXTRA |
| TOTAL CHARGEABLE CLAIMS                                   | 5 minus 20 = * | 0            |
| INDEPENDENT CLAIMS                                        | 2 minus 3 = *  | 0            |
| MULTIPLE DEPENDENT CLAIM PRESENT <input type="checkbox"/> |                |              |

\* If the difference in column 1 is less than zero, enter "0" in column 2

**CLAIMS AS AMENDED - PART II**

|                                                                         | (Column 1)                       | (Column 2)                         | (Column 3)    |
|-------------------------------------------------------------------------|----------------------------------|------------------------------------|---------------|
| AMENDMENT A                                                             | CLAIMS REMAINING AFTER AMENDMENT | HIGHEST NUMBER PREVIOUSLY PAID FOR | PRESENT EXTRA |
| Total                                                                   | *                                | Minus **                           | =             |
| Independent                                                             | *                                | Minus ***                          | =             |
| FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM <input type="checkbox"/> |                                  |                                    |               |

|                                                                         | (Column 1)                       | (Column 2)                         | (Column 3)    |
|-------------------------------------------------------------------------|----------------------------------|------------------------------------|---------------|
| AMENDMENT B                                                             | CLAIMS REMAINING AFTER AMENDMENT | HIGHEST NUMBER PREVIOUSLY PAID FOR | PRESENT EXTRA |
| Total                                                                   | *                                | Minus **                           | =             |
| Independent                                                             | *                                | Minus ***                          | =             |
| FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM <input type="checkbox"/> |                                  |                                    |               |

|                                                                         | (Column 1)                       | (Column 2)                         | (Column 3)    |
|-------------------------------------------------------------------------|----------------------------------|------------------------------------|---------------|
| AMENDMENT C                                                             | CLAIMS REMAINING AFTER AMENDMENT | HIGHEST NUMBER PREVIOUSLY PAID FOR | PRESENT EXTRA |
| Total                                                                   | *                                | Minus **                           | =             |
| Independent                                                             | *                                | Minus ***                          | =             |
| FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM <input type="checkbox"/> |                                  |                                    |               |

- \* If the entry in column 1 is less than the entry in column 2, write "0" in column 3.
  - \*\* If the "Highest Number Previously Paid For" IN THIS SPACE is less than 20, enter "20."
  - \*\*\* If the "Highest Number Previously Paid For" IN THIS SPACE is less than 3, enter "3."
- The "Highest Number Previously Paid For" (Total or Independent) is the highest number found in the appropriate box in column 1.

SMALL ENTITY TYPE ☐

OR OTHER THAN SMALL ENTITY

| RATE      | FEE    |
|-----------|--------|
| BASIC FEE | 385.00 |
| XS 9=     | —      |
| X43=      | —      |
| +145=     | —      |
| TOTAL     | 385    |

| RATE      | FEE    |
|-----------|--------|
| BASIC FEE | 770.00 |
| XS18=     |        |
| X86=      |        |
| +290=     |        |
| TOTAL     |        |

SMALL ENTITY

OR OTHER THAN SMALL ENTITY

| RATE             | ADDITIONAL FEE |
|------------------|----------------|
| XS 9=            |                |
| X43=             |                |
| +145=            |                |
| TOTAL ADDIT. FEE |                |

| RATE             | ADDITIONAL FEE |
|------------------|----------------|
| XS18=            |                |
| X86=             |                |
| +290=            |                |
| TOTAL ADDIT. FEE |                |

| RATE             | ADDITIONAL FEE |
|------------------|----------------|
| XS 9=            |                |
| X43=             |                |
| +145=            |                |
| TOTAL ADDIT. FEE |                |

| RATE             | ADDITIONAL FEE |
|------------------|----------------|
| XS18=            |                |
| X86=             |                |
| +290=            |                |
| TOTAL ADDIT. FEE |                |

| RATE             | ADDITIONAL FEE |
|------------------|----------------|
| XS 9=            |                |
| X43=             |                |
| +145=            |                |
| TOTAL ADDIT. FEE |                |

| RATE             | ADDITIONAL FEE |
|------------------|----------------|
| XS18=            |                |
| X86=             |                |
| +290=            |                |
| TOTAL ADDIT. FEE |                |

PATENT APPLICATION SERIAL NO. \_\_\_\_\_

U.S. DEPARTMENT OF COMMERCE  
PATENT AND TRADEMARK OFFICE  
FEE RECORD SHEET

07/02/2004 MBIZUNES 00000032 10878951

01 FC:2001

385.00 0P

PTO-1556  
(5/87)

\*U.S. Government Printing Office: 2002 — 489-267/69033

| Ref # | Hits   | Search Query                                                                                                                                                                                         | DBs                      | Default Operator | Plurals | Time Stamp       |
|-------|--------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|------------------|---------|------------------|
| L1    | 19407  | (monitor\$3 or track\$3) near7 ((mobile or moveable or moving or movement) near5 (object or remot\$3 or portable or handheld or unit or device))                                                     | USPAT; EPO; JPO; DERWENT | OR               | ON      | 2005/03/29 13:29 |
| L2    | 476995 | (determin\$3 or defin\$3 or establish\$3) near9 (boundar\$3 or area or region)                                                                                                                       | USPAT; EPO; JPO; DERWENT | OR               | ON      | 2005/03/29 13:30 |
| L3    | 16712  | (report\$3 or transmi\$4 or receiv\$3 or indicat\$3) near9 ((proximity or distance or space) near7 (period or time))                                                                                 | USPAT; EPO; JPO; DERWENT | OR               | ON      | 2005/03/29 13:31 |
| L4    | 62     | 1 and 2 and 3 and geographic\$4 and (network\$3 or web or internet)                                                                                                                                  | USPAT; EPO; JPO; DERWENT | OR               | ON      | 2005/03/29 14:59 |
| L5    | 306    | (maintain\$3 or keep\$3 or constant\$) near4 (distance or space or proximity) near5 ((two or adjacent) near4 (unit or remot\$3 or mobile or handheld or object or individual or persons or vehicle)) | USPAT; EPO; JPO; DERWENT | OR               | ON      | 2005/03/29 14:34 |
| L6    | 17     | 5 with (time or period or interval)                                                                                                                                                                  | USPAT; EPO; JPO; DERWENT | OR               | ON      | 2005/03/29 14:31 |
| L7    | 0      | 4 and 6                                                                                                                                                                                              | USPAT; EPO; JPO; DERWENT | OR               | ON      | 2005/03/29 14:30 |
| L8    | 0      | 1 and 2 and 6                                                                                                                                                                                        | USPAT; EPO; JPO; DERWENT | OR               | ON      | 2005/03/29 14:31 |
| L9    | 1      | 1 and 6                                                                                                                                                                                              | USPAT; EPO; JPO; DERWENT | OR               | ON      | 2005/03/29 14:31 |
| L10   | 0      | 4 and 5                                                                                                                                                                                              | USPAT; EPO; JPO; DERWENT | OR               | ON      | 2005/03/29 14:33 |
| L11   | 31     | (request\$3 or acquir\$3) near4 (all or every or plurality) near4 ((remot\$3 or mobile or handheld or individual or person or object or animal) near5 (boundary or region or area or zone))          | USPAT; EPO; JPO; DERWENT | OR               | ON      | 2005/03/29 14:52 |
| L12   | 1      | 1 and 2 and 11                                                                                                                                                                                       | USPAT; EPO; JPO; DERWENT | OR               | ON      | 2005/03/29 14:39 |

|     |      |                                                                                                                                                                                                                                                                                    |                                |    |     |                  |
|-----|------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|----|-----|------------------|
| L13 | 4512 | (verif\$4 or acknowledg\$3 or identif\$4) near5 (remot\$3 or portable or mobile or handheld or person or individual or animal or object) near5 (geographic\$4 or boundary or area or region or zone)                                                                               | USPAT;<br>EPO; JPO;<br>DERWENT | OR | ON  | 2005/03/29 14:41 |
| L14 | 1    | 12 and 13                                                                                                                                                                                                                                                                          | USPAT;<br>EPO; JPO;<br>DERWENT | OR | ON  | 2005/03/29 14:43 |
| L15 | 830  | 13 with (location or position)                                                                                                                                                                                                                                                     | USPAT;<br>EPO; JPO;<br>DERWENT | OR | ON  | 2005/03/29 14:44 |
| L16 | 0    | 12 and 15                                                                                                                                                                                                                                                                          | USPAT;<br>EPO; JPO;<br>DERWENT | OR | ON  | 2005/03/29 14:44 |
| L17 | 0    | 1 and 11 and 15                                                                                                                                                                                                                                                                    | USPAT;<br>EPO; JPO;<br>DERWENT | OR | ON  | 2005/03/29 14:44 |
| L18 | 3    | 11 and 15                                                                                                                                                                                                                                                                          | USPAT;<br>EPO; JPO;<br>DERWENT | OR | ON  | 2005/03/29 14:44 |
| L19 | 0    | 11 with 15                                                                                                                                                                                                                                                                         | USPAT;<br>EPO; JPO;<br>DERWENT | OR | ON  | 2005/03/29 14:52 |
| L20 | 3    | 11 same 13                                                                                                                                                                                                                                                                         | USPAT;<br>EPO; JPO;<br>DERWENT | OR | ON  | 2005/03/29 14:53 |
| L21 | 33   | ((("6414635") or ("6263280") or ("6222483") or ("5689245") or ("5418537") or ("5539395") or ("5504491") or ("5918159") or ("5669061") or ("6108365") or ("6211819") or ("6181253") or ("5517690") or ("5731785") or ("6067044") or ("5825283") or ("5539395") or ("5689245"))).PN. | USPAT;<br>EPO; JPO;<br>DERWENT | OR | OFF | 2005/03/29 15:03 |
| L22 | 0    | 1 and 21 and 3                                                                                                                                                                                                                                                                     | USPAT;<br>EPO; JPO;<br>DERWENT | OR | ON  | 2005/03/29 15:04 |
| L23 | 0    | 1 and 21 and 5                                                                                                                                                                                                                                                                     | USPAT;<br>EPO; JPO;<br>DERWENT | OR | ON  | 2005/03/29 15:04 |
| L24 | 3    | 2 and 3 and 21                                                                                                                                                                                                                                                                     | USPAT;<br>EPO; JPO;<br>DERWENT | OR | ON  | 2005/03/29 15:05 |
| L25 | 0    | 5 and 24                                                                                                                                                                                                                                                                           | USPAT;<br>EPO; JPO;<br>DERWENT | OR | ON  | 2005/03/29 15:05 |

|     |   |                  |                                |    |    |                  |
|-----|---|------------------|--------------------------------|----|----|------------------|
| L26 | 0 | 21 and 11 and 13 | USPAT;<br>EPO; JPO;<br>DERWENT | OR | ON | 2005/03/29 15:05 |
|-----|---|------------------|--------------------------------|----|----|------------------|

|                 |                                                                        |          |                                  |
|-----------------|------------------------------------------------------------------------|----------|----------------------------------|
| US 6507311 B2   | Device and process fr                                                  | 342/70   | 180/169; 342/109                 |
| US 6337730 B1   | Non-uniformly-rigid bz                                                 | 349/156  | 349/184; 349/189                 |
| US 6223125 B1   | Collision avoidance s                                                  | 701/301  | 701/117                          |
| US 6074329 A    | Flexible manufacturin                                                  | 483/15   | 198/346.1; 29/33P; 29/563; 29/51 |
| US 4730917 A    | Method and an appar                                                    | 351/211  | 351/205                          |
| US 4637700 A    | Method and an appar                                                    | 351/211  | 351/205; 351/214                 |
| US 4585314 A    | Projection lens                                                        | 359/761  | 359/682                          |
| US 4251687 A    | Stereophonic sound r                                                   | 381/305  | 181/152; 181/154; 181/156; 381/  |
| US 4156933 A    | Ratio preserving conti                                                 | 700/68   | 359/698                          |
| US 3762801 A    | COMPACT THREE C                                                        | 359/716  | 359/784; 359/785                 |
| US 3727046 A    | VEHICLE TRAVEL SI                                                      | 246/182C | 180/169; 180/170                 |
| US 3696882 A    | METHOD FOR GUID                                                        | 180/168  | 340/905; 340/943                 |
| JP 2000031716 A | BRACKET                                                                |          |                                  |
| JP 63121184 A   | DAMPING DEVICE FOR STEPF                                               | 360/75   |                                  |
| WO 5100 A1      | WARNING LIGHT SIGNAL DEVICE FOR MAINTAINING SAFE D                     |          |                                  |
| GB 2236412 A    | Anti-collision timer                                                   |          | 368/108                          |
| GB 2236412 A    | Anti-collision timer for vehicle - indicates set time periods by audib |          |                                  |

L6

|               |                         |            |                                   |
|---------------|-------------------------|------------|-----------------------------------|
| US 6812851 B1 | Apparatuses for displ:  | 340/815.4  | 340/425.5; 340/691.6; 340/693.3   |
| US 6756918 B2 | Method and apparatus    | 340/988    | 340/989; 340/992                  |
| US 6734823 B2 | Method and system f     | 342/463    | 342/387; 342/457; 342/458         |
| US 6618593 B1 | Location dependent u    | 455/456.3  | 342/357.11; 455/266; 455/414.1    |
| US 6560461 B1 | Authorized location re  | 455/456.2  | 340/825.49; 342/357.09; 455/12.   |
| US 6441752 B1 | Method and apparatus    | 340/988    | 340/989; 340/992                  |
| US 6437743 B1 | Method and system f     | 342/463    | 342/457; 342/458                  |
| US 6353390 B1 | Method and system o     | 340/572.1  | 340/572.4; 340/573.1; 340/825.4   |
| US 6061337 A  | System and method f     | 370/331    | 455/440                           |
| US 5621417 A  | Method and mechanis     | 342/457    | 342/463                           |
| US 6871077 B2 | System and method f     | 455/456.5  | 342/463; 455/456.1; 455/561       |
| US 6850209 B2 | Apparatuses, method     | 345/1.3    | 340/469; 345/207; 345/87; 40/59   |
| US 6822568 B2 | Space area network      | 340/572.1  | 340/541; 340/568.1; 340/571; 34   |
| US 6816090 B2 | Mobile asset security   | 340/989    | 340/539.13; 340/990               |
| US 6812840 B2 | Object area network     | 340/572.1  | 340/573.1; 340/825.36             |
| US 6744403 B2 | GPS based tracking s    | 342/357.0  | 342/357.03                        |
| US 6674368 B2 | Automated tracking s    | 340/573.4  | 340/506; 340/572.1; 340/572.8; 3  |
| US 6658349 B2 | Method and system f     | 701/207    | 340/992; 342/357.09; 701/21; 70   |
| US 6505120 B2 | Navigation apparatus    | 701/211    | 701/209; 701/24                   |
| US 6486801 B1 | Base station apparat    | 340/994    | 340/988; 701/208                  |
| US 6469992 B1 | Intelligent packet retr | 370/329    | 370/349; 370/389; 370/401; 455/   |
| US 6466869 B2 | Navigation apparatus    | 701/211    | 701/209; 701/24                   |
| US 6463290 B1 | Mobile-assisted netw    | 455/456.1  | 455/69                            |
| US 6363323 B1 | Apparatus and metho     | 701/213    | 340/989; 340/991; 340/994; 342/   |
| US 6353606 B1 | System and method f     | 370/342    | 340/10.1; 340/5.1; 340/7.1; 455/6 |
| US 6340935 B1 | Computerized parking    | 340/932.2  | 340/905; 340/933; 340/937; 340/   |
| US 6321090 B1 | Mobile communication    | 455/440    | 370/331; 455/436; 455/439; 455/   |
| US 6308073 B1 | Mobile station locatin  | 455/456.3  | 455/517; 455/561                  |
| US 6246361 B1 | Method and apparatus    | 342/357.01 |                                   |
| US 6243588 B1 | Mobile positioning me   | 455/456.2  | 342/457; 370/252; 455/524         |
| US 6148202 A  | Vehicle locating and c  | 455/434    | 455/457                           |
| US 6100806 A  | Apparatus and metho     | 340/573.4  | 340/10.41; 340/5.3; 340/539.1; 3  |
| US 6097930 A  | System and method f     | 340/7.26   | 455/67.16                         |
| US 6072396 A  | Apparatus and metho     | 340/573.4  | 340/5.5; 340/539.1; 340/539.13;   |
| US 5988645 A  | Moving object monito    | 273/348    | 250/222.2; 273/317; 273/371; 27   |
| US 5987136 A  | Image authentication    | 713/176    | 380/258; 380/54; 382/113; 382/1   |
| US 5970481 A  | Method and apparatus    | 705/417    | 705/31                            |
| US 5926133 A  | Differentially correcte | 342/363    | 342/450; 342/457; 342/463; 455/   |
| US 5905957 A  | Method and apparatus    | 455/435.1  | 455/13.1; 455/427                 |
| US 5901358 A  | Mobile station locatin  | 455/456.2  | 342/450; 342/457; 455/457         |
| US 5884221 A  | Vehicle locating and c  | 701/300    | 455/456.1; 455/457                |
| US 5832394 A  | Vehicle locating and c  | 701/1      | 455/419; 455/456.1                |
| US 5822311 A  | Random access sche      | 370/322    | 370/347; 370/349; 370/508         |

L4

|              |                         |           |                                 |
|--------------|-------------------------|-----------|---------------------------------|
| US 5799082 A | Secure authentication   | 713/179   | 342/357.17; 380/246; 380/258    |
| US 5796365 A | Method and apparatus    | 342/357.0 | 342/363; 343/712                |
| US 5768686 A | Method and system for   | 340/7.25  | 340/825.49; 455/456.5           |
| US 5764770 A | Image authentication    | 713/176   | 380/200; 380/258; 380/54        |
| US 5694322 A | Method and apparatus    | 705/417   | 340/870.07; 705/30; 705/31; 705 |
| US 5659617 A | Method for providing    | 380/258   | 342/357.09; 380/270; 713/156    |
| US 5652707 A | Vehicle locating and c  | 455/456.3 | 340/990                         |
| US 5587715 A | Method and apparatus    | 493/477   | 270/21.1; 270/41; 474/85; 493/3 |
| US 5519621 A | Vehicle locating and c  | 455/99    | 340/825.49; 340/989; 455/457    |
| US 5513111 A | Vehicle locating and c  | 455/456.2 | 340/990                         |
| US 5398190 A | Vehicle locating and c  | 455/456.3 | 340/990; 340/995.12; 342/457; 7 |
| US 5321514 A | Interactive television  | 725/62    | 348/724; 348/725; 375/356; 455/ |
| US 5299132 A | Vehicle locating and c  | 455/457   | 340/990; 340/995.12; 342/457; 3 |
| US 5268698 A | Target acquisition, loc | 342/450   | 340/552; 342/454; 342/457; 342/ |
| US 5177604 A | Interactive television  | 725/144   | 348/475; 375/130; 455/45; 725/1 |
| US 5155689 A | Vehicle locating and c  | 134/1.1   | 216/69; 216/79; 257/E21.226     |
| US 4916455 A | Locating system and     | 342/457   | 340/825.49; 342/387; 701/300    |
| US 4812852 A | Locating system and     | 342/457   | 342/387; 342/390; 375/356; 375/ |
| US 4750036 A | Interactive television  | 725/62    | 348/479; 375/130; 725/109; 725/ |

L4 (Cont.)

|               |                        |           |                               |
|---------------|------------------------|-----------|-------------------------------|
| US 6549775 B2 | Mobile communication   | 455/432.1 | 455/435.1; 455/456.6; 455/458 |
| US 6463055 B1 | Integrated radio telec | 370/353   | 370/356                       |
| US 6389008 B1 | Integrated radio telec | 370/352   | 370/338; 455/433; 455/466     |

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US 6549775 B2  
US 6396535 B1  
US 5913227 A

Mobile communication 455/432.1 455/435.1; 455/456.6; 455/458  
Situation awareness 348/159 348/143  
Agent-implemented 711/152 711/149; 711/151; 711/211

L20



# UNITED STATES PATENT AND TRADEMARK OFFICE

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www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 10/878,951      | 06/28/2004  | Mundi Fomukong       |                     | 5372             |

7590 04/01/2005  
MUNDI FOMUKONG  
10853 ROSE AVE. #49  
W. Los Angeles, CA 90034

EXAMINER

TRIEU, VAN THANH

|          |              |
|----------|--------------|
| ART UNIT | PAPER NUMBER |
|----------|--------------|

2636

DATE MAILED: 04/01/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

|                              |                        |                     |  |
|------------------------------|------------------------|---------------------|--|
| <b>Office Action Summary</b> | <b>Application No.</b> | <b>Applicant(s)</b> |  |
|                              | 10/878,951             | FOMUKONG, MUNDI     |  |
|                              | <b>Examiner</b>        | <b>Art Unit</b>     |  |
|                              | Van T Trieu            | 2636                |  |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION. OK

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 28 June 2004.  
2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-5 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
6) ☒ Claim(s) 1-5 is/are rejected.  
7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.  
10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All    b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |                                                                                                    |                                                                             |
|----------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)               | Paper No(s)/Mail Date. _____                                                |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>6/28/04</u> .                                                             | 6) <input type="checkbox"/> Other: _____                                    |

## DETAILED ACTION

### *Specification*

1. The disclosure is objected to because of the following informalities: in the specification, page 1, the CONTINUING DATA section, line 2, after the year "2000" insert --- issued as U.S. Patent No. 6,756,918 ---.

Appropriate correction is required.

### *Claim Rejections - 35 USC § 102*

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

2. Claims 4 and 5 are rejected under 35 U.S.C. 102(e) as being anticipated by **Drutman et al** [US 6,618,593].

Regarding claim 4, the claimed communication system for providing the location of portable mobile remote units in a geographic region to a wireless consumer requesting that information comprising: means for the wireless consumer to specify and forward to a network geographic boundary information describing the geographic region where the location of portable mobile remote units are required by the wireless consumer (the plurality of wireless mobile

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communications devices 17 and 19 transmits of their geographic location to the central server 25 via a network 15 as required, see Figs. 1-3, col. 6, lines 60-67, col. 7, lines 1-4, col. 8, lines 41-47 and col. 11, lines 12-19); and the means to request that all portable remote units within the geographic boundary establish their location at the network (all the mobile communications devices 17, 19 generates or selects their own meeting places or geographic boundaries 450 and 452, see Figs. 2 and 4, col. 11, lines 34-37 and col. 13, lines 47-58); and the means to verify at the network, after the request that a portable remote unit according to responded with location information (the central server 25 matches or verifies after receiving geographic locations from each of the mobile communications devices 17 and 19, see Figs. 3 and 5, col. 4, lines 44-53, col. 8, lines 54-64 and col. 9, lines 3-11); and the means to provide to the wireless consumer the location of a portable mobile remote unit that exist in the geographic boundary defined by the wireless consumer after the verification (the central server 25 transmits location information or meeting place to each of the user having the mobile communications devices, and/or to transmit the location of one mobile communications device to another mobile communications device user, see Fig. 5, col. 4, lines 49-53, col. 11, lines 37-39 and col. 12, lines 46-48).

Regarding claim 5, all the claimed subject matters are cited in respect to claim 4 above, and including the portable mobile remote units are able to establish and report their location to other communication units of the system (each of the mobile communications devices 17 and 19 generates or selects its own

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geographic location or place, and then transmits to another mobile communications device user, see Figs. 1, 2 and 4, col. 8, lines 64-65 and col. 15, lines 31-37).

### ***Double Patenting***

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

3. Claims 1-5 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-5 of U.S. Patent No. 6,756,918. Although the conflicting claims are not identical, they are not patentably distinct from each other because all the claimed limitations are identical to each other.

### ***Conclusion***

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

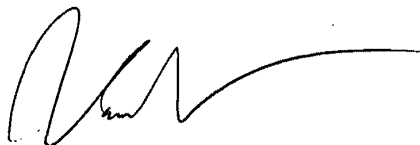
Art Unit: 2636

**Beri et al** discloses a location monitoring system for tracking an object relative to a virtual boundary via telecommunication infrastructure including a wireless communication network. [US 6,535,390]

**Hassan et al** discloses a tracking system for railcars is configured as a dynamic local area network having a master tracking unit and a plurality of slave tracking units. The system determines whether the slave unit is ahead of or behind the master unit. [US 5,621,417]

5. Any inquiry concerning this communication or earlier communications from examiner should be directed to primary examiner **Van Trieu** whose telephone number is (571) 272-2972. The examiner can normally be reached on Mon-Fri from 7:00 AM to 3:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. **Jeffery Hofsass** can be reached on (571) 272-2981.

A handwritten signature in black ink, appearing to read 'Van Trieu', with a long horizontal flourish extending to the right.

**Van Trieu**  
**Primary Examiner**  
**Date: 3/30/05**

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449/PTO

**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**

(Use as many sheets as necessary)

**Complete if Known**

|                        |                 |
|------------------------|-----------------|
| Application Number     | 10/878,951      |
| Filing Date            | 6/28/04         |
| First Named Inventor   | MUNDI FORMKONG  |
| Art Unit               | 2836            |
| Examiner Name          | TRIEU VAN THANH |
| Attorney Docket Number |                 |

| U. S. PATENT DOCUMENTS |                       |                                          |           |                                |                                                    |                                                                                 |
|------------------------|-----------------------|------------------------------------------|-----------|--------------------------------|----------------------------------------------------|---------------------------------------------------------------------------------|
| Examiner Initials*     | Cite No. <sup>1</sup> | Document Number                          |           | Publication Date<br>MM-DD-YYYY | Name of Patentee or<br>Applicant of Cited Document | Pages, Columns, Lines, Where<br>Relevant Passages or Relevant<br>Figures Appear |
|                        |                       | Number-Kind Code <sup>2</sup> (if known) |           |                                |                                                    |                                                                                 |
| 3                      |                       | US                                       | 6,414,635 | 7/2/2002                       | Stewart et al                                      |                                                                                 |
|                        |                       | US                                       | 6,263,280 | 7/17/2001                      | Stingone Jr.                                       |                                                                                 |
|                        |                       | US                                       | 6,222,483 | 4/24/2001                      | Twissell et al                                     |                                                                                 |
|                        |                       | US                                       | 5,689,245 | 11-18-97                       | Moren et al                                        |                                                                                 |
|                        |                       | US                                       | 5,418,537 | 5-23-95                        | Bird                                               |                                                                                 |
|                        |                       | US                                       | 5,539,395 | 7-23-96                        | Buss                                               |                                                                                 |
|                        |                       | US                                       | 5,504,491 | 4-2-96                         | Chapman                                            |                                                                                 |
|                        |                       | US                                       | 5,918,159 | 8-26-97                        | Formkong et al                                     |                                                                                 |
|                        |                       | US                                       | 5,669,061 | 08-1997                        | J.F Schipper                                       |                                                                                 |
|                        |                       | US                                       | 6,109,365 | 08-2000                        | Rubin et al                                        |                                                                                 |
|                        |                       | US                                       | 6,221,819 | 4-2001                         | King et al                                         |                                                                                 |
|                        |                       | US                                       | 6,181,253 | 1-2001                         | Eschebark et al                                    |                                                                                 |
|                        |                       | US                                       | 5,517,690 | 3-1998                         | Lingvist et al                                     |                                                                                 |
|                        |                       | US                                       | 5,731,785 | 3-24-1999                      | Lemelson Jerome et al                              |                                                                                 |
|                        |                       | US                                       | 6,067,044 | 5-23-2000                      | Kashani Motini et al                               |                                                                                 |
|                        |                       | US                                       | 5,825,283 | 11-20-1998                     | Cammi Elie et al                                   |                                                                                 |
|                        |                       | US                                       | 5,539,395 | 7-23-1996                      | Buss et al                                         |                                                                                 |
|                        |                       | US                                       | 5,689,245 | 11-18-1997                     | Harper et al                                       |                                                                                 |
|                        |                       | US                                       |           |                                |                                                    |                                                                                 |

| FOREIGN PATENT DOCUMENTS |                       |                                                                                 |                                |                                                 |                                                                           |                |
|--------------------------|-----------------------|---------------------------------------------------------------------------------|--------------------------------|-------------------------------------------------|---------------------------------------------------------------------------|----------------|
| Examiner Initials*       | Cite No. <sup>1</sup> | Foreign Patent Document                                                         | Publication Date<br>MM-DD-YYYY | Name of Patentee or Applicant of Cited Document | Pages, Columns, Lines, Where Relevant Passages Or Relevant Figures Appear | 1 <sup>6</sup> |
|                          |                       | Country Code <sup>3</sup> Number <sup>4</sup> Kind Code <sup>5</sup> (if known) |                                |                                                 |                                                                           |                |
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|                    |                    |                 |         |
|--------------------|--------------------|-----------------|---------|
| Examiner Signature | <i>[Signature]</i> | Date Considered | 3/29/05 |
|--------------------|--------------------|-----------------|---------|

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. <sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> See Kinds Codes of USPTO Patent Documents at [www.uspto.gov](http://www.uspto.gov) or MPEP 901.04. <sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. <sup>6</sup> Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.

|                                   |                                       |                                                               |             |
|-----------------------------------|---------------------------------------|---------------------------------------------------------------|-------------|
| <b>Notice of References Cited</b> | Application/Control No.<br>10/878,951 | Applicant(s)/Patent Under<br>Reexamination<br>FOMUKONG, MUNDI |             |
|                                   | Examiner<br>Van T Trieu               | Art Unit<br>2636                                              | Page 1 of 1 |

**U.S. PATENT DOCUMENTS**

| * |   | Document Number<br>Country Code-Number-Kind Code | Date<br>MM-YYYY | Name            | Classification |
|---|---|--------------------------------------------------|-----------------|-----------------|----------------|
| * | A | US-6,756,918                                     | 06-2004         | Fomukong, Mundi | 340/988        |
| * | B | US-6,618,593                                     | 09-2003         | Drutman et al.  | 455/456.3      |
| * | C | US-6,353,390                                     | 03-2002         | Beri et al.     | 340/572.1      |
| * | D | US-5,621,417                                     | 04-1997         | Hassan et al.   | 342/457        |
|   | E | US-                                              |                 |                 |                |
|   | F | US-                                              |                 |                 |                |
|   | G | US-                                              |                 |                 |                |
|   | H | US-                                              |                 |                 |                |
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|   | J | US-                                              |                 |                 |                |
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|   | L | US-                                              |                 |                 |                |
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**FOREIGN PATENT DOCUMENTS**

| * |   | Document Number<br>Country Code-Number-Kind Code | Date<br>MM-YYYY | Country | Name | Classification |
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**NON-PATENT DOCUMENTS**

| * |   | Include as applicable: Author, Title Date, Publisher, Edition or Volume, Pertinent Pages) |
|---|---|-------------------------------------------------------------------------------------------|
|   | U |                                                                                           |
|   | V |                                                                                           |
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\*A copy of this reference is not being furnished with this Office action. (See MPEP § 707.05(a).)  
Dates in MM-YYYY format are publication dates. Classifications may be US or foreign.



## UNITED STATES PATENT AND TRADEMARK OFFICE

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 www.uspto.gov

**\*BIBDATASHEET\***

Bib Data Sheet

**CONFIRMATION NO. 5372**

|                             |                                       |              |                        |                        |
|-----------------------------|---------------------------------------|--------------|------------------------|------------------------|
| SERIAL NUMBER<br>10/878,951 | FILING DATE<br>06/28/2004<br><br>RULE | CLASS<br>340 | GROUP ART UNIT<br>2636 | ATTORNEY<br>DOCKET NO. |
|-----------------------------|---------------------------------------|--------------|------------------------|------------------------|

APPLICANTS

Mundi Fomukong, W. Los Angeles, CA;

**\*\* CONTINUING DATA \*\*\*\*\***

This application is a CON of 10/199,829 07/19/2002 PAT 6,756,918  
 which is a CIP of 09/753,178 12/30/2000 PAT 6,441,752

**\*\* FOREIGN APPLICATIONS \*\*\*\*\***

IF REQUIRED, FOREIGN FILING LICENSE GRANTED \*\* SMALL ENTITY \*\*  
 \*\* 08/19/2004

|                                                                                                |                                                                                                                                                                                                                                      |                           |                        |                      |                            |
|------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------|------------------------|----------------------|----------------------------|
| Foreign Priority claimed<br>35 USC 119 (a-d) conditions<br>met<br>Verified and<br>Acknowledged | <input type="checkbox"/> yes <input checked="" type="checkbox"/> no<br><input type="checkbox"/> yes <input checked="" type="checkbox"/> no <input type="checkbox"/> Met after Allowance<br>Examiner's Signature _____ Initials _____ | STATE OR<br>COUNTRY<br>CA | SHEETS<br>DRAWING<br>7 | TOTAL<br>CLAIMS<br>5 | INDEPENDENT<br>CLAIMS<br>2 |
|------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------|------------------------|----------------------|----------------------------|

ADDRESS  
 MUNDI FOMUKONG  
 10853 ROSE AVE. #49  
 W. Los Angeles , CA  
 90034

TITLE  
 Method and apparatus for locating mobile units tracking another or within a prescribed geographic boundary

|                                   |                                                                                                                   |                                                                                                                                                                                                                                                                                 |
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| FILING FEE<br><br>RECEIVED<br>385 | FEES: Authority has been given in Paper<br>No. _____ to charge/credit DEPOSIT ACCOUNT<br>No. _____ for following: | <input type="checkbox"/> All Fees<br><input type="checkbox"/> 1.16 Fees ( Filing )<br><input type="checkbox"/> 1.17 Fees ( Processing Ext. of time )<br><input type="checkbox"/> 1.18 Fees ( Issue )<br><input type="checkbox"/> Other _____<br><input type="checkbox"/> Credit |
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| <b>Index of Claims</b><br> | <b>Application No.</b> |  | <b>Applicant(s)</b> |  |
|                                                                                                             | 10/878,951             |  | FOMUKONG, MUNDI     |  |
|                                                                                                             | <b>Examiner</b>        |  | <b>Art Unit</b>     |  |
|                                                                                                             | Van T Trieu            |  | 2636                |  |

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| ✓ | <b>Rejected</b> |
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| + | <b>Restricted</b>                      |

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| N | <b>Non-Elected</b>  |
| I | <b>Interference</b> |

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| A | <b>Appeal</b>   |
| O | <b>Objected</b> |

| Claim |          | Date    |  |  |  |  |  |  |  |  |  |
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| Final | Original | 3/29/05 |  |  |  |  |  |  |  |  |  |
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| Claim |          | Date |  |  |  |  |  |  |  |  |  |
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| Final | Original |      |  |  |  |  |  |  |  |  |  |
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| Claim |          | Date |  |  |  |  |  |  |  |  |  |
|-------|----------|------|--|--|--|--|--|--|--|--|--|
| Final | Original |      |  |  |  |  |  |  |  |  |  |
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Van T Trieu

2636

| Class | Subclass | Date      | Examiner |
|-------|----------|-----------|----------|
| 340   | 988      | 3/29/2005 | VT       |
|       | 989      |           |          |
|       | 990      |           |          |
|       | 992      |           |          |
|       | 573.1    |           |          |
|       | 573.3    |           |          |
|       | 691.6    |           |          |
| 455   | 439      | 3/29/2005 | VT       |
|       | 456.2    |           |          |
|       | 456.3    |           |          |
|       | 457      |           |          |
| 342   | 357.09   | 3/29/05   | W        |
|       | 377.1    |           |          |
|       | 457      |           |          |

| Class | Subclass | Date | Examiner |
|-------|----------|------|----------|
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[illegible]

Approved for use through 07/31/2005, OMB 0584-0051  
U.S. Patent and Trademark Office, U.S. DEPARTMENT OF COMMERCE  
Under the paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

|                                                                                                                                                                                                                 |            |                                                |                    |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|------------------------------------------------|--------------------|
| <b>PETITION FOR EXTENSION OF TIME UNDER 37 CFR 1.136(a)</b><br><b>FY 2005</b><br><small>(Fees pursuant to the Consolidated Appropriations Act, 2005 (H.R. 4818).)</small>                                       |            | Docket Number (Optional)                       | <b>JUN 27 2005</b> |
| Application Number <b>101878,951</b>                                                                                                                                                                            |            | Filed <b>06/28/2004</b>                        |                    |
| For                                                                                                                                                                                                             |            |                                                |                    |
| Art Unit <b>2636</b>                                                                                                                                                                                            |            | Examiner <b>TRIEU, VAN, THANH</b>              |                    |
| This is a request under the provisions of 37 CFR 1.136(a) to extend the period for filing a reply in the above identified application.                                                                          |            |                                                |                    |
| The requested extension and fee are as follows (check time period desired and enter the appropriate fee below):                                                                                                 |            |                                                |                    |
|                                                                                                                                                                                                                 | <u>Fee</u> | <u>Small Entity Fee</u>                        |                    |
| <input type="checkbox"/> One month (37 CFR 1.17(a)(1))                                                                                                                                                          | \$120      | \$60                                           | \$ _____           |
| <input checked="" type="checkbox"/> Two months (37 CFR 1.17(a)(2))                                                                                                                                              | \$450      | <b>\$225</b>                                   | \$ <b>225</b>      |
| <input type="checkbox"/> Three months (37 CFR 1.17(a)(3))                                                                                                                                                       | \$1020     | \$510                                          | \$ _____           |
| <input type="checkbox"/> Four months (37 CFR 1.17(a)(4))                                                                                                                                                        | \$1590     | \$795                                          | \$ _____           |
| <input type="checkbox"/> Five months (37 CFR 1.17(a)(5))                                                                                                                                                        | \$2160     | \$1080                                         | \$ _____           |
| <input checked="" type="checkbox"/> Applicant claims small entity status. See 37 CFR 1.27.                                                                                                                      |            |                                                |                    |
| <input type="checkbox"/> A check in the amount of the fee is enclosed.                                                                                                                                          |            | 06/27/2005 TL0111 00000017 10878911            |                    |
| <input checked="" type="checkbox"/> Payment by credit card. Form PTO-2038 is attached.                                                                                                                          |            | 01 FC:2252 225.00 OP                           |                    |
| <input type="checkbox"/> The Director has already been authorized to charge fees in this application to a Deposit Account.                                                                                      |            |                                                |                    |
| <input type="checkbox"/> The Director is hereby authorized to charge any fees which may be required, or credit any overpayment, to Deposit Account Number _____ I have enclosed a duplicate copy of this sheet. |            |                                                |                    |
| <b>WARNING: Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.</b>                         |            |                                                |                    |
| I am the <input checked="" type="checkbox"/> applicant/inventor.                                                                                                                                                |            |                                                |                    |
| <input type="checkbox"/> assignee of record of the entire interest. See 37 CFR 3.71.<br>Statement under 37 CFR 3.73(b) is enclosed (Form PTO/SB/96).                                                            |            |                                                |                    |
| <input type="checkbox"/> attorney or agent of record. Registration Number _____                                                                                                                                 |            |                                                |                    |
| <input type="checkbox"/> attorney or agent under 37 CFR 1.34.<br>Registration Number if acting under 37 CFR 1.34 _____                                                                                          |            |                                                |                    |
| _____<br><b>MUNIP FOMUKONG</b><br>Typed or printed name                                                                                                                                                         |            | _____<br><b>6/26/2005</b><br>Date              |                    |
|                                                                                                                                                                                                                 |            | _____<br><b>3105598133</b><br>Telephone Number |                    |
| NOTE: Signatures of all the inventors or assignees of record of the entire interest or their representative(s) are required. Submit multiple forms if more than one signature is required, see below.           |            |                                                |                    |
| <input type="checkbox"/> Total of _____ forms are submitted.                                                                                                                                                    |            |                                                |                    |

This collection of information is required by 37 CFR 1.136(a). The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to take 6 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing this form, call 1-800-PTO-0100 and select option 2.



**RESPONSE TO OFFICE ACTION**

**FOR**

**APPLICATION : US 10/878,951**

**EXAMINER: VAN TRIEU**

**ART UNIT : 2636**

**FAX: (571) 273 8300**

**EXAMINER PHONE: (571) 272 2972**

**CUSTOMER SERVICE PHONE: (571) 272 2600**



**THE U.S PATENT AND TRADEMARK OFFICE**

Application Number: 10/878,951

Applicant: Mundi Fomukong

Examiner: Van Trieu

Art Unit: 2636

Fax : (571) 273 8300

Phone: (571) 272 2972

Method of Transmission : Fax

Date: August 31, 2005

Number of pages : 11 (including cover)

**1) Response to Office Communication**

United States Patent and Trademark Office,  
Customer Service Window, Mail Stop Amendment,  
Randolph Building, 401 Dulany Street,  
Alexandria, VA 22314

Sir:

In response to the Office communication mailed April 01, 2005 kindly review the material herein and amend the application as indicated hereinafter. Note that the claim listing section shows marked up versions of claims. A credit card payment form is also included to cover the relevant fees.

09/06/2005 HALI11 00000045 10878951

02 FC:2201

100.00 OP

### **AMENDMENTS**

- To overcome the objection to the specification update page 1 of the specification, line 2, after the year “2002” insert “issued as U.S Patent No. 6,756,918”
- Update the claims of the instant application as shown in the claim listing section.

## **CLAIM LISTING SHOWING CHANGES**

1. (original) A communication system comprising:

a portable mobile remote unit;

a network of communication units;

means to obtain the location of the portable mobile remote unit;

means to obtain geographic boundary information in order to disclose a global location at the network;

means to provide the location of the portable mobile remote unit to the network upon determination that the portable mobile remote unit is within the geographic boundary obtained at the network;

means to determine and report to the system upon request that, another mobile remote unit has maintained relative proximity to the mobile remote over a period of time.

2. (original) The portable mobile remote according to claim 1, having means to further determine if location disclosure for the remote unit is prohibited at a specific geographic boundary before sending its location to the network.

3. (original) The portable remote unit of claim 1 having means to establish its velocity at the network and having means to further determine that, its velocity is within the network's prescribed velocity before divulging its location to the network.

4. (currently amended) A communication system for providing the location of portable mobile remote units, in a geographic region to a wireless consumer requesting that information comprising:

i) means for the wireless consumer to specify and forward to a network, geographic boundary information describing the geographic region where the location of portable mobile remote units are required by the wireless consumer;

ii) means to request that all portable remote units within said geographic boundary (i) establish their location at the network;

~~iii) means to verify at the network, after said request (ii) that a portable remote unit according to (ii) responded with location information;~~

iii) means to identify said request (ii) and verify at a portable mobile remote unit whether the portable remote unit exist within said geographic boundary(ii);

iv) means to provide to the wireless consumer the location of a portable mobile remote unit that exist in the geographic boundary defined by the wireless consumer after the verification of (iii) .

5. (original) The system of claim 4, the portable mobile remote units able to establish and report their location to other communication units of the system.

6. (new) A method for determining that a first portable mobile remote is tracking a second portable mobile remote unit while in motion comprising:

i) obtaining the geographic location of the first and second portable communication units at intervals over a period of time;

ii) computing from said geographic location (i) whether the first and second portable communication units are maintaining relative proximity during said period of time;

iii) if the result of said computation (ii) indicates that relative proximity is maintained between the first and second portable communication units over said period of time, advising the system that the first portable mobile remote unit is tracking the second;

7. (new) A method for providing the location of portable mobile remote units in a geographic region to a wireless consumer requesting that information comprising:

i) specifying and forwarding to a wireless network, geographic boundary information describing the geographic region where the location of portable mobile remote units are required by the wireless consumer;

ii) requesting that all portable remote units within said geographic boundary (i) establish their location at the network;

iii) identifying said request (ii) and verifying at a portable mobile remote unit that the portable remote unit exist within said geographic boundary specified by said request(ii);

iv) providing to the wireless consumer the location of a portable mobile remote unit that exist in the geographic boundary defined by the wireless consumer after the verification of (iii) .

### **DETAILED RESPONSE TO OFFICE ACTION**

The office action cited the teachings of prior art Drutman et al, US cited 6,618,593 , in the letter of . As understood by applicant, Drutman teaches a mobile communication system that uses profiles of a first location enabled communication device to channel data to/from the device to other location enabled devices that maintains a profile that corresponds to the profile set by the first location enabled device. A central server is used to control component interaction within the system.

Other teachings of prior art Drutman et al. are noted as mentioned in the office letter mailed April 01, 2005 and the claims of the instant application has been amended to overcome that art.

### **RESPONSE TO CLAIM OBJECTIONS /REJECTIONS**

#### **- Claim 4:**

Claim 4 has been amended to define patentably over the prior art. It should be noted that Druman does not discern at the mobile remote unit whether it is within the geographic region specified by a requestor before sending the location of the mobile to the requestor. The amended claim is defined to be patentable over the cited art and applicant solicits allowance from the Examiner.

#### **- Claim 5**

Claim 5 is dependent on claim 4 and applicant solicits its allowance.

#### **- Double Patenting**

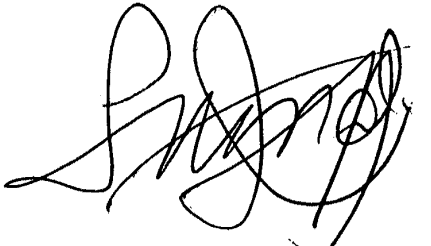
A Terminal disclaimer has also been filed to overcome the non-statutory double patenting rejection.

### CONCLUSION

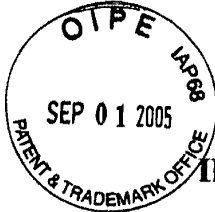
Applicant has made the necessary amendments to ensure the claims of the instant application are patentable over the prior art. Applicant solicits allowance from the Examiner.

Sincerely,

Mundi Fomukong (Inventor)



8/31/05



IN THE U.S PATENT AND TRADEMARK OFFICE

IPW  
\$

In re the Application of:

**MUNDI FOMUKONG**

GROUP ART UNIT 2636

Serial No: 10/878,951

Examiner: Van Trieu

Filed: June 28, 2004

**For: Method and Apparatus for Locating  
Mobile Units Tracking Another or Within a  
Prescribed Geographic Boundary.**

**TERMINAL DISCLAIMER**

Hon. Commissioner for Patents and Trademarks  
Washington, District of Columbia, 20231.

Sir:

Mundi Fomukong, inventor in the above identified application, holding the entire right, title and interest to the above-identified application, and inventor in U.S Patent No. 6,756,918, holding the entire right, title and interest to U.S Patent No. 6,756,918, do hereby disclaim the terminal part of any patent granted on U.S Patent Application Serial No. 10/878,951, which would extend beyond the expiration date of U.S Patent 6,756,918 and hereby agrees that any patent so granted on U.S Patent Application Serial No. 10/878,951 shall be enforceable only for and during such period that the legal title to said patent shall be the same as the legal title to U.S Patent No. 6,756,918, this agreement to run with any patent granted on U.S Patent Application Serial No. 10/878,951 and to be binding upon the grantee, its successors or assigns.

09/06/2005 HALI11 00000045 10878951

01 FC:2814

65.00 OP

In making the above disclaimer, Petitioner does not disclaim the terminal part of any patent granted on U.S Patent Application Serial No. 10/878,951 that would extend to the expiration date of the full statutory term of U.S Patent No. 6,756,918 in the event that such patent later: expires for failure to pay maintenance fee, is held unenforceable, is found invalid by court of competent jurisdiction, is statutorily disclaimed in whole or terminally disclaimed under 37 C.F.R 1.321, has all claims cancelled by a reexamination certificate, is reissued, or is in any manner terminated prior to the expiration of its full statutory term

Dated: August 31, 2005



Mundi Fomukong

**PATENT APPLICATION FEE DETERMINATION RECORD**  
Effective October 1, 2003

Application or Docket Number:

10878951

**CLAIMS AS FILED - PART I**

|                                                           | (Column 1)   | (Column 2)   |
|-----------------------------------------------------------|--------------|--------------|
| TOTAL CLAIMS                                              | 5            |              |
| FOR                                                       | NUMBER FILED | NUMBER EXTRA |
| TOTAL CHARGEABLE CLAIMS                                   | 5 minus 20 = | 0            |
| INDEPENDENT CLAIMS                                        | 2 minus 3 =  | 0            |
| MULTIPLE DEPENDENT CLAIM PRESENT <input type="checkbox"/> |              |              |

\* If the difference in column 1 is less than zero, enter "0" in column 2

**CLAIMS AS AMENDED - PART II**

|                                                                         | (Column 1) | (Column 2)                       | (Column 3)                         |
|-------------------------------------------------------------------------|------------|----------------------------------|------------------------------------|
| AMENDMENT A                                                             | 9-1-05     | CLAIMS REMAINING AFTER AMENDMENT | HIGHEST NUMBER PREVIOUSLY PAID FOR |
| Total                                                                   | 7          | Minus                            | 20 = 1                             |
| Independent                                                             | 4          | Minus                            | 3 = 1                              |
| FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM <input type="checkbox"/> |            |                                  |                                    |

|                                                                         | (Column 1)                       | (Column 2)                         | (Column 3)    |
|-------------------------------------------------------------------------|----------------------------------|------------------------------------|---------------|
| AMENDMENT B                                                             | CLAIMS REMAINING AFTER AMENDMENT | HIGHEST NUMBER PREVIOUSLY PAID FOR | PRESENT EXTRA |
| Total                                                                   |                                  | Minus                              | =             |
| Independent                                                             |                                  | Minus                              | =             |
| FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM <input type="checkbox"/> |                                  |                                    |               |

|                                                                         | (Column 1)                       | (Column 2)                         | (Column 3)    |
|-------------------------------------------------------------------------|----------------------------------|------------------------------------|---------------|
| AMENDMENT C                                                             | CLAIMS REMAINING AFTER AMENDMENT | HIGHEST NUMBER PREVIOUSLY PAID FOR | PRESENT EXTRA |
| Total                                                                   |                                  | Minus                              | =             |
| Independent                                                             |                                  | Minus                              | =             |
| FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM <input type="checkbox"/> |                                  |                                    |               |

- \* If the entry in column 1 is less than the entry in column 2, write "0" in column 3.
  - \*\* If the "Highest Number Previously Paid For" IN THIS SPACE is less than 20, enter "20."
  - \*\*\* If the "Highest Number Previously Paid For" IN THIS SPACE is less than 3, enter "3."
- The "Highest Number Previously Paid For" (Total or Independent) is the highest number found in the appropriate box in column 1.

SMALL ENTITY TYPE ☐

OR OTHER THAN SMALL ENTITY

| RATE      | FEE    |
|-----------|--------|
| BASIC FEE | 385.00 |
| XS 9=     | —      |
| X43=      | —      |
| +145=     | —      |
| TOTAL     | 385    |

| RATE      | FEE    |
|-----------|--------|
| BASIC FEE | 770.00 |
| XS18=     |        |
| X86=      |        |
| +290=     |        |
| TOTAL     |        |

SMALL ENTITY

OR OTHER THAN SMALL ENTITY

| RATE             | ADDITIONAL FEE |
|------------------|----------------|
| XS 9=            |                |
| X43=             | 100.00         |
| +145=            |                |
| TOTAL ADDIT. FEE | paid           |

| RATE             | ADDITIONAL FEE |
|------------------|----------------|
| XS18=            |                |
| X86=             |                |
| +290=            |                |
| TOTAL ADDIT. FEE |                |

| RATE             | ADDITIONAL FEE |
|------------------|----------------|
| XS 9=            |                |
| X43=             |                |
| +145=            |                |
| TOTAL ADDIT. FEE |                |

| RATE             | ADDITIONAL FEE |
|------------------|----------------|
| XS18=            |                |
| X86=             |                |
| +290=            |                |
| TOTAL ADDIT. FEE |                |

| RATE             | ADDITIONAL FEE |
|------------------|----------------|
| XS 9=            |                |
| X43=             |                |
| +145=            |                |
| TOTAL ADDIT. FEE |                |

| RATE             | ADDITIONAL FEE |
|------------------|----------------|
| XS18=            |                |
| X86=             |                |
| +290=            |                |
| TOTAL ADDIT. FEE |                |

|                                                                                                                |                                              |                                                                   |
|----------------------------------------------------------------------------------------------------------------|----------------------------------------------|-------------------------------------------------------------------|
| <b>Application Number</b><br> | <b>Application/Control No.</b><br>10/878,951 | <b>Applicant(s)/Patent under Reexamination</b><br>FOMUKONG, MUNDI |
| <b>Document Code - DISQ</b> <b>Internal Document – DO NOT MAIL</b>                                             |                                              |                                                                   |

|                                |                                                       |                                             |
|--------------------------------|-------------------------------------------------------|---------------------------------------------|
| <b>TERMINAL<br/>DISCLAIMER</b> | <input checked="" type="checkbox"/> <b>APPROVED</b>   | <input type="checkbox"/> <b>DISAPPROVED</b> |
| Date Filed : 09/01/05          | This patent is subject<br>to a Terminal<br>Disclaimer |                                             |

|                                 |
|---------------------------------|
| <b>Approved/Disapproved by:</b> |
| jgunter-riley                   |

U.S. Patent and Trademark Office



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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 10/878,951      | 06/28/2004  | Mundi Fomukong       |                     | 5372             |

7590 09/13/2005  
MUNDI FOMUKONG  
10853 ROSE AVE. #49  
W. Los Angeles, CA 90034

EXAMINER

TRIEU, VAN THANH

|          |              |
|----------|--------------|
| ART UNIT | PAPER NUMBER |
|----------|--------------|

2636

DATE MAILED: 09/13/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Notice of Non-Compliant  
Amendment (37 CFR 1.121)**

Application No.

10/878951

Applicant(s)

Examiner

Art Unit

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

The amendment document filed on 9-1-05 is considered non-compliant because it has failed to meet the requirements of 37 CFR 1.121. In order for the amendment document to be compliant, correction of the following item(s) is required.

THE FOLLOWING MARKED (X) ITEM(S) CAUSE THE AMENDMENT DOCUMENT TO BE NON-COMPLIANT:

- ☒ 1. Amendments to the specification:
- ☐ A. Amended paragraph(s) do not include markings.
  - ☐ B. New paragraph(s) should not be underlined.
  - ☒ C. Other Must present paragraph with markings to show changes.
- ☐ 2. Abstract: Each section of amendment should start on a separate page.
- ☐ A. Not presented on a separate sheet. 37 CFR 1.72.
  - ☐ B. Other \_\_\_\_\_
- ☐ 3. Amendments to the drawings:
- ☐ A. The drawings are not properly identified in the top margin as "Replacement Sheet," "New Sheet," or "Annotated Sheet" as required by 37 CFR 1.121(d).
  - ☐ B. The practice of submitting proposed drawing correction has been eliminated. Replacement drawings showing amended figures, without markings, in compliance with 37 CFR 1.84 are required.
  - ☐ C. Other \_\_\_\_\_
- ☐ 4. Amendments to the claims:
- ☐ A. A complete listing of all of the claims is not present.
  - ☐ B. The listing of claims does not include the text of all pending claims (including withdrawn claims)
  - ☐ C. Each claim has not been provided with the proper status identifier, and as such, the individual status of each claim cannot be identified. Note: the status of every claim must be indicated after its claim number by using one of the following status identifiers: (Original), (Currently amended), (Canceled), (Previously presented), (New), (Not entered), (Withdrawn) and (Withdrawn-currently amended).
  - ☐ D. The claims of this amendment paper have not been presented in ascending numerical order.
  - ☐ E. Other: \_\_\_\_\_

For further explanation of the amendment format required by 37 CFR 1.121, see MPEP § 714 and the USPTO website at <http://www.uspto.gov/web/offices/pac/dapp/opla/preognotice/officelflyer.pdf>.

**TIME PERIODS FOR FILING A REPLY TO THIS NOTICE:**

1. Applicant is given **no new time period** if the non-compliant amendment is an after-final amendment or an amendment filed after allowance. If applicant wishes to resubmit the non-compliant after-final amendment with corrections, the **entire corrected amendment** must be resubmitted within the time period set forth in the final Office action.
2. Applicant is given **one month**, or thirty (30) days, whichever is longer, from the mail date of this notice to supply the **corrected section** of the non-compliant amendment in compliance with 37 CFR 1.121, if the non-compliant amendment is one of the following: a preliminary amendment, a non-final amendment (including a submission for a request for continued examination (RCE) under 37 CFR 1.114), a supplemental amendment filed within a suspension period under 37 CFR 1.103(a) or (c), and an amendment filed in response to a *Quayle* action.

**Extensions of time** are available under 37 CFR 1.136(a) only if the non-compliant amendment is a non-final amendment or an amendment filed in response to a *Quayle* action.

**Failure to timely respond** to this notice will result in:

**Abandonment** of the application if the non-compliant amendment is a non-final amendment or an amendment filed in response to a *Quayle* action; or

**Non-entry** of the amendment if the non-compliant amendment is a preliminary amendment or supplemental amendment.

Margaretta M. Lee  
Legal Instruments Examiner (LIE)

(571) 272-2956  
Telephone No.

**RECEIVED  
CENTRAL FAX CENTER**

**OCT 05 2005**

**RESPONSE TO OFFICE ACTION**

**FOR**

**APPLICATION : US 10/878,951**

**EXAMINER: VAN TRIEU**

**ART UNIT : 2636**

**FAX: (571) 273 8300**

**EXAMINER PHONE: (571) 272 2972**

**CUSTOMER SERVICE PHONE: (571) 272 2600**

**RECEIVED**  
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OCT 05 2005

**THE U.S PATENT AND TRADEMARK OFFICE**

Application Number: 10/878,951

Applicant: Mundi Fomukong

Examiner: Van Trieu, Art Unit: 2636

Fax: (571) 273 8300 Phone: (571) 272 2972

Date: October 04, 2005

Number of pages: 3 (including cover)

**1) Response to Office Communication**

United States Patent and Trademark Office,  
Customer Service Window, Mail Stop Amendment,  
Randolph Building, 401 Dulany Street, Alexandria, VA 22314

Sir/Madam:

In response to the Office communication mailed September 13, 2005, find attached a marked up version of page 1, paragraph 1, line 2 of the specification amended by applicant in the letter filed on September 1, 2005. This should overcome the non compliant amendment objection raised under 37 CFR 1.121 in the office letter mailed September 1, 2005.

Sincerely,

Mundi Fomukong (Inventor)



10/4/05

**MARK UP CHANGES TO PAGE 1 PARAGRAPH 1 OF THE SPECIFICATION**

This application is a continuation application of U.S Application Serial No 10/199,829, filed July 19, 2002 issued as U.S Patent No. 6,756,918, which in turn is a continuation-in-part of U.S Application Serial No. 09/753,178, filed December 30, 2000 issued as U.S patent No 6,441,752. The disclosure is incorporated herein by reference.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

**PATENT APPLICATION FEE DETERMINATION RECORD**

Substitute for Form PTO-875

Application or PTO Number

10/878,451

**APPLICATION AS FILED – PART I**

(Column 1)

(Column 2)

SMALL ENTITY

OR

OTHER THAN  
SMALL ENTITY

| FOR                                              | NUMBER FILED                                                                                                                                                                                                                  | NUMBER EXTRA |
|--------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|
| BASIC FEE<br>(37 CFR 1.16(a), (b), or (c))       |                                                                                                                                                                                                                               |              |
| SEARCH FEE<br>(37 CFR 1.16(k), (l), or (m))      |                                                                                                                                                                                                                               |              |
| EXAMINATION FEE<br>(37 CFR 1.16(o), (p), or (q)) |                                                                                                                                                                                                                               |              |
| TOTAL CLAIMS<br>(37 CFR 1.16(i))                 | minus 20 =                                                                                                                                                                                                                    | *            |
| INDEPENDENT CLAIMS<br>(37 CFR 1.16(h))           | minus 3 =                                                                                                                                                                                                                     | *            |
| APPLICATION SIZE<br>FEE<br>(37 CFR 1.16(s))      | If the specification and drawings exceed 100 sheets of paper, the application size fee due is \$250 (\$125 for small entity) for each additional 50 sheets or fraction thereof. See 35 U.S.C. 41(a)(1)(G) and 37 CFR 1.16(s). |              |

| RATE (\$) | FEE (\$) |
|-----------|----------|
|           |          |
|           |          |
|           |          |
| X         | =        |
| X         | =        |
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| RATE (\$) | FEE (\$) |
|-----------|----------|
|           |          |
|           |          |
|           |          |
| X         | =        |
| X         | =        |
|           |          |
|           |          |

MULTIPLE DEPENDENT CLAIM PRESENT (37 CFR 1.16(j))

\* If the difference in column 1 is less than zero, enter "0" in column 2.

TOTAL

TOTAL

**APPLICATION AS AMENDED – PART II**

(Column 1)

(Column 2)

(Column 3)

SMALL ENTITY

OR

OTHER THAN  
SMALL ENTITY

| AMENDMENT A                                                     |                                       | CLAIMS<br>REMAINING<br>AFTER<br>AMENDMENT |       | HIGHEST<br>NUMBER<br>PREVIOUSLY<br>PAID FOR | PRESENT<br>EXTRA |
|-----------------------------------------------------------------|---------------------------------------|-------------------------------------------|-------|---------------------------------------------|------------------|
|                                                                 | Total<br>(37 CFR 1.16(i))             | *                                         | Minus | **                                          | =                |
|                                                                 | Independent<br>(37 CFR 1.16(h))       | *                                         | Minus | ***                                         | =                |
|                                                                 | Application Size Fee (37 CFR 1.16(s)) |                                           |       |                                             |                  |
| FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j)) |                                       |                                           |       |                                             |                  |

| RATE (\$) | ADDI-<br>TIONAL<br>FEE (\$) |
|-----------|-----------------------------|
|           |                             |
| X         | =                           |
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|           |                             |
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| RATE (\$) | ADDI-<br>TIONAL<br>FEE (\$) |
|-----------|-----------------------------|
|           |                             |
| X         | =                           |
| X         | =                           |
|           |                             |
|           |                             |

TOTAL  
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ADD'L FEE

|                                                                 |                                       | (Column 1)                                |       | (Column 2)                                  | (Column 3)       |
|-----------------------------------------------------------------|---------------------------------------|-------------------------------------------|-------|---------------------------------------------|------------------|
| AMENDMENT B                                                     |                                       | CLAIMS<br>REMAINING<br>AFTER<br>AMENDMENT |       | HIGHEST<br>NUMBER<br>PREVIOUSLY<br>PAID FOR | PRESENT<br>EXTRA |
|                                                                 | Total<br>(37 CFR 1.16(i))             | *                                         | Minus | **                                          | =                |
|                                                                 | Independent<br>(37 CFR 1.16(h))       | *                                         | Minus | ***                                         | =                |
|                                                                 | Application Size Fee (37 CFR 1.16(s)) |                                           |       |                                             |                  |
| FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j)) |                                       |                                           |       |                                             |                  |

| RATE (\$) | ADDI-<br>TIONAL<br>FEE (\$) |
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|           |                             |
| X         | =                           |
| X         | =                           |
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| RATE (\$) | ADDI-<br>TIONAL<br>FEE (\$) |
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| X         | =                           |
| X         | =                           |
|           |                             |
|           |                             |

TOTAL  
ADD'L FEETOTAL  
ADD'L FEE

\* If the entry in column 1 is less than the entry in column 2, write "0" in column 3.

\*\* If the "Highest Number Previously Paid For" IN THIS SPACE is less than 20, enter "20".

\*\*\* If the "Highest Number Previously Paid For" IN THIS SPACE is less than 3, enter "3".

The "Highest Number Previously Paid For" (Total or Independent) is the highest number found in the appropriate box in column 1.

This collection of information is required by 37 CFR 1.16. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

| Ref # | Hits   | Search Query                                                                                                              | DBs                            | Default Operator | Plurals | Time Stamp       |
|-------|--------|---------------------------------------------------------------------------------------------------------------------------|--------------------------------|------------------|---------|------------------|
| L1    | 6      | ((("6756918") or ("6618593") or ("6441752"))).PN.                                                                         | USPAT;<br>EPO; JPO;<br>DERWENT | OR               | OFF     | 2005/12/12 10:56 |
| L2    | 181386 | (portable or handheld or mobile or moving) near3 (remot\$3 or electronic or communication or transceiv\$3 or transponder) | USPAT;<br>EPO; JPO;<br>DERWENT | OR               | ON      | 2005/12/12 11:52 |
| L3    | 847    | (obtain\$3 or determin\$3 or defin\$3) near3 ((location or position or geographic\$4) near4 2)                            | USPAT;<br>EPO; JPO;<br>DERWENT | OR               | ON      | 2005/12/12 12:02 |
| L4    | 5349   | 2 near3 (another or second or third or different)                                                                         | USPAT;<br>EPO; JPO;<br>DERWENT | OR               | ON      | 2005/12/12 11:56 |
| L5    | 1936   | (maintain\$3 or remain\$3 or keep\$3 or within) near4 (proximity or distance) near7 (period or interval)                  | USPAT;<br>EPO; JPO;<br>DERWENT | OR               | ON      | 2005/12/12 11:58 |
| L6    | 2      | 4 with 5                                                                                                                  | USPAT;<br>EPO; JPO;<br>DERWENT | OR               | ON      | 2005/12/12 11:58 |
| L7    | 1      | 3 and 6                                                                                                                   | USPAT;<br>EPO; JPO;<br>DERWENT | OR               | ON      | 2005/12/12 12:01 |
| L8    | 2      | 6 and ((location or position or geographic\$4) near4 2)                                                                   | USPAT;<br>EPO; JPO;<br>DERWENT | OR               | ON      | 2005/12/12 12:04 |
| L9    | 2      | 8 and (boundary or region or area)                                                                                        | USPAT;<br>EPO; JPO;<br>DERWENT | OR               | ON      | 2005/12/12 12:06 |
| L10   | 1      | 9 and network\$3                                                                                                          | USPAT;<br>EPO; JPO;<br>DERWENT | OR               | ON      | 2005/12/12 12:08 |
| L11   | 2      | 6 and (request\$3 or acquir\$3 or requir\$3)                                                                              | USPAT;<br>EPO; JPO;<br>DERWENT | OR               | ON      | 2005/12/12 12:08 |

US 6756918 B2  
US 4658357 A

Method and apparatus: 340/988 340/989; 340/992  
Time and accounting : 705/32 235/380; 340/531; 340/539.1

L6, 8, 9 & 11



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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 10/878,951      | 06/28/2004  | Mundi Fomukong       |                     | 5372             |

7590 12/20/2005  
MUNDI FOMUKONG  
10853 ROSE AVE. #49  
W. Los Angeles, CA 90034

EXAMINER

TRIEU, VAN THANH

| ART UNIT | PAPER NUMBER |
|----------|--------------|
|----------|--------------|

2636

DATE MAILED: 12/20/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

|                              |                 |                 |  |
|------------------------------|-----------------|-----------------|--|
| <b>Office Action Summary</b> | Application No. | Applicant(s)    |  |
|                              | 10/878,951      | FOMUKONG, MUNDI |  |
|                              | Examiner        | Art Unit        |  |
|                              | Van T Trieu     | 2636            |  |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 05 October 2005.  
 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.  
 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-7 is/are pending in the application.  
 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
 6) ☒ Claim(s) 1, 2 and 4-7 is/are rejected.  
 7) ☒ Claim(s) 3 is/are objected to.  
 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.  
 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
 a) ☐ All b) ☐ Some \* c) ☐ None of:  
 1. ☐ Certified copies of the priority documents have been received.  
 2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |                                                                                         |                                                                             |
|-----------------------------------------------------------------------------------------|-----------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)             | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____                                                |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____                                                             | 6) <input type="checkbox"/> Other: _____                                    |

## DETAILED ACTION

### *Claim Rejections - 35 USC § 103*

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1. Claims 1, 2 and 4-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Carroll et al** [US 4,658,357].

Regarding claim 1, the claimed a communication system comprising: a portable mobile remote unit (the portable self-contained transceiver units 24, see Figs. 1, 6 and 7, col. 3, lines 32-35, col. 6, lines 66-68 and col. 7, lines 1-10); and a network of communication units (the hospital environmental communication includes computer terminals 36, stationary units 26 and/or central receiver units 154 to communicate with each of the portable transceiver units 24, see Figs. 1 and 12, col.4, lines 37-56, col. 5, lines 12-60, col. 7, lines 11-67, col. 8, lines 1-67, col. 9, lines 1-11 and col. 14, lines 8-57); and the means to obtain the location of the portable mobile remote unit (the stationary units 26 are selectively placed throughout a hospital or large facility for obtaining location information of each portable transceivers 24 within proximity or upon an event, see Fig. 1, col. 2, lines 10-14, col. 4, lines 37-56 and col. 5, lines 12-20); and the means to obtain geographic boundary information in order to disclose a global location at

the network (the specified boundaries within the hospital or large facility, see col. 2, lines 10-14 and col. 4, lines 37-56); and the means to provide the location of the portable mobile remote unit to the network upon determination that the portable mobile remote unit is within the geographic boundary obtained at the network (the computer terminals 36 or receivers 154 receives location information from the stationary units 26, which are selectively placed throughout a hospital or large facility for obtaining location information of each portable transceivers 24 within proximity or upon an event, see Fig. 1, col. 2, lines 10-14, col. 4, lines 37-56 and col. 5, lines 12-20); but **Carroll et al** fails to disclose means to determine and report to the system upon request that, another mobile remote unit has maintain relative proximity to the mobile remote over a period of time. However, **Carroll et al** teaches that each of the portable transceiver units 24 is programmed to automatically report to the computer terminals 36 and/or receivers 154 whenever the portable receiver 24 carried by doctor/nurse is in proximity with portable patient transmitting units 20 for a prescribed intervals or period of time. The report of time intervals and locations are logged for future analysis and billing statements, see Figs. 1 and 12, col. 3, lines 31-68, col. 4, lines 1-20, col. 7, lines 55-68 and col. 8, lines 1-66. Therefore, it would have been obvious to one skill in the art to recognize that the automatically logged/assigned doctors/nurse visiting a particular patient for medical treatment at a specified location and time period is functionally equivalent to the claimed report to the system upon request because the doctors/nurses are scheduled as requested to check his/her patient at particular time frame or even in emergency

Art Unit: 2636

situation, which must be through requested or acquired as well known in the medical hospital system and physician practices.

Regarding claim 2, all the claimed subject matters are discussed in respect to claim 1 above.

Regarding claim 4, all the claimed subject matters are discussed in respect to claim 1 above, and including the verifications (the codes of each portable transceiver units 24 and patient transmitter units 20, see col. 6, lines 1-60).

Regarding claim 5, all the claimed subject matters are discussed in respect to claim 1 above, and the claimed portable mobile remote units able to establish and report their location to other communication units of the system (the portable transceiver units 24 report to one of a plurality of stationary units 26, see Fig. 1).

Regarding claim 6, the method claimed limitations are met by the apparatus claim 1 above, and including the advising the system that the first portable mobile remote unit is tracking the second, which reads upon the portable transceiver unit 24 reports to the stationary unit 26 and computer terminal 36 when it is being in proximity with the patient's unit 20, see Fig. 1.

Regarding claim 7, all the claimed subject matters are cited in respect to claims 4 and 6 above.

***Response to Arguments***

2. Applicant's arguments filed on 05 October 2005 have been fully considered but they are not persuasive. After an update search, a new reference of **Carroll et al** is introduced to make the rejections smoother as above.

***Conclusion***

3. Examiner is very regrettably to have a new ground of rejection based on the update search.

4. Claim 3 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

5. Any inquiry concerning this communication or earlier communications from examiner should be directed to primary examiner **Van Trieu** whose telephone number is (571) 272-2972. The examiner can normally be reached on Mon-Fri from 7:00 AM to 3:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. **Jeffery Hofsass** can be reached on (571) 272-2981.

  
**Van Trieu**  
**Primary Examiner**  
**Date: 12/13/05**

|                                   |                                       |                                                               |             |
|-----------------------------------|---------------------------------------|---------------------------------------------------------------|-------------|
| <b>Notice of References Cited</b> | Application/Control No.<br>10/878,951 | Applicant(s)/Patent Under<br>Reexamination<br>FOMUKONG, MUNDI |             |
|                                   | Examiner<br>Van T Trieu               | Art Unit<br>2636                                              | Page 1 of 1 |

**U.S. PATENT DOCUMENTS**

| * |   | Document Number<br>Country Code-Number-Kind Code | Date<br>MM-YYYY | Name           | Classification |
|---|---|--------------------------------------------------|-----------------|----------------|----------------|
| * | A | US-4,658,357                                     | 04-1987         | Carroll et al. | 705/32         |
|   | B | US-                                              |                 |                |                |
|   | C | US-                                              |                 |                |                |
|   | D | US-                                              |                 |                |                |
|   | E | US-                                              |                 |                |                |
|   | F | US-                                              |                 |                |                |
|   | G | US-                                              |                 |                |                |
|   | H | US-                                              |                 |                |                |
|   | I | US-                                              |                 |                |                |
|   | J | US-                                              |                 |                |                |
|   | K | US-                                              |                 |                |                |
|   | L | US-                                              |                 |                |                |
|   | M | US-                                              |                 |                |                |

**FOREIGN PATENT DOCUMENTS**

| * |   | Document Number<br>Country Code-Number-Kind Code | Date<br>MM-YYYY | Country | Name | Classification |
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**NON-PATENT DOCUMENTS**

| * |   | Include as applicable: Author, Title Date, Publisher, Edition or Volume, Pertinent Pages) |
|---|---|-------------------------------------------------------------------------------------------|
|   | U |                                                                                           |
|   | V |                                                                                           |
|   | W |                                                                                           |
|   | X |                                                                                           |

\*A copy of this reference is not being furnished with this Office action. (See MPEP § 707.05(a).)  
Dates in MM-YYYY format are publication dates. Classifications may be US or foreign.

|                                                                                                          |                        |                     |  |
|----------------------------------------------------------------------------------------------------------|------------------------|---------------------|--|
| <b>Search Notes</b><br> | <b>Application No.</b> | <b>Applicant(s)</b> |  |
|                                                                                                          | 10/878,951             | FOMUKONG, MUNDI     |  |
|                                                                                                          | <b>Examiner</b>        | <b>Art Unit</b>     |  |
|                                                                                                          | Van T Trieu            | 2636                |  |

| SEARCHED |          |            |          |
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| Class    | Subclass | Date       | Examiner |
| 340      | 988      | 3/29/2005  | VT       |
| ↓        | 989      | ↓          | ↓        |
| ↓        | 990      | ↓          | ↓        |
| ↓        | 992      | ↓          | ↓        |
| ↓        | 573.1    | ↓          | ↓        |
| ↓        | 573.3    | ↓          | ↓        |
| ↓        | 691.6    | ↓          | ↓        |
| 455      | 439      | 3/29/2005  | VT       |
| ↓        | 456.2    | ↓          | ↓        |
| ↓        | 456.3    | ↓          | ↓        |
| ↓        | 457      | ↓          | ↓        |
| 342      | 357.09   | 3/29/2005  | VT       |
| ↓        | 377.1    | ↓          | ↓        |
| 705      | 32       | 12/12/2005 | VT       |

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| SEARCH NOTES<br>(INCLUDING SEARCH STRATEGY) |            |      |
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|                                             | DATE       | EXMR |
| EAST                                        | 3/29/2005  | VT   |
| Update Search                               | 12/12/2005 | VT   |
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|-------------------------------------------------------------------------------------------------------------|------------------------|--|---------------------|--|
| <b>Index of Claims</b><br> | <b>Application No.</b> |  | <b>Applicant(s)</b> |  |
|                                                                                                             | 10/878,951             |  | FOMUKONG, MUNDI     |  |
|                                                                                                             | <b>Examiner</b>        |  | <b>Art Unit</b>     |  |
|                                                                                                             | Van T Trieu            |  | 2636                |  |

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| ✓ | Rejected |
| ≡ | Allowed  |

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| — | (Through numeral)<br>Cancelled |
| + | Restricted                     |

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| I | Interference |

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| A | Appeal   |
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| Claim |          | Date    |          |  |  |  |
|-------|----------|---------|----------|--|--|--|
| Final | Original | 3/29/05 | 12/13/05 |  |  |  |
|       | 1        | ✓       | ✓        |  |  |  |
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CENTRAL FAX CENTER

MAR 15 2006

**RESPONSE TO OFFICE ACTION**

**FOR**

**APPLICATION : US 10/878,951**

**EXAMINER: VAN TRIEU**

**ART UNIT : 2636**

**FAX: (571) 273 8300 (General)**

**EXAMINER PHONE: (571) 272 2972**

**CUSTOMER SERVICE PHONE: (571) 272 2600**

**THE U.S PATENT AND TRADEMARK OFFICE**

**RECEIVED  
CENTRAL FAX CENTER  
MAR 15 2006**

**Application Number:** 10/878,951

**Applicant:** Mundi Pomukong

**Examiner:** Van Trieu

**Art Unit:** 2636

**Fax General** (571) 273 8300

**Fax Direct** (571) 273 2972

**Phone:** (571) 272 2972

**Method of Transmission :** Fax (Direct)

**Date:** March 15, 2006

**Number of pages :** 14 (including cover)

**1) Response to Office Communication**

United States Patent and Trademark Office,  
Commissioner For Patents,  
P.O Box1450,  
Alexandria, VA 22313-1450

Sir:

This communication is in response to the Office communication mailed December 20, 2005. In that communication the claims 1,2 and 4-7 of the instant application were rejected under 35 USC 103(a) as being unpatentable over Carroll et al [US, 4,658,357].

Amendments have been made to some of the claims and appropriate arguments provided to overcome pending rejections.

#### **DISCUSSION OF PRIOR ART IN VIEW OF EXAMINERS'S COMMENTS**

It is clear from the Examiner's comments that the prior art teaches a communication system that detects the presence of a mobile remote unit when it enters a geographic area that is covered by a fixed/stationary wireless transmitter. The location of the fixed/stationary transmitter is known but movements or the location of the portable mobile remote unit within the boundary of the fixed transmitter cannot be sensed. The location of the mobile remote is only tied to the general area covered by the fixed transmitter. Note that in the prior art, the stationary unit can only transmit interrogatory signals within 5 feet. When a portable device is out of that range its location cannot be tied to that of the stationary unit [col 4, line 42-45]

When interaction is between two portable mobile devices of the prior art, the system can only tell that there was interaction between the two units, but the exact location is unknown. The mobile remote unit depicted by the prior art emits very low powered signals [col 3, line 14-21 ] and is only configured to work in a hospital or setting that requires said mobile remote unit to only establish presence/contact when it is close to the other communication units.

Tracking as depicted in the invention is when a clandestine mobile remote unit - probably concealed in a car - is reporting the location of a wireless subscriber in possession of another location enabled device while in motion and maintaining relative proximity to the wireless subscriber. It is clear that the low powered devices mentioned by the prior art would hardly function outdoors as depicted in the invention.

The system depicted by the prior art is not configured to sense the movement or establish the geographic location of a mobile remote unit while it is in motion within the boundaries of its base station transmitter. As a result it will be impossible for the system depicted in the prior art to determine whether two of its portable devices have maintained relative proximity while in motion over a period of time as defined in the invention.

Assuming portable devices are within the boundary of a fixed based transmitter whose geographic location is known, the system of the prior art can only tell that that portable devices are present in the same geographic area. It cannot sense or tell whether they are moving within the coverage area/boundary of the transmitter. When portable devices of the prior art are not within the boundary of a fixed base transmitter their location would never be known but the system would only be able to discern that both portables made contact. As a result it will be impossible to determine tracking as depicted in the invention.

The claims of the invention have been also been updated to address the issues raised in the last Office Action.

### CLAIM AMENDMENT

1. (amended) A communication system comprising:

- (i) a portable mobile remote unit;
- (ii) a network of communication units;
- ~~(iii) means to obtain the location of the portable mobile remote unit;~~
- (iii) the portable mobile remote unit able to communicate with at least a transmitter within the network to establish its geographic location within the system;
- ~~(iv) means to obtain geographic boundary information in order to disclose a global location at the network;~~
- (iv) means to request for the location information of portable mobile remote units that are in a geographic boundary that is prescribed within the coverage area of said transmitter;
- (v) means to provide the location information of the portable mobile remote unit to the network upon determination that the portable mobile remote unit is within said prescribed the geographic boundary obtained at requested by the network;
- (vi) means to determine and report to the system upon request that, another portable mobile remote unit has maintained relative proximity to the portable mobile remote over a period of time while in motion.

It is clear from the above that the prior art cannot determine if a portable mobile remote unit is in a designated area within the coverage area of a base transmitter. The prior art cannot sense the movement of portable devices within the coverage area of a transmitter and can not perform amended steps (iii), (iv), (v), (vi). It is further clear that

the portable mobile remote unit of the prior art cannot communicate with a base transmitter to establish its geographic location. The presence of the portable mobile remote unit within the coverage area of the base transmitter is known but its geographic location is not known.

2. (original) The portable mobile remote according to claim 1, having means to further determine if location disclosure for the remote unit is prohibited at a specific geographic boundary before sending its location to the network.

Claim 2 is dependent on amendment claim1 and should be allowed. Furthermore, the office communication failed to cite any passage of the prior art that teaches the claimed step. It should be noted that the portable mobile remote unit of the prior art does not know its geographic location and would hardly be able to tell it has been prohibited from divulging location information in a geographic area.

3. (original) The portable remote unit of claim 1 having means to establish its velocity at the network and having means to further determine that, its velocity is within the network's prescribed velocity before divulging its location to the network.

There was no objection to this claim in the last Office Action and it is also noted that the Office Action agreed that the prior art cannot sense movements of a portable device within a prescribed geographic boundary and as a result cannot provide velocity information.

4. (currently amended) A communication system for providing the location of portable mobile remote units in a geographic region to a wireless consumer requesting that information comprising:

i) a pool of portable mobile remote units that are able to communicate with a network transmitter to establish their location within the system;

ii) means for the wireless consumer to specify and forward to a network, geographic boundary information describing the geographic a region within the coverage area of said transmitter where the location of portable mobile remote units are required by the wireless consumer;

iii) means to request that all portable remote units within said geographic boundary region (ii) establish their location at the network;

iv) means to identify said request (iii) and verify at a portable mobile remote unit whether the portable remote unit exist within said region geographic boundary(iii);

v) means to provide to the wireless consumer the location of a portable mobile remote unit that exist in the geographic boundary defined by the wireless consumer after the verification of (iv) .

The last office communication was very vague and failed to show where any of the above claimed steps are recited in the prior art. The prior art cannot establish if a portable mobile remote unit is in a geographic boundary that is within the coverage area of a base transmitter communicating with the portable mobile remote unit. Moreover, there is no way to tell the location of the portable mobile remote unit within the coverage area of the transmitter. As a result it will be impossible for the prior art to know whether

a portable mobile remote unit exist in a prescribed boundary that is within the coverage area of a transmitter.

5. (original) The system of claim 4, the portable mobile remote units able to establish and report their location to other communication units of the system.

The portable mobile remote units of the prior art cannot establish and report their location to the system. Actually, a portable mobile remote unit of the prior art only communicates with a stationary base transmitter. The location of the base transmitter is known but the location of the portable mobile remote unit within a prescribed coverage area of the base transmitter is not known. As a result, the portable mobile remote unit cannot and does not establish and report its location to the system as anticipated by the last Office Action.

6. (original) A method for determining that a first portable mobile remote is tracking a second portable mobile remote unit while in motion comprising:

- i) obtaining the geographic location of the first and second portable communication units at intervals over a period of time;
- ii) computing from said geographic location (i) whether the first and second portable communication units are maintaining relative proximity during said period of time;
- iii) if the result of said computation (ii) indicates that relative proximity is maintained between the first and second portable communication units over said period of time, advising the system that the first portable mobile remote unit is tracking the second;

According to the above claim, the portable devices must be in motion and must maintain the same relative proximity over a period of time. It is obvious in view of prior arguments laid out by applicant that the prior art does not provide any support for the above claim.

The geographic location of a portable mobile remote unit described by the prior art is not known when the device is in motion and as a result velocity information is not also known. Only the location of stationary transmitters is known and said location cannot be used to perform the claim step.

When two portable devices of the prior art are in motion, the prior art system cannot determine that they are in motion.

7. (currently amended) A method for providing the location of portable mobile remote units in a geographic region to a wireless consumer requesting that information comprising:

i) communicating with a base transmitter to establish the location of a portable mobile remote unit within the system;

ii) specifying and forwarding to a wireless network, geographic boundary information describing the geographic a region within the coverage area of said transmitter where the location of portable mobile remote units are required by the wireless consumer;

iii) requesting that all portable remote units within said geographic boundary region (ii) establish their location at the network;

iv) identifying said request (iii) and verifying at a portable mobile remote unit that the portable remote unit exist within said geographic boundary region specified by said request(iii);

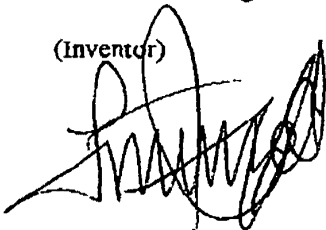
v) providing to the wireless consumer the location of a portable mobile remote unit that exist in the geographic boundary defined by the wireless consumer after the verification of (iv) .

Same arguments made for the allowance of claim 4 apply to claim 7.

Sincerely

Mundi Fomukong

(Inventor)



(March 15, 06 )

### CLAIM LISTING SHOWING CHANGES

1. (amended) A communication system comprising:

(i) a portable mobile remote unit;

(ii) a network of communication units;

~~(iii) means to obtain the location of the portable mobile remote unit;~~

~~(iii) the portable mobile remote unit able to communicate with at least a transmitter within the network to establish its geographic location within the system;~~

~~(iv) means to obtain geographic boundary information in order to disclose a global location at the network;~~

(iv) means to request for the location information of portable mobile remote units that are in a geographic boundary that is prescribed within the coverage area of said transmitter;

(v) means to provide the location information of the portable mobile remote unit to the network upon determination that the portable mobile remote unit is within said prescribed the geographic boundary obtained at requested by the network;

(vi) means to determine and report to the system upon request that, another portable mobile remote unit has maintained relative proximity to the portable mobile remote over a period of time while in motion.

2. (original) The portable mobile remote according to claim 1, having means to further determine if location disclosure for the remote unit is prohibited at a specific geographic boundary before sending its location to the network.

3. (original) The portable remote unit of claim 1 having means to establish its velocity at the network and having means to further determine that, its velocity is within the network's prescribed velocity before divulging its location to the network.

4. (currently amended) A communication system for providing the location of portable mobile remote units, in a geographic region to a wireless consumer requesting that information comprising:

i) a pool of portable mobile remote units that are able to communicate with a network transmitter to establish their location within the system;

ii) means for the wireless consumer to specify and forward to a network, geographic boundary information describing the geographic a region within the coverage area of said transmitter where the location of portable mobile remote units are required by the wireless consumer;

iii) means to request that all portable remote units within said geographic boundary region (ii) establish their location at the network;

iv) means to identify said request (iii) and verify at a portable mobile remote unit whether the portable remote unit exist within said region geographic boundary (iii);

v) means to provide to the wireless consumer the location of a portable mobile remote unit that exist in the geographic boundary defined by the wireless consumer after the verification of (iv) .

5. (original) The system of claim 4, the portable mobile remote units able to establish and report their location to other communication units of the system.

6. (original) A method for determining that a first portable mobile remote is tracking a second portable mobile remote unit while in motion comprising:

- iv) obtaining the geographic location of the first and second portable communication units at intervals over a period of time;
- v) computing from said geographic location (i) whether the first and second portable communication units are maintaining relative proximity during said period of time;
- vi) if the result of said computation (ii) indicates that relative proximity is maintained between the first and second portable communication units over said period of time, advising the system that the first portable mobile remote unit is tracking the second;

7. (currently amended) A method for providing the location of portable mobile remote units in a geographic region to a wireless consumer requesting that information comprising:

i) communicating with a base transmitter to establish the location of a portable mobile remote unit within the system;

ii) specifying and forwarding to a wireless network, geographic boundary information describing the geographic a region within the coverage area of said

transmitter where the location of portable mobile remote units are required by the wireless consumer;

iii) requesting that all portable remote units within said ~~geographic boundary~~ region (ii) establish their location at the network;

iv) identifying said request (iii) and verifying at a portable mobile remote unit that the portable remote unit exist within said ~~geographic boundary~~ region specified by said request(iii);

v) providing to the wireless consumer the location of a portable mobile remote unit that exist in the geographic boundary defined by the wireless consumer after the verification of (iv) .

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

| PATENT APPLICATION FEE DETERMINATION RECORD<br>Substitute for Form PTO-875                                                                                                                                                                                                                                                                                                                                                           |                                                                                                                                                                                                                               |                                    |               |                 |                     | Application or Docket Number<br><b>10 878951</b> |                     |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------|---------------|-----------------|---------------------|--------------------------------------------------|---------------------|
| APPLICATION AS FILED – PART I                                                                                                                                                                                                                                                                                                                                                                                                        |                                                                                                                                                                                                                               |                                    |               |                 |                     | SMALL ENTITY OR OTHER THAN SMALL ENTITY          |                     |
| (Column 1)                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                                                                                                                                                                                               | (Column 2)                         |               |                 |                     |                                                  |                     |
| FOR                                                                                                                                                                                                                                                                                                                                                                                                                                  | NUMBER FILED                                                                                                                                                                                                                  | NUMBER EXTRA                       | RATE (\$)     | FEE (\$)        | RATE (\$)           | FEE (\$)                                         |                     |
| BASIC FEE<br>(37 CFR 1.16(a), (b), or (c))                                                                                                                                                                                                                                                                                                                                                                                           |                                                                                                                                                                                                                               |                                    |               |                 |                     |                                                  |                     |
| SEARCH FEE<br>(37 CFR 1.16(k), (l), or (m))                                                                                                                                                                                                                                                                                                                                                                                          |                                                                                                                                                                                                                               |                                    |               |                 |                     |                                                  |                     |
| EXAMINATION FEE<br>(37 CFR 1.16(o), (p), or (q))                                                                                                                                                                                                                                                                                                                                                                                     |                                                                                                                                                                                                                               |                                    |               |                 |                     |                                                  |                     |
| TOTAL CLAIMS<br>(37 CFR 1.16(i))                                                                                                                                                                                                                                                                                                                                                                                                     | minus 20 =                                                                                                                                                                                                                    | *                                  | X             | =               | X                   | =                                                |                     |
| INDEPENDENT CLAIMS<br>(37 CFR 1.16(h))                                                                                                                                                                                                                                                                                                                                                                                               | minus 3 =                                                                                                                                                                                                                     | *                                  | X             | =               | X                   | =                                                |                     |
| APPLICATION SIZE FEE<br>(37 CFR 1.16(s))                                                                                                                                                                                                                                                                                                                                                                                             | If the specification and drawings exceed 100 sheets of paper, the application size fee due is \$250 (\$125 for small entity) for each additional 50 sheets or fraction thereof. See 35 U.S.C. 41(a)(1)(G) and 37 CFR 1.16(s). |                                    |               |                 |                     |                                                  |                     |
| MULTIPLE DEPENDENT CLAIM PRESENT (37 CFR 1.16(j))                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                               |                                    |               |                 |                     |                                                  |                     |
| * If the difference in column 1 is less than zero, enter "0" in column 2.                                                                                                                                                                                                                                                                                                                                                            |                                                                                                                                                                                                                               |                                    | TOTAL         |                 | TOTAL               |                                                  |                     |
| APPLICATION AS AMENDED – PART II                                                                                                                                                                                                                                                                                                                                                                                                     |                                                                                                                                                                                                                               |                                    |               |                 |                     | SMALL ENTITY OR OTHER THAN SMALL ENTITY          |                     |
| (Column 1)                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                                                                                                                                                                                               | (Column 2)                         |               | (Column 3)      |                     |                                                  |                     |
| AMENDMENT A                                                                                                                                                                                                                                                                                                                                                                                                                          | CLAIMS REMAINING AFTER AMENDMENT                                                                                                                                                                                              | HIGHEST NUMBER PREVIOUSLY PAID FOR | PRESENT EXTRA | RATE (\$)       | ADDITIONAL FEE (\$) | RATE (\$)                                        | ADDITIONAL FEE (\$) |
|                                                                                                                                                                                                                                                                                                                                                                                                                                      | Total<br>(37 CFR 1.16(i))                                                                                                                                                                                                     | Minus                              | ** 20         | X               | =                   | X                                                | =                   |
|                                                                                                                                                                                                                                                                                                                                                                                                                                      | Independent<br>(37 CFR 1.16(h))                                                                                                                                                                                               | Minus                              | *** 4         | X               | =                   | X                                                | =                   |
|                                                                                                                                                                                                                                                                                                                                                                                                                                      | Application Size Fee (37 CFR 1.16(s))                                                                                                                                                                                         |                                    |               |                 |                     |                                                  |                     |
|                                                                                                                                                                                                                                                                                                                                                                                                                                      | FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))                                                                                                                                                               |                                    |               |                 |                     |                                                  |                     |
|                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                                                                                                                                                                                               |                                    |               | TOTAL ADD'L FEE |                     | TOTAL ADD'L FEE                                  |                     |
| AMENDMENT B                                                                                                                                                                                                                                                                                                                                                                                                                          | CLAIMS REMAINING AFTER AMENDMENT                                                                                                                                                                                              | HIGHEST NUMBER PREVIOUSLY PAID FOR | PRESENT EXTRA | RATE (\$)       | ADDITIONAL FEE (\$) | RATE (\$)                                        | ADDITIONAL FEE (\$) |
|                                                                                                                                                                                                                                                                                                                                                                                                                                      | Total<br>(37 CFR 1.16(i))                                                                                                                                                                                                     | Minus                              | **            | X               | =                   | X                                                | =                   |
|                                                                                                                                                                                                                                                                                                                                                                                                                                      | Independent<br>(37 CFR 1.16(h))                                                                                                                                                                                               | Minus                              | ***           | X               | =                   | X                                                | =                   |
|                                                                                                                                                                                                                                                                                                                                                                                                                                      | Application Size Fee (37 CFR 1.16(s))                                                                                                                                                                                         |                                    |               |                 |                     |                                                  |                     |
|                                                                                                                                                                                                                                                                                                                                                                                                                                      | FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))                                                                                                                                                               |                                    |               |                 |                     |                                                  |                     |
|                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                                                                                                                                                                                               |                                    |               | TOTAL ADD'L FEE |                     | TOTAL ADD'L FEE                                  |                     |
| <p>* If the entry in column 1 is less than the entry in column 2, write "0" in column 3.</p> <p>** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 20, enter "20".</p> <p>*** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 3, enter "3".</p> <p>The "Highest Number Previously Paid For" (Total or Independent) is the highest number found in the appropriate box in column 1.</p> |                                                                                                                                                                                                                               |                                    |               |                 |                     |                                                  |                     |

This collection of information is required by 37 CFR 1.16. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

## EAST Search History

| Ref # | Hits   | Search Query                                                                                                                                 | DBs                            | Default Operator | Plurals | Time Stamp       |
|-------|--------|----------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|------------------|---------|------------------|
| L1    | 344071 | (portable or handheld or mobile or remot\$3) near2 (device or electronic or unit or transmit\$4 or receiv\$3 or transceiv\$3 or transponder) | USPAT;<br>EPO; JPO;<br>DERWENT | OR               | ON      | 2006/04/25 06:57 |
| L2    | 11735  | (establish\$3 or generat\$3 or provid\$3 or accomplis\$3) near4 (geographic or location or position) near9 (area or region or boundary)      | USPAT;<br>EPO; JPO;<br>DERWENT | OR               | ON      | 2006/04/25 07:02 |
| L3    | 122    | 1 with 2                                                                                                                                     | USPAT;<br>EPO; JPO;<br>DERWENT | OR               | ON      | 2006/04/25 07:02 |
| L4    | 1006   | 1 near4 (request\$3 or acquir\$3 or demand\$3) near4 (location or position or geographic\$3 or boundary)                                     | USPAT;<br>EPO; JPO;<br>DERWENT | OR               | ON      | 2006/04/25 07:04 |
| L5    | 2287   | 1 near7 (location or position or geographic\$3 or boundary) near9 network\$3                                                                 | USPAT;<br>EPO; JPO;<br>DERWENT | OR               | ON      | 2006/04/25 07:06 |
| L6    | 14     | 3 and 4 and 5                                                                                                                                | USPAT;<br>EPO; JPO;<br>DERWENT | OR               | ON      | 2006/04/25 07:39 |
| L7    | 2698   | 1 near2 (another or adjacent or proximity or next or near\$2)                                                                                | USPAT;<br>EPO; JPO;<br>DERWENT | OR               | ON      | 2006/04/25 07:41 |
| L8    | 36497  | (maintain\$3 or stay\$3 or constant or "same") near3 (proximity or distance or space area or region) near7 (period or interval or time)      | USPAT;<br>EPO; JPO;<br>DERWENT | OR               | ON      | 2006/04/25 07:43 |
| L9    | 2      | 7 near7 8                                                                                                                                    | USPAT;<br>EPO; JPO;<br>DERWENT | OR               | ON      | 2006/04/25 07:44 |
| L10   | 1      | 6 and 9                                                                                                                                      | USPAT;<br>EPO; JPO;<br>DERWENT | OR               | ON      | 2006/04/25 07:49 |
| L11   | 1512   | 1 near4 (exit or presen\$3 or within or about) near4 (region or area or geographic)                                                          | USPAT;<br>EPO; JPO;<br>DERWENT | OR               | ON      | 2006/04/25 07:50 |
| L12   | 164    | 11 near5 (determin\$3 or defin\$3 or verif\$4 or check\$3)                                                                                   | USPAT;<br>EPO; JPO;<br>DERWENT | OR               | ON      | 2006/04/25 07:51 |
| L13   | 5      | 6 and 12                                                                                                                                     | USPAT;<br>EPO; JPO;<br>DERWENT | OR               | ON      | 2006/04/25 07:54 |

## EAST Search History

|     |   |                                    |                                |    |     |                  |
|-----|---|------------------------------------|--------------------------------|----|-----|------------------|
| L14 | 2 | 13 and boundary                    | USPAT;<br>EPO; JPO;<br>DERWENT | OR | ON  | 2006/04/25 07:55 |
| L15 | 4 | ((("6618593") or ("4658357"))).PN. | USPAT;<br>EPO; JPO;<br>DERWENT | OR | OFF | 2006/04/25 07:56 |
| L16 | 0 | 15 and 4 and 5                     | USPAT;<br>EPO; JPO;<br>DERWENT | OR | ON  | 2006/04/25 07:57 |
| L17 | 0 | 15 and 12                          | USPAT;<br>EPO; JPO;<br>DERWENT | OR | ON  | 2006/04/25 07:57 |



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NOTICE OF ALLOWANCE AND FEE(S) DUE

7590 05/01/2006

MUNDI FOMUKONG  
10853 ROSE AVE. #49  
W. Los Angeles, CA 90034

EXAMINER

TRIEU, VAN THANH

ART UNIT

PAPER NUMBER

2612

DATE MAILED: 05/01/2006

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 10/878,951      | 06/28/2004  | Mundi Fomukong       |                     | 5372             |

TITLE OF INVENTION: METHOD AND APPARATUS FOR LOCATING MOBILE UNITS TRACKING ANOTHER OR WITHIN A PRESCRIBED GEOGRAPHIC BOUNDARY

| APPLN. TYPE    | SMALL ENTITY | ISSUE FEE | PUBLICATION FEE | TOTAL FEE(S) DUE | DATE DUE   |
|----------------|--------------|-----------|-----------------|------------------|------------|
| nonprovisional | YES          | \$700     | \$300           | \$1000           | 08/01/2006 |

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE REFLECTS A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE APPLIED IN THIS APPLICATION. THE PTOL-85B (OR AN EQUIVALENT) MUST BE RETURNED WITHIN THIS PERIOD EVEN IF NO FEE IS DUE OR THE APPLICATION WILL BE REGARDED AS ABANDONED.

HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

- A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.
- B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

- A. Pay TOTAL FEE(S) DUE shown above, or
- B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FEE shown above.

II. PART B - FEE(S) TRANSMITTAL should be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). Even if the fee(s) have already been paid, Part B - Fee(s) Transmittal should be completed and returned. If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

**IMPORTANT REMINDER:** Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

# **PART B - FEE(S) TRANSMITTAL**

**Complete and send this form, together with applicable fee(s), to: Mail Mail Stop ISSUE FEE  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
or Fax (571)-273-2885**

**INSTRUCTIONS:** This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 5 should be completed where appropriate. All further correspondence including the Patent, advance orders and notification of maintenance fees will be mailed to the current correspondence address as indicated unless corrected below or directed otherwise in Block 1, by (a) specifying a new correspondence address; and/or (b) indicating a separate "FEE ADDRESS" for maintenance fee notifications.

CURRENT CORRESPONDENCE ADDRESS (Note: Use Block 1 for any change of address)

7590 05/01/2006

**MUNDI FOMUKONG**  
10853 ROSE AVE. #49  
W. Los Angeles, CA 90034

Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission.

## **Certificate of Mailing or Transmission**

I hereby certify that this Fee(s) Transmittal is being deposited with the United States Postal Service with sufficient postage for first class mail in an envelope addressed to the Mail Stop ISSUE FEE address above, or being facsimile transmitted to the USPTO (571) 273-2885, on the date indicated below.

|                             |
|-----------------------------|
| _____<br>(Depositor's name) |
| _____<br>(Signature)        |
| _____<br>(Date)             |

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 10/878,951      | 06/28/2004  | Mundi Fomukong       |                     | 5372             |

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| APPLN. TYPE    | SMALL ENTITY | ISSUE FEE | PUBLICATION FEE | TOTAL FEE(S) DUE | DATE DUE   |
|----------------|--------------|-----------|-----------------|------------------|------------|
| nonprovisional | YES          | \$700     | \$300           | \$1000           | 08/01/2006 |

| EXAMINER         | ART UNIT | CLASS-SUBCLASS |
|------------------|----------|----------------|
| TRIEU, VAN THANH | 2612     | 340-988000     |

1. Change of correspondence address or indication of "Fee Address" (37 CFR 1.363).  
☐ Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached.  
☐ "Fee Address" indication (or "Fee Address" Indication form PTO/SB/47; Rev 03-02 or more recent) attached. **Use of a Customer Number is required.**

2. For printing on the patent front page, list  
 (1) the names of up to 3 registered patent attorneys or agents OR, alternatively, 1 \_\_\_\_\_  
 (2) the name of a single firm (having as a member a registered attorney or agent) and the names of up to 2 registered patent attorneys or agents. If no name is listed, no name will be printed. 2 \_\_\_\_\_  
 3 \_\_\_\_\_

## **3. ASSIGNEE NAME AND RESIDENCE DATA TO BE PRINTED ON THE PATENT (print or type)**

PLEASE NOTE: Unless an assignee is identified below, no assignee data will appear on the patent. If an assignee is identified below, the document has been filed for recordation as set forth in 37 CFR 3.11. Completion of this form is NOT a substitute for filing an assignment.

(A) NAME OF ASSIGNEE \_\_\_\_\_ (B) RESIDENCE: (CITY and STATE OR COUNTRY) \_\_\_\_\_

Please check the appropriate assignee category or categories (will not be printed on the patent): ☐ Individual ☐ Corporation or other private group entity ☐ Government

## **4a. The following fee(s) are enclosed:**

- ☐ Issue Fee  
☐ Publication Fee (No small entity discount permitted)  
☐ Advance Order - # of Copies \_\_\_\_\_

## **4b. Payment of Fee(s):**

- ☐ A check in the amount of the fee(s) is enclosed.  
☐ Payment by credit card. Form PTO-2038 is attached.  
☐ The Director is hereby authorized by charge the required fee(s), or credit any overpayment, to Deposit Account Number \_\_\_\_\_ (enclose an extra copy of this form).

## **5. Change in Entity Status (from status indicated above)**

- ☐ a. Applicant claims SMALL ENTITY status. See 37 CFR 1.27. ☐ b. Applicant is no longer claiming SMALL ENTITY status. See 37 CFR 1.27(g)(2).

The Director of the USPTO is requested to apply the Issue Fee and Publication Fee (if any) or to re-apply any previously paid issue fee to the application identified above.  
 NOTE: The Issue Fee and Publication Fee (if required) will not be accepted from anyone other than the applicant; a registered attorney or agent; or the assignee or other party in interest as shown by the records of the United States Patent and Trademark Office.

Authorized Signature \_\_\_\_\_

Date \_\_\_\_\_

Typed or printed name \_\_\_\_\_

Registration No. \_\_\_\_\_

This collection of information is required by 37 CFR 1.311. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, Virginia 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450.

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| 10/878,951      | 06/28/2004  | Mundi Fomukong       |                     | 5372             |

7590 05/01/2006

MUNDI FOMUKONG  
10853 ROSE AVE. #49  
W. Los Angeles, CA 90034

|          |
|----------|
| EXAMINER |
|----------|

TRIEU, VAN THANH

|          |              |
|----------|--------------|
| ART UNIT | PAPER NUMBER |
|----------|--------------|

2612

DATE MAILED: 05/01/2006

**Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)**  
(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 0 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 0 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (<http://pair.uspto.gov>).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

**Notice of Allowability**

Application No.

10/878,951

Examiner

Van T. Trieu

Applicant(s)

FOMUKONG, MUNDI

Art Unit

2612

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to the Amendment filed on 15 March 2006.
2. ☒ The allowed claim(s) is/are 1-7.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some\* c) ☐ None of the:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.  
**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.  
(a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached  
1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.  
(b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.  
**Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).**
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

- |                                                                                                                     |                                                                                       |
|---------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| 1. <input type="checkbox"/> Notice of References Cited (PTO-892)                                                    | 5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)           |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                | 6. <input type="checkbox"/> Interview Summary (PTO-413),<br>Paper No./Mail Date _____ |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),<br>Paper No./Mail Date _____ | 7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment                   |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit<br>of Biological Material          | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance  |
|                                                                                                                     | 9. <input type="checkbox"/> Other _____                                               |

## **DETAILED ACTION**

### **EXAMINER'S AMENDMENT**

1. The application has been amended as follows: in the Amendment filed on 15 March 2006, claim 6, line 11, replace the semicolon ";" by a period ---- . ----

### ***Allowable Subject Matter***

2. The following is an examiner's statement of reasons for allowance: there are no prior arts teaching or suggesting of a communication system comprising:

- (i) a portable mobile remote unit;
- (ii) a network of communication units;
- (iii) the portable mobile remote unit able to communicate with at least a transmitter within the network to establish its geographic location within the system;
- (iv) means to request for the location information of portable mobile remote units that are in a geographic boundary that is prescribed within the coverage area of the transmitter;
- (v) means to provide the location information of the portable mobile remote unit to the network upon determination that the portable mobile remote unit is within the prescribed the geographic boundary requested by the network;
- (vi) means to determine and report to the system that, another portable mobile remote unit has maintained relative proximity to the portable mobile remote over a period of time while in motion.

In another embodiment, a communication system for providing the location of portable mobile remote unite in a geographic region to a wireless consumer requesting that information comprising:

i) a pool of portable mobile remote units that are able to communicate with a network transmitter to establish their location within the system;

ii) means for the wireless consumer to specify and forward to a network, geographic boundary information describing a region within the coverage area of the transmitter where the location of portable mobile remote units are required by the wireless consumer;

iii) means to request that all portable remote units within the region (ii) establish their location at the network;

iv) means to identify the request (iii) and verify at a portable mobile remote unit whether the portable remote unit exist within the region;

v) means to provide to the wireless consumer the location of a portable mobile remote unit that exist in the geographic boundary defined by the wireless consumer after the verification of (iv) .

A method for determining that a first portable mobile remote is tracking a second portable mobile remote unit while in motion comprising:

i) obtaining the geographic location of the first and second portable communication units at intervals over a period of time;

Art Unit: 2612

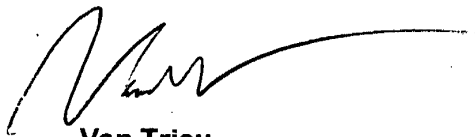
ii) computing from the geographic location (i) whether the first and second portable communication units are maintaining relative proximity during the period of time;

iii) if the result of the computation (ii) indicates that relative proximity is maintained between the first and second portable communication units over the period of time, advising the system that the first portable mobile remote unit is tracking the second.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

3. Any inquiry concerning this communication or earlier communications from examiner should be directed to primary examiner **Van Trieu** whose telephone number is (571) 272-2972. The examiner can normally be reached on Mon-Fri from 7:00 AM to 3:00 PM.

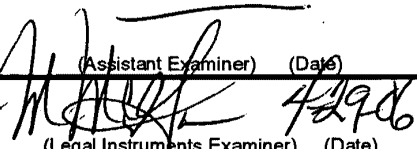
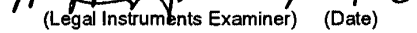
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **Mr. Mike Horabik** can be reached on (571) 272-3068.



**Van Trieu**  
**Primary Examiner**  
**Date: 4/25/06**

|                                                                                                                  |                                |  |                                                |  |
|------------------------------------------------------------------------------------------------------------------|--------------------------------|--|------------------------------------------------|--|
| <b>Issue Classification</b><br> | <b>Application/Control No.</b> |  | <b>Applicant(s)/Patent under Reexamination</b> |  |
|                                                                                                                  | 10/878,951                     |  | FOMUKONG, MUNDI                                |  |
|                                                                                                                  | <b>Examiner</b>                |  | <b>Art Unit</b>                                |  |
|                                                                                                                  | Van T. Trieu                   |  | 2612                                           |  |

| ISSUE CLASSIFICATION         |          |   |   |       |                    |                                   |     |  |  |  |
|------------------------------|----------|---|---|-------|--------------------|-----------------------------------|-----|--|--|--|
| ORIGINAL                     |          |   |   |       | CROSS REFERENCE(S) |                                   |     |  |  |  |
| CLASS                        | SUBCLASS |   |   |       | CLASS              | SUBCLASS (ONE SUBCLASS PER BLOCK) |     |  |  |  |
| 340                          | 988      |   |   |       | 340                | 989                               | 992 |  |  |  |
| INTERNATIONAL CLASSIFICATION |          |   |   |       |                    |                                   |     |  |  |  |
| G                            | 0        | 8 | G | 1/123 |                    |                                   |     |  |  |  |
|                              |          |   |   | /     |                    |                                   |     |  |  |  |
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|                                                                                                                                                                                                                                                      |                 |                                                                                                                                                                             |  |                                                                                                                                                                     |  |                     |                 |   |   |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|---------------------|-----------------|---|---|
| <br>(Assistant Examiner) (Date) 4/29/06<br><br>(Legal Instruments Examiner) (Date) |                 | <br><b>VAN T. TRIEU</b><br><b>PRIMARY EXAMINER</b><br>(Primary Examiner) 4/25/06<br>(Date) |  | <b>Total Claims Allowed: 7</b><br><br><table border="1"> <tr> <td>O.G. Print Claim(s)</td> <td>O.G. Print Fig.</td> </tr> <tr> <td>1</td> <td>1</td> </tr> </table> |  | O.G. Print Claim(s) | O.G. Print Fig. | 1 | 1 |
| O.G. Print Claim(s)                                                                                                                                                                                                                                  | O.G. Print Fig. |                                                                                                                                                                             |  |                                                                                                                                                                     |  |                     |                 |   |   |
| 1                                                                                                                                                                                                                                                    | 1               |                                                                                                                                                                             |  |                                                                                                                                                                     |  |                     |                 |   |   |

| <input type="checkbox"/> Claims renumbered in the same order as presented by applicant |          |       |          | <input type="checkbox"/> CPA |          |       |          | <input type="checkbox"/> T.D. |          |       |          | <input type="checkbox"/> R.1.47 |          |       |          |
|----------------------------------------------------------------------------------------|----------|-------|----------|------------------------------|----------|-------|----------|-------------------------------|----------|-------|----------|---------------------------------|----------|-------|----------|
| Final                                                                                  | Original | Final | Original | Final                        | Original | Final | Original | Final                         | Original | Final | Original | Final                           | Original | Final | Original |
| 1                                                                                      | 1        |       | 31       |                              | 61       |       | 91       |                               | 121      |       | 151      |                                 |          |       | 181      |
| 2                                                                                      | 2        |       | 32       |                              | 62       |       | 92       |                               | 122      |       | 152      |                                 |          |       | 182      |
| 3                                                                                      | 3        |       | 33       |                              | 63       |       | 93       |                               | 123      |       | 153      |                                 |          |       | 183      |
| 4                                                                                      | 4        |       | 34       |                              | 64       |       | 94       |                               | 124      |       | 154      |                                 |          |       | 184      |
| 5                                                                                      | 5        |       | 35       |                              | 65       |       | 95       |                               | 125      |       | 155      |                                 |          |       | 185      |
| 6                                                                                      | 6        |       | 36       |                              | 66       |       | 96       |                               | 126      |       | 156      |                                 |          |       | 186      |
| 7                                                                                      | 7        |       | 37       |                              | 67       |       | 97       |                               | 127      |       | 157      |                                 |          |       | 187      |
|                                                                                        | 8        |       | 38       |                              | 68       |       | 98       |                               | 128      |       | 158      |                                 |          |       | 188      |
|                                                                                        | 9        |       | 39       |                              | 69       |       | 99       |                               | 129      |       | 159      |                                 |          |       | 189      |
|                                                                                        | 10       |       | 40       |                              | 70       |       | 100      |                               | 130      |       | 160      |                                 |          |       | 190      |
|                                                                                        | 11       |       | 41       |                              | 71       |       | 101      |                               | 131      |       | 161      |                                 |          |       | 191      |
|                                                                                        | 12       |       | 42       |                              | 72       |       | 102      |                               | 132      |       | 162      |                                 |          |       | 192      |
|                                                                                        | 13       |       | 43       |                              | 73       |       | 103      |                               | 133      |       | 163      |                                 |          |       | 193      |
|                                                                                        | 14       |       | 44       |                              | 74       |       | 104      |                               | 134      |       | 164      |                                 |          |       | 194      |
|                                                                                        | 15       |       | 45       |                              | 75       |       | 105      |                               | 135      |       | 165      |                                 |          |       | 195      |
|                                                                                        | 16       |       | 46       |                              | 76       |       | 106      |                               | 136      |       | 166      |                                 |          |       | 196      |
|                                                                                        | 17       |       | 47       |                              | 77       |       | 107      |                               | 137      |       | 167      |                                 |          |       | 197      |
|                                                                                        | 18       |       | 48       |                              | 78       |       | 108      |                               | 138      |       | 168      |                                 |          |       | 198      |
|                                                                                        | 19       |       | 49       |                              | 79       |       | 109      |                               | 139      |       | 169      |                                 |          |       | 199      |
|                                                                                        | 20       |       | 50       |                              | 80       |       | 110      |                               | 140      |       | 170      |                                 |          |       | 200      |
|                                                                                        | 21       |       | 51       |                              | 81       |       | 111      |                               | 141      |       | 171      |                                 |          |       | 201      |
|                                                                                        | 22       |       | 52       |                              | 82       |       | 112      |                               | 142      |       | 172      |                                 |          |       | 202      |
|                                                                                        | 23       |       | 53       |                              | 83       |       | 113      |                               | 143      |       | 173      |                                 |          |       | 203      |
|                                                                                        | 24       |       | 54       |                              | 84       |       | 114      |                               | 144      |       | 174      |                                 |          |       | 204      |
|                                                                                        | 25       |       | 55       |                              | 85       |       | 115      |                               | 145      |       | 175      |                                 |          |       | 205      |
|                                                                                        | 26       |       | 56       |                              | 86       |       | 116      |                               | 146      |       | 176      |                                 |          |       | 206      |
|                                                                                        | 27       |       | 57       |                              | 87       |       | 117      |                               | 147      |       | 177      |                                 |          |       | 207      |
|                                                                                        | 28       |       | 58       |                              | 88       |       | 118      |                               | 148      |       | 178      |                                 |          |       | 208      |
|                                                                                        | 29       |       | 59       |                              | 89       |       | 119      |                               | 149      |       | 179      |                                 |          |       | 209      |
|                                                                                        | 30       |       | 60       |                              | 90       |       | 120      |                               | 150      |       | 180      |                                 |          |       | 210      |

|                                                                                                          |                        |                     |  |
|----------------------------------------------------------------------------------------------------------|------------------------|---------------------|--|
| <b>Search Notes</b><br> | <b>Application No.</b> | <b>Applicant(s)</b> |  |
|                                                                                                          | 10/878,951             | FOMUKONG, MUNDI     |  |
|                                                                                                          | <b>Examiner</b>        | <b>Art Unit</b>     |  |
|                                                                                                          | Van T Trieu            | 2612                |  |

| SEARCHED |          |            |          |
|----------|----------|------------|----------|
| Class    | Subclass | Date       | Examiner |
| 340      | 988      | 3/29/2005  | VT       |
| ↓        | 989      | ↓          | ↓        |
| ↓        | 990      | ↓          | ↓        |
| ↓        | 992      | ↓          | ↓        |
| ↓        | 573.1    | ↓          | ↓        |
| ↓        | 573.3    | ↓          | ↓        |
| ↓        | 691.6    | ↓          | ↓        |
| 455      | 439      | 3/29/2005  | VT       |
| ↓        | 456.2    | ↓          | ↓        |
| ↓        | 456.3    | ↓          | ↓        |
| ↓        | 457      | ↓          | ↓        |
| 342      | 357.09   | 3/29/2005  | VT       |
| ↓        | 377.1    | ↓          | ↓        |
| 705      | 32       | 12/12/2005 | VT       |

| INTERFERENCE SEARCHED |          |      |          |
|-----------------------|----------|------|----------|
| Class                 | Subclass | Date | Examiner |
|                       |          |      |          |
|                       |          |      |          |
|                       |          |      |          |
|                       |          |      |          |

| SEARCH NOTES<br>(INCLUDING SEARCH STRATEGY) |            |      |
|---------------------------------------------|------------|------|
|                                             | DATE       | EXMR |
| EAST                                        | 3/29/2005  | VT   |
| Update Search                               | 12/12/2005 | VT   |
| Update Search                               | 4/25/2006  | VT   |
|                                             |            |      |
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|------------------|-----------------------------------------------------------------------|
| US 7016689 B2    | Method and apparatus: 455/456.1 455/404.2; 455/466; 701/200           |
| US 6836667 B1    | Method and apparatus: 455/456.1 455/456.3                             |
| US 6756918 B2    | Method and apparatus: 340/988 340/989; 340/992                        |
| US 6611687 B1    | Method and apparatus for a wirel 340/990; 701/200                     |
| US 6453237 B1    | Method and apparatus: 701/213 342/356; 342/358; 701/200               |
| US 6441752 B1    | Method and apparatus: 340/988 340/989; 340/992                        |
| US 6968195 B2    | Enhanced PDE select 455/456.2 342/357.01                              |
| US 6961562 B2    | Method and apparatus: 455/425 342/450; 455/456.1; 455/456.3; 4        |
| US 6888811 B2    | Communication system: 370/338 370/401; 455/404.2; 455/414.3; 4        |
| US 6757545 B2    | Location information n 455/456.2 342/357.01; 455/404.2                |
| US 6650908 B1    | Communications system: 455/560 455/414.1; 455/507; 455/508; 455/      |
| US 6138030 A     | Communications system: 455/507 455/518                                |
| US 5959577 A     | Method and structure 342/357.1; 701/208                               |
| US 20030236095 A | Method for processing location information of e.g. cellular phone, ir |

L6

US 6756918 B2      Method and apparatus 340/988    340/989; 340/992  
US 20040246146 A    Communication system has determining and reporting unit that det

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|               |                                                             |
|---------------|-------------------------------------------------------------|
| US 7016689 B2 | Method and apparatus: 455/456.1 455/404.2; 455/466; 701/200 |
| US 6836667 B1 | Method and apparatus: 455/456.1 455/456.3                   |
| US 6756918 B2 | Method and apparatus: 340/988 340/989; 340/992              |
| US 6611687 B1 | Method and apparatus for a wire: 340/990; 701/200           |
| US 6441752 B1 | Method and apparatus: 340/988 340/989; 340/992              |

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Application Number: 10/878,951

**JUL 31 2006**

Applicant: Mundi Fomukong

Examiner: Van Trieu

Art Unit: 2636

Fax General (571) 273 8300

Fax Direct (571) 273 2972

Phone: (571) 272 2972

Method of Transmission : Fax (Direct)

Date: July 30, 2006

Number of pages : 9 (including cover)

**1) Response to Office Communication**

United States Patent and Trademark Office,

Commissioner For Patents,

P.O Box1450,

Alexandria, VA 22313-1450

Sir:

In view of 37 CFR 1.114, kindly amend the above application as indicated in the claimamendment section. New claims 8-15 have now been added to the application. The fee as set forth in 37 CFR 1.17(e) is included in the credit card form PTO-2038.

07/31/2006 TL0111 00000012 10878951

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200.00 0P

### **CLAIM AMENDMENT**

1. (previously presented) A communication system comprising:

- (i) a portable mobile remote unit;
- (ii) a network of communication units;
- (iii) the portable mobile remote unit able to communicate with at least a

transmitter within the network to establish its geographic location within the system;

(iv) means to request for the location information of portable mobile remote units that are in a geographic boundary that is prescribed within the coverage area of said transmitter;

(v) means to provide the location information of the portable mobile remote unit to the network upon determination that the portable mobile remote unit is within said prescribed geographic boundary requested by the network;

(vi) means to determine and report to the system that, another portable mobile remote unit has maintained relative proximity to the portable mobile remote over a period of time while in motion.

2. (previously presented) The portable mobile remote according to claim 1, having means to further determine if location disclosure for the remote unit is prohibited at a specific geographic boundary before sending its location to the network.

3. (previously presented) The portable remote unit of claim 1 having means to establish its velocity at the network and having means to further determine that, its velocity is within the network's prescribed velocity before divulging its location to the network.

4. (previously presented) A communication system for providing the location of portable mobile remote units, in a geographic region to a wireless consumer requesting that information comprising:

i) a pool of portable mobile remote units that are able to communicate with a network transmitter to establish their location within the system;

ii) means for the wireless consumer to specify and forward to a network, geographic boundary information describing a region within the coverage area of said transmitter where the location of portable mobile remote units are required by the wireless consumer;

iii) means to request that all portable remote units within said region (ii) establish their location at the network;

iv) means to identify said request (iii) and verify at a portable mobile remote unit whether the portable remote unit exist within said region (iii);

v) means to provide to the wireless consumer the location of a portable mobile remote unit that exist in the geographic boundary defined by the wireless consumer after the verification of (iv) .

5. (previously presented) The system of claim 4, the portable mobile remote units able to establish and report their location to other communication units of the system.

6. (previously presented) A method for determining that a first portable mobile remote is tracking a second portable mobile remote unit while in motion comprising:

- i) obtaining the geographic location of the first and second portable communication units at intervals over a period of time;
- ii) computing from said geographic location (i) whether the first and second portable communication units are maintaining relative proximity during said period of time,
- iii) if the result of said computation (ii) indicates that relative proximity is maintained between the first and second portable communication units over said period of time, advising the system that the first portable mobile remote unit is tracking the second;

7. (previously presented) A method for providing the location of portable mobile remote units in a geographic region to a wireless consumer requesting that information comprising:

- i) communicating with a base transmitter to establish the location of a portable mobile remote unit within the system;
- ii) specifying and forwarding to a wireless network, geographic boundary information describing a region within the coverage area of said transmitter where the location of portable mobile remote units are required by the wireless consumer;
- iii) requesting that all portable remote units within said region (ii) establish their location at the network;

- iv) identifying said request (iii) and verifying at a portable mobile remote unit that the portable remote unit exist within said region specified by said request(iii);
- v) providing to the wireless consumer the location of a portable mobile remote unit that exist in the geographic boundary defined by the wireless consumer after the verification of (iv) .

8. (new) A communication system comprising:

- i) a network of communication resources;
- ii) a pool of portable mobile remote units that are able to communicate with the network to establish their geographic location within the system;
- ii) means for a wireless consumer to specify and forward to the network, geographic boundary information describing a region within a coverage area of said network where a notification should be sent to one or more of said portable mobile remote units within said region ;
- iii) means to forward said notification to portable mobile remote units within said region;
- iv) means to identify said notification (iii) at the portable mobile remote unit and means to verify whether the portable remote unit exists within said region (iii);

9) (new) The system of claim 8 further comprising means to respond to said notification if said portable mobile remote unit (iv) exist within the geographic boundary defined by said region.

10. (new)      The system of claim 8 said geographic boundary information including latitude, longitude and radii information.

11. (new)      The system of claim 8 said notification message including a request for the location information of said portable mobile remote units.

12. (new)      A method for notifying portable mobile remote units within a geographic region in a wireless communication system comprising:

        i) communicating with one or more portable mobile remote unit in a network to establish their geographic location within the system;

        ii) specifying and forwarding to the network, geographic boundary information describing a region within a coverage area of said network where a notification should be sent to one or more of said portable mobile remote units within said region ;

        iii) forwarding said notification to portable mobile remote units within said region;

        iv) identifying said notification (iii) at the portable mobile remote unit and verifying whether the portable remote unit exists within said region (iii);

13. (new)      The method of claim 12 further comprising responding to said notification if said portable mobile remote unit (iv) exist within the geographic boundary defined by said region.

14. (new) The method of claim 12 said geographic boundary information including latitude, longitude and radii information.

15. (new) The method of claim 12 said notification message including a request for the location information of said portable mobile remote units.

**REMARKS:**

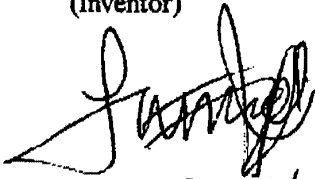
The portable mobile device of the prior art cannot sense movement within a prescribed geographic boundary making it impossible for the prior art to perform the claimed step.

Applicant solicits allowance of the new claims from the Examiner.

Sincerely

Mundi Fomukong

(Inventor)



7-30-06

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PAGE 1/12 \* RCVD AT 7/31/2006 3:30:18 AM [Eastern Daylight Time] \* SVR:USPTO-EFAXRF-1/13 \* DNIS:2738300 \* CSID: \* DURATION (mm:ss):03:12

PTO/SB/30 (04-05)

Approved for use through 07/31/2006. OMB 0651-0031  
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

|                                                                                                                                                                                      |                        |                  |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------|------------------|
| <b>Request<br/>for<br/>Continued Examination (RCE)<br/>Transmittal</b><br><br>Address to:<br>Mail Stop RCE<br>Commissioner for Patents<br>P.O. Box 1450<br>Alexandria, VA 22313-1450 | Application Number     | 10-878-951       |
|                                                                                                                                                                                      | Filing Date            | 06-28-2004       |
|                                                                                                                                                                                      | First Named Inventor   | MUNDI FORMUKONG  |
|                                                                                                                                                                                      | Art Unit               | 2612             |
|                                                                                                                                                                                      | Examiner Name          | IRIEU, VAN THANH |
|                                                                                                                                                                                      | Attorney Docket Number |                  |

This is a Request for Continued Examination (RCE) under 37 CFR 1.114 of the above-identified application. Request for Continued Examination (RCE) practice under 37 CFR 1.114 does not apply to any utility or plant application filed prior to June 8, 1995, or to any design application. See Instruction Sheet for RCEs (not to be submitted to the USPTO) on page 2.

1. **Submission required under 37 CFR 1.114** Note: If the RCE is proper, any previously filed unentered amendments and amendments enclosed with the RCE will be entered in the order in which they were filed unless applicant instructs otherwise. If applicant does not wish to have any previously filed unentered amendment(s) entered, applicant must request non-entry of such amendment(s).

- a. ☐ Previously submitted. If a final Office action is outstanding, any amendments filed after the final Office action may be considered as a submission even if this box is not checked.
- i. ☐ Consider the arguments in the Appeal Brief or Reply Brief previously filed on \_\_\_\_\_
- ii. ☐ Other \_\_\_\_\_
- b. ☒ Enclosed
- i. ☒ Amendment/Reply
- ii. ☐ Affidavit(s)/ Declaration(s)
- iii. ☐ Information Disclosure Statement (IDS)
- iv. ☐ Other \_\_\_\_\_

2. **Miscellaneous**

- a. ☐ Suspension of action on the above-identified application is requested under 37 CFR 1.103(e) for a period of \_\_\_\_\_ months. (Period of suspension shall not exceed 3 months; Fee under 37 CFR 1.17(i) required)
- b. ☐ Other \_\_\_\_\_

3. **Fees**

- The RCE fee under 37 CFR 1.17(e) is required by 37 CFR 1.114 when the RCE is filed. The Director is hereby authorized to charge the following fees, any underpayment of fees, or credit any overpayments, to Deposit Account No. \_\_\_\_\_ I have enclosed a duplicate copy of this sheet.
- i. ☐ RCE fee required under 37 CFR 1.17(e)
- ii. ☐ Extension of time fee (37 CFR 1.136 and 1.17)
- iii. ☐ Other \_\_\_\_\_
- b. ☐ Check in the amount of \$ \_\_\_\_\_ enclosed
- c. ☒ Payment by credit card (Form PTO-2038 enclosed)

**WARNING:** Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.

**SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT REQUIRED**

|                   |                    |                  |         |
|-------------------|--------------------|------------------|---------|
| Signature         | <i>[Signature]</i> | Date             | 7-30-06 |
| Name (Print/Type) | MUNDI FORMUKONG    | Registration No. |         |

**CERTIFICATE OF MAILING OR TRANSMISSION**

I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Mail Stop RCE, Commissioner for Patents, P. O. Box 1450, Alexandria, VA 22313-1450 or facsimile transmitted to the U.S. Patent and Trademark Office on the date shown below.

|                   |  |      |  |
|-------------------|--|------|--|
| Signature         |  | Date |  |
| Name (Print/Type) |  |      |  |

This collection of information is required by 37 CFR 1.114. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Mail Stop RCE, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

07/31/2006 TL0111 00000012 10878951

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PTO/SB/17 (12-04V2)  
Approved for use through 07/31/2006. OMB 0651-0032  
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Effective on 12/08/2004.  
Fees pursuant to the Consolidated Appropriations Act, 2005 (H.R. 4818).

# FEE TRANSMITTAL For FY 2005

☐ Applicant claims small entity status. See 37 CFR 1.27

TOTAL AMOUNT OF PAYMENT (\$)

Complete if Known

Application Number 10-878-951  
Filing Date 06-28-2004  
First Named Inventor MUONDI FORMUKONG  
Examiner Name IRILEU, VAN THANH  
Art Unit 2612  
Attorney Docket No.

METHOD OF PAYMENT (check all that apply)

☐ Check ☒ Credit Card ☐ Money Order ☐ None ☐ Other (please identify):  
☐ Deposit Account Deposit Account Number: Deposit Account Name:  
For the above-identified deposit account, the Director is hereby authorized to: (check all that apply)  
☐ Charge fee(s) indicated below ☐ Charge fee(s) indicated below, except for the filing fee  
☒ Charge any additional fee(s) or underpayments of fee(s) under 37 CFR 1.16 and 1.17 ☒ Credit any overpayments

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FEE CALCULATION

1. BASIC FILING, SEARCH, AND EXAMINATION FEES

| Application Type | FILING FEES |                       | SEARCH FEES |                       | EXAMINATION FEES |                       | Fees Paid (\$) |
|------------------|-------------|-----------------------|-------------|-----------------------|------------------|-----------------------|----------------|
|                  | Fee (\$)    | Small Entity Fee (\$) | Fee (\$)    | Small Entity Fee (\$) | Fee (\$)         | Small Entity Fee (\$) |                |
| Utility          | 300         | 150                   | 500         | 250                   | 200              | 100                   |                |
| Design           | 200         | 100                   | 100         | 50                    | 130              | 65                    |                |
| Plant            | 200         | 100                   | 300         | 150                   | 160              | 80                    |                |
| Reissue          | 300         | 150                   | 500         | 250                   | 600              | 300                   |                |
| Provisional      | 200         | 100                   | 0           | 0                     | 0                | 0                     |                |

2. EXCESS CLAIM FEES

| Fee Description                                                        | Fee (\$) | Small Entity Fee (\$) |
|------------------------------------------------------------------------|----------|-----------------------|
| Each claim over 20 (including Reissues)                                | 50       | 25                    |
| Each independent claim over 3 (including Reissues)                     | 200      | 100                   |
| Multiple dependent claims                                              | 360      | 180                   |
| Total Claims                                                           |          |                       |
| Extra Claims                                                           |          |                       |
| Fee (\$)                                                               |          |                       |
| Fee Paid (\$)                                                          |          |                       |
| HP = highest number of total claims paid for, if greater than 20.      |          |                       |
| Indep. Claims                                                          |          |                       |
| Extra Claims                                                           |          |                       |
| Fee (\$)                                                               |          |                       |
| Fee Paid (\$)                                                          |          |                       |
| HP = highest number of independent claims paid for, if greater than 3. |          |                       |

3. APPLICATION SIZE FEE

If the specification and drawings exceed 100 sheets of paper (excluding electronically filed sequence or computer listings under 37 CFR 1.52(c)), the application size fee due is \$250 (\$125 for small entity) for each additional 50 sheets or fraction thereof. See 35 U.S.C. 41(a)(1)(G) and 37 CFR 1.16(s).

Total Sheets Extra Sheets Number of each additional 50 or fraction thereof Fee (\$)

4. OTHER FEE(S)

Non-English Specification, \$130 fee (no small entity discount)  
Other (e.g., late filing surcharge): 37 CFR 1.17(c) \$ 395

|                   |                  |                  |              |
|-------------------|------------------|------------------|--------------|
| SUBMITTED BY      |                  | Registration No. | Telephone    |
| Signature         |                  | (Attorney/Agent) | 310-559-8133 |
| Name (Print/Type) | MUONDI FORMUKONG | Date             | 7-30-06      |

This collection of information is required by 37 CFR 1.136. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 30 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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**REQUEST FOR CONTINUED EXAMINATION**

**PURSAUNT TO 37 CFR 1.114**

**APPLICATION : US 10/878,951**

**EXAMINER: VAN TRIEU**

**ART UNIT : 2636**

**FAX: (571) 273 8300 (General)**

**EXAMINER PHONE: (571) 272 2972**

**CUSTOMER SERVICE PHONE: (571) 272 2600**

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**PATENT APPLICATION FEE DETERMINATION RECORD**

Substitute for Form PTO-875 Effective December 8, 2004

Application or Docket Number

10828951

**APPLICATION AS FILED - PART I**

| (Column 1)                                        |                                                                                                                                                                                                                               | (Column 2)   | SMALL ENTITY |          | OR | OTHER THAN SMALL ENTITY |          |
|---------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|--------------|----------|----|-------------------------|----------|
| FOR                                               | NUMBER FILED                                                                                                                                                                                                                  | NUMBER EXTRA | RATE (\$)    | FEE (\$) |    | RATE (\$)               | FEE (\$) |
| BASIC FEE<br>(37 CFR 1.16(a), (b), or (c))        | N/A                                                                                                                                                                                                                           | N/A          | N/A          | 150.00   |    | N/A                     | 300.00   |
| SEARCH FEE<br>(37 CFR 1.16(h), (i), or (m))       | N/A                                                                                                                                                                                                                           | N/A          | N/A          | \$250    |    | N/A                     | \$500    |
| EXAMINATION FEE<br>(37 CFR 1.16(d), (p), or (q))  | N/A                                                                                                                                                                                                                           | N/A          | N/A          | \$100    |    | N/A                     | \$200    |
| TOTAL CLAIMS<br>(37 CFR 1.16(i))                  | minus 20 =                                                                                                                                                                                                                    | -            | X\$ 25 =     |          | OR | X\$50 =                 |          |
| INDEPENDENT CLAIMS<br>(37 CFR 1.16(h))            | minus 3 =                                                                                                                                                                                                                     | -            | X100 =       |          |    | X200 =                  |          |
| APPLICATION SIZE FEE<br>(37 CFR 1.16(s))          | If the specification and drawings exceed 100 sheets of paper, the application size fee due is \$250 (\$125 for small entity) for each additional 50 sheets or fraction thereof. See 35 U.S.C. 41(a)(1)(G) and 37 CFR 1.16(s). |              |              |          |    |                         |          |
| MULTIPLE DEPENDENT CLAIM PRESENT (37 CFR 1.16(j)) |                                                                                                                                                                                                                               |              | +180=        |          |    | +360=                   |          |
|                                                   |                                                                                                                                                                                                                               |              | TOTAL        |          |    | TOTAL                   |          |

\* If the difference in column 1 is less than zero, enter "0" in column 2.

**APPLICATION AS AMENDED - PART II**

| (Column 1)                                                      |                                  | (Column 2)                         | (Column 3)    | SMALL ENTITY    |                     | OR | OTHER THAN SMALL ENTITY |                     |
|-----------------------------------------------------------------|----------------------------------|------------------------------------|---------------|-----------------|---------------------|----|-------------------------|---------------------|
| AMENDMENT A                                                     | CLAIMS REMAINING AFTER AMENDMENT | HIGHEST NUMBER PREVIOUSLY PAID FOR | PRESENT EXTRA | RATE (\$)       | ADDITIONAL FEE (\$) |    | RATE (\$)               | ADDITIONAL FEE (\$) |
| Total<br>(37 CFR 1.16(i))                                       | 15                               | Minus 20                           | -             | X\$ 25 =        |                     | OR | X\$50 =                 |                     |
| Independent<br>(37 CFR 1.16(h))                                 | 10                               | Minus 4                            | 2             | X100 =          | 200                 | OR | X200 =                  |                     |
| Application Size Fee (37 CFR 1.16(s))                           |                                  |                                    |               |                 |                     |    |                         |                     |
| FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j)) |                                  |                                    |               | +180=           |                     | OR | +360=                   |                     |
|                                                                 |                                  |                                    |               | TOTAL ADD'L FEE | 200                 | OR | TOTAL ADD'L FEE         |                     |

| (Column 1)                                                      |                                  | (Column 2)                         | (Column 3)    | SMALL ENTITY    |                     | OR | OTHER THAN SMALL ENTITY |                     |
|-----------------------------------------------------------------|----------------------------------|------------------------------------|---------------|-----------------|---------------------|----|-------------------------|---------------------|
| AMENDMENT B                                                     | CLAIMS REMAINING AFTER AMENDMENT | HIGHEST NUMBER PREVIOUSLY PAID FOR | PRESENT EXTRA | RATE (\$)       | ADDITIONAL FEE (\$) |    | RATE (\$)               | ADDITIONAL FEE (\$) |
| Total<br>(37 CFR 1.16(i))                                       |                                  | Minus                              |               | X\$ 25 =        |                     | OR | X\$50 =                 |                     |
| Independent<br>(37 CFR 1.16(h))                                 |                                  | Minus                              |               | X100 =          |                     | OR | X200 =                  |                     |
| Application Size Fee (37 CFR 1.16(s))                           |                                  |                                    |               |                 |                     |    |                         |                     |
| FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j)) |                                  |                                    |               | +180=           |                     | OR | +360=                   |                     |
|                                                                 |                                  |                                    |               | TOTAL ADD'L FEE |                     | OR | TOTAL ADD'L FEE         |                     |

• If the entry in column 1 is less than the entry in column 2, write "0" in column 3.

• If the "Highest Number Previously Paid For" IN THIS SPACE is less than 20, enter "20".

• If the "Highest Number Previously Paid For" IN THIS SPACE is less than 3, enter "3".

The "Highest Number Previously Paid For" (Total or Independent) is the highest number found in the appropriate box in column 1.

This collection of information is required by 37 CFR 1.16. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1460, Alexandria, VA 22313-1460.

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## EAST Search History

| Ref # | Hits   | Search Query                                                                                                                   | DBs                            | Default Operator | Plurals | Time Stamp       |
|-------|--------|--------------------------------------------------------------------------------------------------------------------------------|--------------------------------|------------------|---------|------------------|
| L1    | 69422  | (portable or handheld or PDA or mobile) near9 (network\$3 or LAN)                                                              | USPAT;<br>EPO; JPO;<br>DERWENT | OR               | ON      | 2006/08/30 10:19 |
| L2    | 184771 | (geographic or region or area) near3 (location or position)                                                                    | USPAT;<br>EPO; JPO;<br>DERWENT | OR               | ON      | 2006/08/30 10:19 |
| L3    | 4820   | 2 with (portable or handheld or PDA or mobile)                                                                                 | USPAT;<br>EPO; JPO;<br>DERWENT | OR               | ON      | 2006/08/30 10:42 |
| L4    | 47362  | (geographic or region or area) near3 boundary                                                                                  | USPAT;<br>EPO; JPO;<br>DERWENT | OR               | ON      | 2006/08/30 10:35 |
| L5    | 2217   | 4 near4 (information or data)                                                                                                  | USPAT;<br>EPO; JPO;<br>DERWENT | OR               | ON      | 2006/08/30 10:22 |
| L6    | 822    | (notify\$3 or alert\$3 or indicat\$3 or verify\$3) near5 ((portable or handheld or mobile or PDA) near5 (4 or region or area)) | USPAT;<br>EPO; JPO;<br>DERWENT | OR               | ON      | 2006/08/30 10:25 |
| L7    | 8      | 3 and 4 and 5 and 6                                                                                                            | USPAT;<br>EPO; JPO;<br>DERWENT | OR               | ON      | 2006/08/30 10:33 |
| L8    | 12513  | (whether or when or 'if') near5 (portable or handheld or PDA or mobile)                                                        | USPAT;<br>EPO; JPO;<br>DERWENT | OR               | ON      | 2006/08/30 10:35 |
| L9    | 732    | 8 near5 (geographic or region or area or boundary)                                                                             | USPAT;<br>EPO; JPO;<br>DERWENT | OR               | ON      | 2006/08/30 10:36 |
| L10   | 5      | 7 and 9                                                                                                                        | USPAT;<br>EPO; JPO;<br>DERWENT | OR               | ON      | 2006/08/30 10:41 |
| L11   | 5383   | 2 near5 (generat\$3 or establish\$3 or creat\$3)                                                                               | USPAT;<br>EPO; JPO;<br>DERWENT | OR               | ON      | 2006/08/30 10:42 |
| L12   | 154    | 11 near7 (portable or handheld or PDA or mobile)                                                                               | USPAT;<br>EPO; JPO;<br>DERWENT | OR               | ON      | 2006/08/30 10:42 |
| L13   | 0      | 10 and 12                                                                                                                      | USPAT;<br>EPO; JPO;<br>DERWENT | OR               | ON      | 2006/08/30 10:42 |
| L14   | 1      | 7 and 12                                                                                                                       | USPAT;<br>EPO; JPO;<br>DERWENT | OR               | ON      | 2006/08/30 10:42 |

|               |                                      |                                  |
|---------------|--------------------------------------|----------------------------------|
| US 6756918 B2 | Method and apparatus: 340/988        | 340/989; 340/992                 |
| US 6643517 B1 | Method of using location: 455/456.4  | 455/561                          |
| US 6441752 B1 | Method and apparatus: 340/988        | 340/989; 340/992                 |
| US 7084775 B1 | Method and system for: 340/601       | 340/905; 379/37; 702/3           |
| US 6973323 B2 | Method and system for: 455/456.4     | 370/328; 455/456.1; 455/456.5; 4 |
| US 6813501 B2 | Location dependent system: 455/456.2 | 342/457; 455/456.5               |
| US 6714664 B2 | ROAD AREA EXTRACTION: 382/113        | 340/995.14; 382/192; 382/241; 38 |
| US 5905957 A  | Method and apparatus: 455/435.1      | 455/13.1; 455/427                |

L7

|               |                        |           |                        |
|---------------|------------------------|-----------|------------------------|
| US 6756918 B2 | Method and apparatus:  | 340/988   | 340/989; 340/992       |
| US 6643517 B1 | Method of using locati | 455/456.4 | 455/561                |
| US 6441752 B1 | Method and apparatus:  | 340/988   | 340/989; 340/992       |
| US 5905957 A  | Method and apparatus:  | 455/435.1 | 455/13.1; 455/427      |
| US 7084775 B1 | Method and system fo   | 340/601   | 340/905; 379/37; 702/3 |

L<sub>10</sub>

**CLAIM AMENDMENTS**

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**APPLICATION : US 10/878,951**

**SEP 09 2006**

**EXAMINER: VAN TRIEU**

**ART UNIT : 2636**

**FAX: (571) 273 8300 (General)**

**EXAMINER PHONE: (571) 272 2972**

**CUSTOMER SERVICE PHONE: (571) 272 2600**

**THE U.S PATENT AND TRADEMARK OFFICE**

Application Number: 10/878,951

Applicant: Mundi Fomukong

Examiner: Van Trieu

Art Unit: 2636

Fax General (571) 273 8300

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Phone: (571) 272 2972

Method of Transmission : Fax (Direct)

Date: September 07, 2006

Number of pages : 9 (including cover)

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SEP 09 2006

**1) CLAIM AMENDMENT**

United States Patent and Trademark Office,  
Commissioner For Patents,  
P.O Box1450,  
Alexandria, VA 22313-1450

Sir:

Kindly amend the claims of the above application as indicated below.

### CLAIM AMENDMENT

1. (currently amended) A communication system comprising:

- (i) a portable mobile remote unit;
- (ii) a network of communication units;
- (iii) the portable mobile remote unit able to communicate with at least a transmitter within the network to establish its geographic location within the system;
- (iv) means to request for the location information of portable mobile remote units that are in a geographic boundary that is prescribed within the coverage area of said transmitter network;
- (v) means to provide the location information of the portable mobile remote unit to the network upon determination that the portable mobile remote unit is within said prescribed geographic boundary requested by the network;
- (vi) means to determine and report to the system that, another portable mobile remote unit has maintained relative proximity to the portable mobile remote over a period of time while in motion.

2. (currently amended) The portable mobile remote according to claim 1, having means to further determine if location disclosure for the remote unit is prohibited at a specific geographic boundary before sending its location information to the network.

3. (previously presented) The portable remote unit of claim 1 having means to establish its velocity at the network and having means to further determine that, its velocity is within the network's prescribed velocity before divulging its location to the network.

4. (currently amended) A communication system for providing the location information of portable mobile remote units in a geographic region to a wireless consumer requesting that information comprising:

i) a pool of portable mobile remote units that are able to communicate with a network transmitter to establish their location within the system;

ii) means for the wireless consumer to specify and forward to a network, geographic boundary information describing a region within the coverage area of said ~~transmitter network~~ where the location information of portable mobile remote units are required by the wireless consumer;

iii) means to request that all portable remote units within said region (ii) establish their location at the network;

iv) means to identify said request (iii) and verify at a portable mobile remote unit whether the portable remote unit exist within said region (iii);

v) means to provide to the wireless consumer the location information of a portable mobile remote unit that exist in the geographic boundary defined by the wireless consumer after the verification of (iv) .

5. (previously presented) The system of claim 4, the portable mobile remote units able to establish and report their location to other communication units of the system.

6. (currently amended) A method for determining that a first portable mobile remote communication unit is tracking a second portable mobile remote communication unit while in motion comprising:

- i) obtaining the geographic location of the first and second portable communication units at intervals over a period of time;
- ii) computing from said geographic location (i) whether the first and second portable communication units are maintaining relative proximity during said period of time;
- iii) if the result of said computation (ii) indicates that relative proximity is maintained between the first and second portable communication units over said period of time, advising the system that the first portable mobile remote unit is tracking the second;

7. (currently amended) A method for providing the location information of portable mobile remote units in a geographic region to a wireless consumer requesting that information comprising:

- i) communicating with a base transmitter to establish the location of a portable mobile remote unit within the system;
- ii) specifying and forwarding to a wireless network, geographic boundary information describing a region within the coverage area of said transmitter network where the location information of portable mobile remote units are required by the wireless consumer;

iii) requesting that all portable remote units within said region (ii) establish their location at the network;

iv) identifying said request (iii) and verifying at a portable mobile remote unit that the portable remote unit exist within said region specified by said request(iii);

v) providing to the wireless consumer the location information of a portable mobile remote unit that exist in the geographic boundary defined by the wireless consumer after the verification of (iv) .

8. (previously presented) A communication system comprising:

i) a network of communication resources;

ii) a pool of portable mobile remote units that are able to communicate with the network to establish their geographic location within the system;

ii) means for a wireless consumer to specify and forward to the network, geographic boundary information describing a region within a coverage area of said network where a notification should be sent to one or more of said portable mobile remote units within said region ;

iii) means to forward said notification to portable mobile remote units within said region;

iv) means to identify said notification (iii) at the portable mobile remote unit and means to verify whether the portable remote unit exists within said region (iii);

9) (previously presented) The system of claim 8 further comprising means to respond to said notification if said portable mobile remote unit (iv) exist within the geographic boundary defined by said region.

10. (previously presented) The system of claim 8 said geographic boundary information including latitude, longitude and radii information.

11. (previously presented) The system of claim 8 said notification message including a request for the location information of said portable mobile remote units.

12. (previously presented) A method for notifying portable mobile remote units within a geographic region in a wireless communication system comprising:

i) communicating with one or more portable mobile remote unit in a network to establish their geographic location within the system;

ii) specifying and forwarding to the network, geographic boundary information describing a region within a coverage area of said network where a notification should be sent to one or more of said portable mobile remote units within said region ;

iii) forwarding said notification to portable mobile remote units within said region;

iv) identifying said notification (iii) at the portable mobile remote unit and verifying whether the portable remote unit exists within said region (iii);

13. (previously presented) The method of claim 12 further comprising responding to said notification if said portable mobile remote unit (iv) exist within the geographic boundary defined by said region.

14. (previously presented) The method of claim 12 said geographic boundary information including latitude, longitude and radii information.

15. (previously presented) The method of claim 12 said notification message including a request for the location information of said portable mobile remote units.

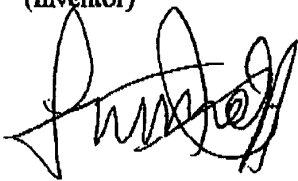
**REMARKS:**

The above amended claims present nothing new that has not already been considered by the office. Applicant solicits entry and allowance of the above claims from the Examiner.

Sincerely

Mundi Fomukong

(Inventor)



Sept 07, 2006

2



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

NOTICE OF ALLOWANCE AND FEE(S) DUE

7590 09/11/2006

MUNDI FOMUKONG  
10853 ROSE AVE. #49  
W. Los Angeles, CA 90034

EXAMINER

TRIEU, VAN THANH

ART UNIT

PAPER NUMBER

2612

DATE MAILED: 09/11/2006

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 10/878,951      | 06/28/2004  | Mundi Fomukong       |                     | 5372             |

TITLE OF INVENTION: METHOD AND APPARATUS FOR LOCATING MOBILE UNITS TRACKING ANOTHER OR WITHIN A PRESCRIBED GEOGRAPHIC BOUNDARY

| APPLN. TYPE    | SMALL ENTITY | ISSUE FEE DUE | PUBLICATION FEE DUE | PREV. PAID ISSUE FEE | TOTAL FEE(S) DUE | DATE DUE   |
|----------------|--------------|---------------|---------------------|----------------------|------------------|------------|
| nonprovisional | YES          | \$700         | \$300               | \$0                  | \$1000           | 12/11/2006 |

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. **PROSECUTION ON THE MERITS IS CLOSED.** THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. **THIS STATUTORY PERIOD CANNOT BE EXTENDED.** SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

- A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.
- B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

- A. Pay TOTAL FEE(S) DUE shown above, or
- B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FEE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

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**or Fax (571)-273-2885**

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CURRENT CORRESPONDENCE ADDRESS (Note: Use Block 1 for any change of address)

7590 09/11/2006

MUNDI FOMUKONG  
10853 ROSE AVE. #49  
W. Los Angeles, CA 90034

Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission.

## Certificate of Mailing or Transmission

I hereby certify that this Fee(s) Transmittal is being deposited with the United States Postal Service with sufficient postage for first class mail in an envelope addressed to the Mail Stop ISSUE FEE address above, or being facsimile transmitted to the USPTO (571) 273-2885, on the date indicated below.

|                    |
|--------------------|
| (Depositor's name) |
| (Signature)        |
| (Date)             |

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 10/878,951      | 06/28/2004  | Mundi Fomukong       |                     | 5372             |

TITLE OF INVENTION: METHOD AND APPARATUS FOR LOCATING MOBILE UNITS TRACKING ANOTHER OR WITHIN A PRESCRIBED GEOGRAPHIC BOUNDARY

| APPLN. TYPE    | SMALL ENTITY | ISSUE FEE DUE | PUBLICATION FEE DUE | PREV. PAID ISSUE FEE | TOTAL FEE(S) DUE | DATE DUE   |
|----------------|--------------|---------------|---------------------|----------------------|------------------|------------|
| nonprovisional | YES          | \$700         | \$300               | \$0                  | \$1000           | 12/11/2006 |

| EXAMINER         | ART UNIT | CLASS-SUBCLASS |
|------------------|----------|----------------|
| TRIEU, VAN THANH | 2612     | 340-988000     |

1. Change of correspondence address or indication of "Fee Address" (37 CFR 1.363).  
☐ Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached.  
☐ "Fee Address" indication (or "Fee Address" Indication form PTO/SB/47; Rev 03-02 or more recent) attached. Use of a Customer Number is required.

2. For printing on the patent front page, list  
(1) the names of up to 3 registered patent attorneys or agents OR, alternatively, 1 \_\_\_\_\_  
(2) the name of a single firm (having as a member a registered attorney or agent) and the names of up to 2 registered patent attorneys or agents. If no name is listed, no name will be printed. 2 \_\_\_\_\_  
3 \_\_\_\_\_

## 3. ASSIGNEE NAME AND RESIDENCE DATA TO BE PRINTED ON THE PATENT (print or type)

PLEASE NOTE: Unless an assignee is identified below, no assignee data will appear on the patent. If an assignee is identified below, the document has been filed for recordation as set forth in 37 CFR 3.11. Completion of this form is NOT a substitute for filing an assignment.

(A) NAME OF ASSIGNEE

(B) RESIDENCE: (CITY and STATE OR COUNTRY)

Please check the appropriate assignee category or categories (will not be printed on the patent): ☐ Individual ☐ Corporation or other private group entity ☐ Government

## 4a. The following fee(s) are submitted:

- ☐ Issue Fee  
☐ Publication Fee (No small entity discount permitted)  
☐ Advance Order - # of Copies \_\_\_\_\_

## 4b. Payment of Fee(s): (Please first reapply any previously paid issue fee shown above)

- ☐ A check is enclosed.  
☐ Payment by credit card. Form PTO-2038 is attached.  
☐ The Director is hereby authorized to charge the required fee(s), any deficiency, or credit any overpayment, to Deposit Account Number \_\_\_\_\_ (enclose an extra copy of this form).

## 5. Change in Entity Status (from status indicated above)

- ☐ a. Applicant claims SMALL ENTITY status. See 37 CFR 1.27. ☐ b. Applicant is no longer claiming SMALL ENTITY status. See 37 CFR 1.27(g)(2).

NOTE: The Issue Fee and Publication Fee (if required) will not be accepted from anyone other than the applicant; a registered attorney or agent; or the assignee or other party in interest as shown by the records of the United States Patent and Trademark Office.

Authorized Signature \_\_\_\_\_

Date \_\_\_\_\_

Typed or printed name \_\_\_\_\_

Registration No. \_\_\_\_\_

This collection of information is required by 37 CFR 1.311. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, Virginia 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450.

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|-----------------|-------------|----------------------|---------------------|------------------|
| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
| 10/878,951      | 06/28/2004  | Mundi Fomukong       |                     | 5372             |

|      |            |
|------|------------|
| 7590 | 09/11/2006 |
|------|------------|

MUNDI FOMUKONG  
10853 ROSE AVE. #49  
W. Los Angeles, CA 90034

|                  |
|------------------|
| EXAMINER         |
| TRIEU, VAN THANH |

|          |              |
|----------|--------------|
| ART UNIT | PAPER NUMBER |
| 2612     |              |

DATE MAILED: 09/11/2006

## Determination of Patent Term Adjustment under 35 U.S.C. 154 (b) (application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 0 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 0 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (<http://pair.uspto.gov>).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

ST

|                               |                        |                     |  |
|-------------------------------|------------------------|---------------------|--|
| <b>Notice of Allowability</b> | <b>Application No.</b> | <b>Applicant(s)</b> |  |
|                               | 10/878,951             | FOMUKONG, MUNDI     |  |
|                               | <b>Examiner</b>        | <b>Art Unit</b>     |  |
|                               | Van T. Trieu           | 2612                |  |

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to the RCE filed on 31 July 2006.
2. ☒ The allowed claim(s) is/are 1-15.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☐ All    b) ☐ Some\*    c) ☐ None    of the:
  1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.  
**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
  5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
    - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
      - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
    - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).**
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

- |                                                                                                                     |                                                                                        |
|---------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------|
| 1. <input type="checkbox"/> Notice of References Cited (PTO-892)                                                    | 5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)            |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                | 6. <input type="checkbox"/> Interview Summary (PTO-413),<br>Paper No./Mail Date _____. |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),<br>Paper No./Mail Date _____ | 7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment                    |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit<br>of Biological Material          | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance   |
|                                                                                                                     | 9. <input type="checkbox"/> Other _____.                                               |

## DETAILED ACTION

### EXAMINER'S AMENDMENT

1. The application has been amended as follows: in the RCE filed on 31 July 2006,

page 4, claim 6, line 11, replace the semicolon “;” by a period ---- . ----;

page 5, claim 8, line 12, replace the semicolon “;” by a period ---- . ----; and

page 6, claim 12, line 11, replace the semicolon “;” by a period ---- . ----.

### *Allowable Subject Matter*

2. The following is an examiner's statement of reasons for allowance: there are no prior arts teaching or suggesting of a communication system comprising:

(i) a portable mobile remote unit;

(ii) a network of communication units;

(iii) the portable mobile remote unit able to communicate with at least a transmitter within the network to establish its geographic location within the system;

(iv) means to request for the location information of portable mobile remote units that are in a geographic boundary that is prescribed within the coverage area of the transmitter;

(v) means to provide the location information of the portable mobile remote unit to the network upon determination that the portable mobile remote unit is within the prescribed the geographic boundary requested by the network;

Art Unit: 2612

(vi) means to determine and report to the system that, another portable mobile remote unit has maintained relative proximity to the portable mobile remote over a period of time while in motion.

In another embodiment, a communication system for providing the location of portable mobile remote unite in a geographic region to a wireless consumer requesting that information comprising:

i) a pool of portable mobile remote units that are able to communicate with a network transmitter to establish their location within the system;

ii) means for the wireless consumer to specify and forward to a network, geographic boundary information describing a region within the coverage area of the transmitter where the location of portable mobile remote units are required by the wireless consumer;

iii) means to request that all portable remote units within the region (ii) establish their location at the network;

iv) means to identify the request (iii) and verify at a portable mobile remote unit whether the portable remote unit exist within the region;

v) means to provide to the wireless consumer the location of a portable mobile remote unit that exist in the geographic boundary defined by the wireless consumer after the verification of (iv) .

A method for determining that a first portable mobile remote is tracking a second portable mobile remote unit while in motion comprising:

Art Unit: 2612

- i) obtaining the geographic location of the first and second portable communication units at intervals over a period of time;
- ii) computing from the geographic location (i) whether the first and second portable communication units are maintaining relative proximity during the period of time;
- iii) if the result of the computation (ii) indicates that relative proximity is maintained between the first and second portable communication units over the period of time, advising the system that the first portable mobile remote unit is tracking the second.

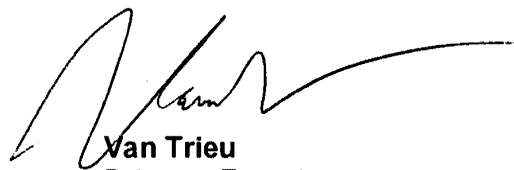
Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

3. Any inquiry concerning this communication or earlier communications from examiner should be directed to primary examiner **Van Trieu** whose telephone number is (571) 272-2972. The examiner can normally be reached on Mon-Fri from 7:00 AM to 3:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **Mr. Mike Horabik** can be reached on (571) 272-3068.

Application/Control Number: 10/878,951  
Art Unit: 2612

Page 5



**Van Trieu**  
**Primary Examiner**  
**Date: 8/30/06**



|                                                                                                          |  |                                      |  |                                        |  |
|----------------------------------------------------------------------------------------------------------|--|--------------------------------------|--|----------------------------------------|--|
| <b>Search Notes</b><br> |  | <b>Application No.</b><br>10/878,951 |  | <b>Applicant(s)</b><br>FOMUKONG, MUNDI |  |
|                                                                                                          |  | <b>Examiner</b><br>Van T Trieu       |  | <b>Art Unit</b><br>2612                |  |

| SEARCHED |          |            |          |
|----------|----------|------------|----------|
| Class    | Subclass | Date       | Examiner |
| 340      | 988      | 3/29/2005  | VT       |
| ↓        | 989      | ↓          | ↓        |
| ↓        | 990      | ↓          | ↓        |
| ↓        | 992      | ↓          | ↓        |
| ↓        | 573.1    | ↓          | ↓        |
| ↓        | 573.3    | ↓          | ↓        |
| ↓        | 691.6    | ↓          | ↓        |
| 455      | 439      | 3/29/2005  | VT       |
| ↓        | 456.2    | ↓          | ↓        |
| ↓        | 456.3    | ↓          | ↓        |
| ↓        | 457      | ↓          | ↓        |
| 342      | 357.09   | 3/29/2005  | VT       |
| ↓        | 377.1    | ↓          | ↓        |
| 705      | 32       | 12/12/2005 | VT       |

| INTERFERENCE SEARCHED |          |      |          |
|-----------------------|----------|------|----------|
| Class                 | Subclass | Date | Examiner |
|                       |          |      |          |
|                       |          |      |          |
|                       |          |      |          |
|                       |          |      |          |

| SEARCH NOTES<br>(INCLUDING SEARCH STRATEGY) |            |      |
|---------------------------------------------|------------|------|
|                                             | DATE       | EXMR |
| EAST                                        | 3/29/2005  | VT   |
| Update Search                               | 12/12/2005 | VT   |
| Update Search                               | 4/25/2006  | VT   |
| Update Search                               | 8/30/2006  | VT   |
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|                                             |            |      |
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| APPLICATION NUMBER | PATENT NUMBER | GROUP ART UNIT | FILE WRAPPER LOCATION |
|--------------------|---------------|----------------|-----------------------|
| 10/878,951         |               | 2612           | 21M1                  |

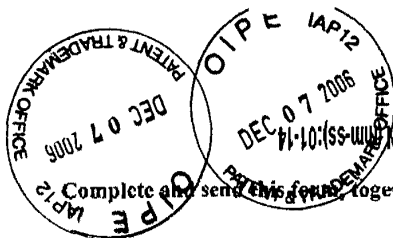
## Correspondence Address / Fee Address Change

The following fields have been set to Customer Number 62184 on 11/24/2006

- Correspondence Address
- Maintenance Fee Address

The address of record for Customer Number 62184 is:

MUNDI FOMUKONG  
10853 ROSE AVE.  
# 49  
WLA,CA 90034



PAGE 1/2 RCVD AT 12/7/2006 2:12:15 AM [Eastern Standard Time] SVR:USPTO-ETXRF-1/5 DNS:2732885 CSID: DURATION (mm-ss)-01-14

Complete and send this form, together with applicable fee(s), to: **Mail** Mail Stop ISSUE FEE  
Commissioner for Patents  
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Alexandria, Virginia 22313-1450  
or **Fax** (571)-273-2885

**INSTRUCTIONS:** This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 5 should be completed where appropriate. All further correspondence including the Patent, advance orders and notification of maintenance fees will be mailed to the current correspondence address as indicated unless corrected below or directed otherwise in Block 1, by (a) specifying a new correspondence address; and/or (b) indicating a separate "FEE ADDRESS" for maintenance fee notifications.

**CURRENT CORRESPONDENCE ADDRESS** (Note: Use Block 1 for any change of address)

Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission.

7590 09/11/2006  
**MUNDI FOMUKONG**  
10853 ROSE AVE. #49  
W. Los Angeles, CA 90034

**Certificate of Mailing or Transmission**  
I hereby certify that this Fee(s) Transmittal is being deposited with the United States Postal Service with sufficient postage for first class mail in an envelope addressed to the Mail Stop ISSUE FEE address above, or being facsimile transmitted to the USPTO (571) 273-2885, on the date indicated below.

|                    |
|--------------------|
| (Depositor's name) |
| (Signature)        |
| (Date)             |

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 10/878,951      | 06/28/2004  | Mundi Fomukong       |                     | 5372             |

**TITLE OF INVENTION:** METHOD AND APPARATUS FOR LOCATING MOBILE UNITS TRACKING ANOTHER OR WITHIN A PRESCRIBED GEOGRAPHIC BOUNDARY  
12/07/2006 CNGUYEN1 00000040 10878951

| APPLN. TYPE    | SMALL ENTITY | ISSUE FEE DUE | PUBLICATION FEE DUE | PREV. PAID ISSUE FEE | TOTAL FEE(S) DUE | DATE DUE   |
|----------------|--------------|---------------|---------------------|----------------------|------------------|------------|
| nonprovisional | YES          | \$700         | \$300               | \$0                  | \$1000           | 12/11/2006 |

| EXAMINER         | ART UNIT | CLASS-SUBCLASS |
|------------------|----------|----------------|
| TRIEU, VAN THANH | 2612     | 340-986000     |

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☐ Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached.  
☐ "Fee Address" indication (or "Fee Address" Indication form PTO/SB/47; Rev 03-02 or more recent) attached. Use of a Customer Number is required.
2. For printing on the patent front page, list  
(1) the names of up to 3 registered patent attorneys or agents OR, alternatively,  
(2) the name of a single firm (having as a member a registered attorney or agent) and the names of up to 2 registered patent attorneys or agents. If no name is listed, no name will be printed.

3. ASSIGNEE NAME AND RESIDENCE DATA TO BE PRINTED ON THE PATENT (print or type)  
PLEASE NOTE: Unless an assignee is identified below, no assignee data will appear on the patent. If an assignee is identified below, the document has been filed for examination as set forth in 37 CFR 3.111. Completion of this form is NOT a substitute for filing an assignment.  
(A) NAME OF ASSIGNEE (B) RESIDENCE: (CITY and STATE OR COUNTRY)

Please check the appropriate assignee category or categories (will not be printed on the patent): ☐ Individual ☐ Corporation or other private group entity ☐ Government

- 4a. The following fee(s) are submitted:  
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☐ A check is enclosed.  
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☐ a. Applicant claims SMALL ENTITY status. See 37 CFR 1.27. ☐ b. Applicant is no longer claiming SMALL ENTITY status. See 37 CFR 1.27(g)(2).

NOTE: The Issue Fee and Publication Fee (if required) will not be accepted from anyone other than the applicant; a registered attorney or agent; or the assignee or other party in interest as shown by the records of the United States Patent and Trademark Office.

Authorized Signature \_\_\_\_\_ Date 12-6-06  
Typed or printed name MUNDI FOMUKONG Registration No. \_\_\_\_\_

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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 10/878,951      | 06/28/2004  | Mundi Fomukong       |                     | 5372             |

62184 7590 02/12/2007  
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# 49  
WLA, CA 90034

EXAMINER

TRIEU, VAN THANH

|          |              |
|----------|--------------|
| ART UNIT | PAPER NUMBER |
|----------|--------------|

2612

|           |               |
|-----------|---------------|
| MAIL DATE | DELIVERY MODE |
|-----------|---------------|

02/12/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

**SUPPLEMENTAL**  
**Notice of Allowability**

Application No.

10/878,951

Examiner

Van T. Trieu

Applicant(s)

FOMUKONG, MUNDI

Art Unit

2612

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to the Rule 312 Amendment filed on 09 September 2006.

2. ☒ The allowed claim(s) is/are 1-15.

3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) ☐ All b) ☐ Some\* c) ☐ None of the:

1. ☐ Certified copies of the priority documents have been received.

2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.

3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.  
**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.

5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.

(a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached

1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.

(b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).

6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

1. ☐ Notice of References Cited (PTO-892)

2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08),  
Paper No./Mail Date \_\_\_\_\_

4. ☐ Examiner's Comment Regarding Requirement for Deposit  
of Biological Material

5. ☐ Notice of Informal Patent Application (PTO-152)

6. ☐ Interview Summary (PTO-413),  
Paper No./Mail Date \_\_\_\_\_

7. ☐ Examiner's Amendment/Comment

8. ☐ Examiner's Statement of Reasons for Allowance

9. ☐ Other \_\_\_\_\_

  
**VAN T. TRIEU**  
**PRIMARY EXAMINER**

**THE U.S PATENT AND TRADEMARK OFFICE**

Application Number: 10/878,951

Applicant: Mundi Formukong

Examiner: Van Trieu

Art Unit: 2636

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*OK. to enter*  
  
*2/8/07*

Sir:

Kindly amend the claims of the above application as indicated below.



# UNITED STATES PATENT AND TRADEMARK OFFICE

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United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

| APPLICATION NO. | ISSUE DATE | PATENT NO. | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|------------|------------|---------------------|------------------|
| 10/878,951      | 04/03/2007 | 7199726    |                     | 5372             |

62184 7590 03/14/2007  
MUNDI FOMUKONG  
10853 ROSE AVE.  
# 49  
WLA, CA 90034

## ISSUE NOTIFICATION

The projected patent number and issue date are specified above.

### **Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)** (application filed on or after May 29, 2000)

The Patent Term Adjustment is 0 day(s). Any patent to issue from the above-identified application will include an indication of the adjustment on the front page.

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (<http://pair.uspto.gov>).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at (571)-272-4200.

APPLICANT(s) (Please see PAIR WEB site <http://pair.uspto.gov> for additional applicants):

Mundi Fomukong, W. Los Angeles, CA;

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

**CHANGE OF  
CORRESPONDENCE ADDRESS  
Patent**Address to:  
Mail Stop Post Issue  
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Alexandria, VA 22313-1450

|                        |                |
|------------------------|----------------|
| Patent Number          | 7,199,726      |
| Issue Date             | 04/03/2007     |
| Application Number     | 10/878,951     |
| Filing Date            | 06/28/2004     |
| First Named Inventor   | Mundi Fomukong |
| Attorney Docket Number | E022.P23364    |

Please change the Correspondence Address for the above-identified patent to:



The address associated with Customer Number:

33356

**OR****Firm or  
Individual Name****Address****City****State****ZIP****Country****Telephone****Email**

This form cannot be used to change the data associated with a Customer Number. To change the data associated with an existing Customer Number use "Request for Customer Number Data Change" (PTO/SB/124).

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I am the:



Patentee.



If the Patentee was not the applicant for patent (37 CFR 1.42), then a Statement under 37 CFR 3.73(c) (Form PTO/AIA/96 or equivalent) is enclosed or was filed on \_\_\_\_\_. See 37 CFR 3.71.

Attorney or agent of record. Registration Number 60,972.Patent practitioner acting in a representative capacity whose correspondence address is the correspondence address of record. Notice has been given to the patentee or owner. Registration Number 60,972.

Signature /jonathan pearce/

Typed or  
Printed Name Jonathan Pearce

Date 04/07/2023

Telephone 8052301350

NOTE: This form must be signed in accordance with 37 CFR 1.33. See 37 CFR 1.4(d) for signature requirements and certifications. Submit multiple forms if more than one signature is required, see below\*.



\*Total of \_\_\_\_\_ forms are submitted.

A Federal agency may not conduct or sponsor, and a person is not required to respond to, nor shall a person be subject to a penalty for failure to comply with an information collection subject to the requirements of the Paperwork Reduction Act of 1995, unless the information collection has a currently valid OMB Control Number. The OMB Control Number for this information collection is 0651-00\*\*. Public burden for this form is estimated to average \*\* hour per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the information collection. Send comments regarding this burden estimate or any other aspect of this information collection, including suggestions for reducing this burden to the Chief Administrative Officer, United States Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450 or email InformationCollection@uspto.gov. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. If filing this completed form by mail, send to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

## Privacy Act Statement

The Privacy Act of 1974 (P.L. 93-579) requires that you be given certain information in connection with your submission of the attached form related to a patent application or patent. The United States Patent and Trademark Office (USPTO) collects the information in this record under authority of 35 U.S.C. 2. The USPTO's system of records is used to manage all applicant and owner information including name, citizenship, residence, post office address, and other information with respect to inventors and their legal representatives pertaining to the applicant's/owner's activities in connection with the invention for which a patent is sought or has been granted. The applicable Privacy Act System of Records Notice for the information collected in this form is COMMERCE/PAT-TM-7 Patent Application Files, available in the Federal Register at 78 FR 19243 (March 29, 2013). <https://www.govinfo.gov/content/pkg/FR-2013-03-29/pdf/2013-07341.pdf>

Routine uses of the information in this record may include disclosure to: 1) law enforcement, in the event that the system of records indicates a violation or potential violation of law; 2) a Federal, state, local, or international agency, in response to its request; 3) a contractor of the USPTO having need for the information in order to perform a contract; 4) the Department of Justice for determination of whether the Freedom of Information Act (FOIA) requires disclosure of the record; 5) a Member of Congress submitting a request involving an individual to whom the record pertains, when the individual has requested the Member's assistance with respect to the subject matter of the record; 6) a court, magistrate, or administrative tribunal, in the course of presenting evidence, including disclosures to opposing counsel in the course of settlement negotiations; 7) the Administrator, General Services Administration (GSA), or their designee, during an inspection of records conducted by GSA under authority of 44 U.S.C. 2904 and 2906, in accordance with the GSA regulations and any other relevant (i.e., GSA or Commerce) directive, where such disclosure shall not be used to make determinations about individuals; 8) another federal agency for purposes of National Security review (35 U.S.C. 181) and for review pursuant to the Atomic Energy Act (42 U.S.C. 218(c)); 9) the Office of Personnel Management (OPM) for personnel research purposes; and 9) the Office of Management and Budget (OMB) for legislative coordination and clearance.

If you do not furnish the information requested on this form, the USPTO may not be able to process and/or examine your submission, which may result in termination of proceedings, abandonment of the application, and/or expiration of the patent.

## Additional Uses

Additional USPTO uses of the information in this record may include disclosure to: 1) the International Bureau of the World Intellectual Property Organization, if the record is related to an international application filed under the Patent Cooperation Treaty; 2) the public i) after publication of the application pursuant to 35 U.S.C. 122(b), ii) after issuance of a patent pursuant to 35 U.S.C. 151, iii) if the record was filed in an application which became abandoned or in which the proceedings were terminated and which application is referenced by either a published application, an application open to public inspections, or an issued patent, or iv) without publication of the application or patent under the specific circumstances provided for by 37 CFR 1.14(a)(1)(v)-(vii); and/or 3) the National Archives and Records Administration, for inspection of records.

**POWER OF ATTORNEY TO PROSECUTE APPLICATIONS BEFORE THE USPTO**

I hereby revoke all previous powers of attorney given in the application identified in the attached statement under 37 CFR 3.73(c).

I hereby appoint:

☒

Practitioners associated with Customer Number:

33356

**OR**

☐

Practitioner(s) named below (if more than ten patent practitioners are to be named, then a customer number must be used):

| Name | Registration Number |
|------|---------------------|
|      |                     |
|      |                     |
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|      |                     |

| Name | Registration Number |
|------|---------------------|
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|      |                     |
|      |                     |

As attorney(s) or agent(s) to represent the undersigned before the United States Patent and Trademark Office (USPTO) in connection with any and all patent applications assigned only to the undersigned according to the USPTO assignment records or assignments documents attached to this form in accordance with 37 CFR 3.73(c).

Please change the correspondence address for the application identified in the attached statement under 37 CFR 3.73(c) to:

☒

The address associated with Customer Number:

33356

**OR**

|                          |                         |       |     |  |
|--------------------------|-------------------------|-------|-----|--|
| <input type="checkbox"/> | Firm or Individual Name |       |     |  |
|                          | Address                 |       |     |  |
|                          | City                    | State | Zip |  |
|                          | Country                 |       |     |  |
|                          | Telephone               | Email |     |  |

Assignee Name and Address: Enovsys LLC

269 S. Beverly Drive, Suite 951, Beverly Hills, CA 90212

**A copy of this form, together with a statement under 37 CFR 3.73(c) (Form PTO/AIA/96 or equivalent) is required to be Filed in each application in which this form is used. The statement under 37 CFR 3.73(c) may be completed by one of The practitioners appointed in this form, and must identify the application in which this Power of Attorney is to be filed.**

**SIGNATURE of Assignee of Record**

The individual whose signature and title is supplied below is authorized to act on behalf of the assignee

|           |                       |           |          |
|-----------|-----------------------|-----------|----------|
| Signature | <i>Mundi Fomukong</i> | Date      | 5/5/2016 |
| Name      | Mundi Fomukong        | Telephone | -----    |
| Title     | Principal             |           |          |

This collection of information is required by 37 CFR 1.31, 1.32 and 1.33. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to take 3 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

**STATEMENT UNDER 37 CFR 3.73(c)**

Applicant/Patent Owner: Mundi Fomukong  
Application No./Patent No.: 7,199,726 Filed/Issue Date: 04/03/2007  
Titled: METHOD AND APPARATUS FOR LOCATING MOBILE UNITS TRACKING ANOTHER OR WITHIN A PRESCRIBED GEOGRAPHIC BOUNDARY  
ENOVSYs LLC, a Limited Liability Company  
(Name of Assignee) (Type of Assignee, e.g., corporation, partnership, university, government agency, etc.)

states that, for the patent application/patent identified above, it is (choose **one** of options 1, 2, 3 or 4 below):

1. ☒ The assignee of the entire right, title, and interest.
2. ☐ An assignee of less than the entire right, title, and interest (check applicable box):
- ☐ The extent (by percentage) of its ownership interest is \_\_\_\_%. Additional Statement(s) by the owners holding the balance of the interest must be submitted to account for 100% of the ownership interest.
- ☐ There are unspecified percentages of ownership. The other parties, including inventors, who together own the entire right, title and interest are:

Additional Statement(s) by the owner(s) holding the balance of the interest must be submitted to account for the entire right, title, and interest.

3. ☐ The assignee of an undivided interest in the entirety (a complete assignment from one of the joint inventors was made). The other parties, including inventors, who together own the entire right, title, and interest are:

Additional Statement(s) by the owner(s) holding the balance of the interest must be submitted to account for the entire right, title, and interest.

4. ☐ The recipient, via a court proceeding or the like (e.g., bankruptcy, probate), of an undivided interest in the entirety (a complete transfer of ownership interest was made). The certified document(s) showing the transfer is attached.

The interest identified in option 1, 2 or 3 above (not option 4) is evidenced by either (choose **one** of options A or B below):

- A. ☒ An assignment from the inventor(s) of the patent application/patent identified above. The assignment was recorded in the United States Patent and Trademark Office at Reel 063207, Frame 0093, or for which a copy thereof is attached.

- B. ☐ A chain of title from the inventor(s), of the patent application/patent identified above, to the current assignee as follows:

1. From: \_\_\_\_\_ To: \_\_\_\_\_

The document was recorded in the United States Patent and Trademark Office at  
Reel \_\_\_\_\_, Frame \_\_\_\_\_, or for which a copy thereof is attached.

2. From: \_\_\_\_\_ To: \_\_\_\_\_

The document was recorded in the United States Patent and Trademark Office at  
Reel \_\_\_\_\_, Frame \_\_\_\_\_, or for which a copy thereof is attached.

[Page 1 of 2]

This collection of information is required by 37 CFR 3.73(b). The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

*If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.*

**STATEMENT UNDER 37 CFR 3.73(c)**

3. From: \_\_\_\_\_ To: \_\_\_\_\_

The document was recorded in the United States Patent and Trademark Office at  
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The document was recorded in the United States Patent and Trademark Office at  
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6. From: \_\_\_\_\_ To: \_\_\_\_\_

The document was recorded in the United States Patent and Trademark Office at  
Reel \_\_\_\_\_, Frame \_\_\_\_\_, or for which a copy thereof is attached.

☐ Additional documents in the chain of title are listed on a supplemental sheet(s).

☐ As required by 37 CFR 3.73(c)(1)(i), the documentary evidence of the chain of title from the original owner to the assignee was, or concurrently is being, submitted for recordation pursuant to 37 CFR 3.11.

[NOTE: A separate copy (i.e., a true copy of the original assignment document(s)) must be submitted to Assignment Division in accordance with 37 CFR Part 3, to record the assignment in the records of the USPTO. See MPEP 302.08]

The undersigned (whose title is supplied below) is authorized to act on behalf of the assignee.

/jonathan pearce/

Signature

**Jonathan Pearce**

Printed or Typed Name

**04/07/2023**

Date

**60,972**

Title or Registration Number

## Privacy Act Statement

The **Privacy Act of 1974 (P.L. 93-579)** requires that you be given certain information in connection with your submission of the attached form related to a patent application or patent. Accordingly, pursuant to the requirements of the Act, please be advised that: (1) the general authority for the collection of this information is 35 U.S.C. 2(b)(2); (2) furnishing of the information solicited is voluntary; and (3) the principal purpose for which the information is used by the U.S. Patent and Trademark Office is to process and/or examine your submission related to a patent application or patent. If you do not furnish the requested information, the U.S. Patent and Trademark Office may not be able to process and/or examine your submission, which may result in termination of proceedings or abandonment of the application or expiration of the patent.

The information provided by you in this form will be subject to the following routine uses:

1. The information on this form will be treated confidentially to the extent allowed under the Freedom of Information Act (5 U.S.C. 552) and the Privacy Act (5 U.S.C. 552a). Records from this system of records may be disclosed to the Department of Justice to determine whether disclosure of these records is required by the Freedom of Information Act.
2. A record from this system of records may be disclosed, as a routine use, in the course of presenting evidence to a court, magistrate, or administrative tribunal, including disclosures to opposing counsel in the course of settlement negotiations.
3. A record in this system of records may be disclosed, as a routine use, to a Member of Congress submitting a request involving an individual, to whom the record pertains, when the individual has requested assistance from the Member with respect to the subject matter of the record.
4. A record in this system of records may be disclosed, as a routine use, to a contractor of the Agency having need for the information in order to perform a contract. Recipients of information shall be required to comply with the requirements of the Privacy Act of 1974, as amended, pursuant to 5 U.S.C. 552a(m).
5. A record related to an International Application filed under the Patent Cooperation Treaty in this system of records may be disclosed, as a routine use, to the International Bureau of the World Intellectual Property Organization, pursuant to the Patent Cooperation Treaty.
6. A record in this system of records may be disclosed, as a routine use, to another federal agency for purposes of National Security review (35 U.S.C. 181) and for review pursuant to the Atomic Energy Act (42 U.S.C. 218(c)).
7. A record from this system of records may be disclosed, as a routine use, to the Administrator, General Services, or his/her designee, during an inspection of records conducted by GSA as part of that agency's responsibility to recommend improvements in records management practices and programs, under authority of 44 U.S.C. 2904 and 2906. Such disclosure shall be made in accordance with the GSA regulations governing inspection of records for this purpose, and any other relevant (*i.e.*, GSA or Commerce) directive. Such disclosure shall not be used to make determinations about individuals.
8. A record from this system of records may be disclosed, as a routine use, to the public after either publication of the application pursuant to 35 U.S.C. 122(b) or issuance of a patent pursuant to 35 U.S.C. 151. Further, a record may be disclosed, subject to the limitations of 37 CFR 1.14, as a routine use, to the public if the record was filed in an application which became abandoned or in which the proceedings were terminated and which application is referenced by either a published application, an application open to public inspection or an issued patent.
9. A record from this system of records may be disclosed, as a routine use, to a Federal, State, or local law enforcement agency, if the USPTO becomes aware of a violation or potential violation of law or regulation.



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PATENT AND TRADEMARK OFFICE

P.O. Box 1450  
Alexandria, VA 22313 - 1450  
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## ELECTRONIC ACKNOWLEDGEMENT RECEIPT

APPLICATION #  
**10/878,951**

RECEIPT DATE / TIME  
**04/07/2023 04:44:03 PM ET**

ATTORNEY DOCKET #  
-

### Title of Invention

METHOD AND APPARATUS FOR LOCATING MOBILE UNITS TRACKING ANOTHER OR WITHIN A  
PRESCRIBED GEOGRAPHIC BOUNDARY

### Application Information

APPLICATION TYPE Utility - Nonprovisional Application  
under 35 USC 111(a)

PATENT # 7199726

CONFIRMATION # 5372

FILED BY Nicole Abeloe

PATENT CENTER # 61887694

FILING DATE 06/28/2004

CUSTOMER # 62184

FIRST NAMED  
INVENTOR Mundi Fomukong

CORRESPONDENCE  
ADDRESS -

AUTHORIZED BY Jonathan Pearce

### Documents

**TOTAL DOCUMENTS: 3**

| DOCUMENT           | PAGES | DESCRIPTION                                      | SIZE (KB) |
|--------------------|-------|--------------------------------------------------|-----------|
| P23364-aia0096.pdf | 3     | Assignee showing of ownership<br>per 37 CFR 3.73 | 122 KB    |
| P23364-aia0123.pdf | 2     | Change of Address                                | 316 KB    |
| E022-GPOA.pdf      | 1     | Power of Attorney                                | 70 KB     |

### Digest

| DOCUMENT | MESSAGE DIGEST(SHA-512) |
|----------|-------------------------|
|----------|-------------------------|

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|                    |                                                                                                                                          |
|--------------------|------------------------------------------------------------------------------------------------------------------------------------------|
| P23364-aia0096.pdf | E53A1F3165F060F5FCCCCF987CB7B0AEA27C19645830A3D12<br>C19903E11D368567E24A4EC4F7E5465433EC17BCF0405CA37<br>1AA7EA675BF628577F8C1787D10909 |
| P23364-aia0123.pdf | 7A50DDA0F02A91517C914C097B36A25CE378840D8CC903637<br>476F07A4132FD87BF4EC9748B59DE11D4D4E0AE56A3A3CCC<br>FE7F53A4BF193DF0292C2A125BDC6AD |
| E022-GPOA.pdf      | B4CF7B3B9AA3DF4EEF45AB00D9377F309FE5878D1A19B9FB9<br>C7A37F81ACC2232695D65C77F61A7E2E5CA068F0DB9C28A88<br>CB97C2EBA485D75B199CFD3F21D8AB |

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This Acknowledgement Receipt evidences receipt on the noted date by the USPTO of the indicated documents, characterized by the applicant, and including page counts, where applicable. It serves as evidence of receipt similar to a Post Card, as described in MPEP 503.

**New Applications Under 35 U.S.C. 111**

If a new application is being filed and the application includes the necessary components for filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application.

**National Stage of an International Application under 35 U.S.C. 371**

If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course.

**New International Application Filed with the USPTO as a Receiving Office**

If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.



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| APPLICATION NUMBER | FILING OR 371(C) DATE | FIRST NAMED APPLICANT | ATTY. DOCKET NO./TITLE |
|--------------------|-----------------------|-----------------------|------------------------|
| 10/878,951         | 06/28/2004            | Mundi Fomukong        |                        |

62184  
MUNDI FOMUKONG  
Enovsys LLC  
269 South Beverly Drive, #951  
Beverly Hills, CA 90212

**CONFIRMATION NO. 5372**  
**POWER OF ATTORNEY NOTICE**



Date Mailed: 04/10/2023

**NOTICE REGARDING CHANGE OF POWER OF ATTORNEY**

This is in response to the Power of Attorney filed 04/07/2023.

- The Power of Attorney to you in this application has been revoked by the assignee who has intervened as provided by 37 CFR 3.71. Future correspondence will be mailed to the new address of record(37 CFR 1.33).

Questions about the contents of this notice and the requirements it sets forth should be directed to the Office of Data Management, Application Assistance Unit, at (571) 272-4000 or (571) 272-4200 or 1-888-786-0101.

/tmwilliams/



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| APPLICATION NUMBER | FILING OR 371(C) DATE | FIRST NAMED APPLICANT | ATTY. DOCKET NO./TITLE |
|--------------------|-----------------------|-----------------------|------------------------|
| 10/878,951         | 06/28/2004            | Mundi Fomukong        |                        |

33356  
SoCAL IP LAW GROUP LLP  
310 N. WESTLAKE BLVD. STE 120  
WESTLAKE VILLAGE, CA 91362

**CONFIRMATION NO. 5372**  
**POA ACCEPTANCE LETTER**



Date Mailed: 04/10/2023

**NOTICE OF ACCEPTANCE OF POWER OF ATTORNEY**

This is in response to the Power of Attorney filed 04/07/2023.

The Power of Attorney in this application is accepted. Correspondence in this application will be mailed to the above address as provided by 37 CFR 1.33.

Questions about the contents of this notice and the requirements it sets forth should be directed to the Office of Data Management, Application Assistance Unit, at (571) 272-4000 or (571) 272-4200 or 1-888-786-0101.

/tmwilliams/