AO 120 (Rev. 08/10)

TO:	REPORT ON THE FILING OR DETERMINATION OF AN ACTION REGARDING A PATENT OR TRADEMARK
Mail Stop 8 **Director of the U.S. Patent and Trademark Office** **P.O. Box 1450** **Alexandria, VA 22313-1450**	

In Compliance with 35 U.S.C. § 290 and/or 15 U.S.C. § 1116 you are hereby advised that a court action has been filed in the U.S. District Court for the Eastern District of Texas, Marshall Division on the following

☐ Trademarks or ☑ Patents. (☐ the patent action involves 35 U.S.C. § 292.):

DOCKET NO.	DATE FILED	U.S. DISTRICT COURT
2:24-cv-00133	2/23/2024	for the Eastern District of Texas, Marshall Division

PLAINTIFF	DEFENDANT
Avant Location Technologies LLC	Samsung Electronics Co., Ltd. and Samsung Electronics America, Inc.

	PATENT OR TRADEMARK NO.	DATE OF PATENT OR TRADEMARK	HOLDER OF PATENT OR TRADEMARK
1	9,485,621	11/1/2016	Avant Location Technologies LLC
2	9,622,032	4/11/2017	Avant Location Technologies LLC
3			
4			
5			

In the above—entitled case, the following patent(s)/ trademark(s) have been included:

DATE INCLUDED	INCLUDED BY ☐ Amendment ☐ Answer ☐ Cross Bill ☐ Other Pleading	
PATENT OR TRADEMARK NO.	DATE OF PATENT OR TRADEMARK	HOLDER OF PATENT OR TRADEMARK
1		
2		
3		
4		
5		

In the above—entitled case, the following decision has been rendered or judgement issued:

DECISION/JUDGEMENT

CLERK	(BY) DEPUTY CLERK	DATE

Copy 1—Upon initiation of action, mail this copy to Director **Copy 3—Upon termination of action, mail this copy to Director**
Copy 2—Upon filing document adding patent(s), mail this copy to Director **Copy 4—Case file copy**

AO 120 (Rev. 08/10)

TO:	REPORT ON THE FILING OR DETERMINATION OF AN ACTION REGARDING A PATENT OR TRADEMARK
Mail Stop 8 Director of the U.S. Patent and Trademark Office P.O. Box 1450 Alexandria, VA 22313-1450	

In Compliance with 35 U.S.C. § 290 and/or 15 U.S.C. § 1116 you are hereby advised that a court action has been filed in the U.S. District Court for the Eastern District of Texas, Marshall Division on the following

☐ Trademarks or ☑ Patents. (☐ the patent action involves 35 U.S.C. § 292.):

DOCKET NO.	DATE FILED	U.S. DISTRICT COURT
2:23-cv-00354	7/31/2023	for the Eastern District of Texas, Marshall Division

PLAINTIFF	DEFENDANT
AVANT LOCATION TECHNOLOGIES LLC	ECOBEE TECHNOLOGIES ULC d/b/a ECOBEE

	PATENT OR TRADEMARK NO.	DATE OF PATENT OR TRADEMARK	HOLDER OF PATENT OR TRADEMARK
1	9,485,621	11/1/2016	AVANT LOCATION TECHNOLOGIES LLC
2	9,622,032	4/11/2017	AVANT LOCATION TECHNOLOGIES LLC
3			
4			
5			

In the above—entitled case, the following patent(s)/ trademark(s) have been included:

DATE INCLUDED	INCLUDED BY ☐ Amendment ☐ Answer ☐ Cross Bill ☐ Other Pleading	
PATENT OR TRADEMARK NO.	DATE OF PATENT OR TRADEMARK	HOLDER OF PATENT OR TRADEMARK
1		
2		
3		
4		
5		

In the above—entitled case, the following decision has been rendered or judgement issued:

DECISION/JUDGEMENT

CLERK	(BY) DEPUTY CLERK	DATE

Copy 1—Upon initiation of action, mail this copy to Director Copy 3—Upon termination of action, mail this copy to Director
Copy 2—Upon filing document adding patent(s), mail this copy to Director Copy 4—Case file copy

AO 120 (Rev. 08/10)

TO:	REPORT ON THE FILING OR DETERMINATION OF AN ACTION REGARDING A PATENT OR TRADEMARK
Mail Stop 8 Director of the U.S. Patent and Trademark Office P.O. Box 1450 Alexandria, VA 22313-1450	

In Compliance with 35 U.S.C. § 290 and/or 15 U.S.C. § 1116 you are hereby advised that a court action has been filed in the U.S. District Court New Hampshire on the following

☐ Trademarks or ☑ Patents. (☐ the patent action involves 35 U.S.C. § 292.):

DOCKET NO.	DATE FILED	U.S. DISTRICT COURT
21-cv-41-JL	1/17/2021	New Hampshire

PLAINTIFF	DEFENDANT
Ocado Innovation LTD, et al.	AutoStore AS, et al.

	PATENT OR TRADEMARK NO.	DATE OF PATENT OR TRADEMARK	HOLDER OF PATENT OR TRADEMARK
1	Appl. 16/902,459	12/28/2020	Ocado Innovation Limited
2	Appl. 16/575,906	11/27/2020	Ocado Innovation Limited
3	9,796,080	10/24/2017	Ocado Innovation Limited
4			
5			

In the above—entitled case, the following patent(s)/ trademark(s) have been included:

DATE INCLUDED	INCLUDED BY ☐ Amendment ☐ Answer ☐ Cross Bill ☐ Other Pleading		
	PATENT OR TRADEMARK NO.	DATE OF PATENT OR TRADEMARK	HOLDER OF PATENT OR TRADEMARK
1			
2			
3			
4			
5			

In the above—entitled case, the following decision has been rendered or judgement issued:

DECISION/JUDGEMENT
Case dismissed on stipulation of dismissal of the parties dated 7/26/2023.

CLERK	(BY) DEPUTY CLERK	DATE
Daniel J. Lynch	/s/Jadean Barthelmes	7/28/2023

Copy 1—Upon initiation of action, mail this copy to Director Copy 3—Upon termination of action, mail this copy to Director
Copy 2—Upon filing document adding patent(s), mail this copy to Director Copy 4—Case file copy

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

APPLICATION NO.	ISSUE DATE	PATENT NO.	ATTORNEY DOCKET NO.	CONFIRMATION NO.
14/738,350	04/11/2017	9622032	0572.0001C3	9146

27896 7590 03/22/2017

EDELL, SHAPIRO & FINNAN, LLC
9801 Washingtonian Blvd.
Suite 750
Gaithersburg, MD 20878

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 Application Assistance Unit (AAU) of the Office of Data Management (ODM) at (571)-272-4200.

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

Carlos A. Pérez LaFuente, Madrid, SPAIN;
AFIRMA CONSULTING & TECHNOLOGIES, S.L., Madrid, SPAIN;

The United States represents the largest, most dynamic marketplace in the world and is an unparalleled location for business investment, innovation, and commercialization of new technologies. The USA offers tremendous resources and advantages for those who invest and manufacture goods here. Through SelectUSA, our nation works to encourage and facilitate business investment. To learn more about why the USA is the best country in the world to develop technology, manufacture products, and grow your business, visit SelectUSA.gov.

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)

27896 7590 02/14/2017
EDELL, SHAPIRO & FINNAN, LLC
9801 Washingtonian Blvd.
Suite 750
Gaithersburg, MD 20878

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.
14/738,350	06/12/2015	Carlos A. Pérez LaFuente	0572.0001C3	9146

TITLE OF INVENTION: METHOD AND SYSTEM FOR MONITORING A MOBILE STATION PRESENCE IN A SPECIAL AREA

APPLN. TYPE	ENTITY STATUS	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	SMALL	$480	$0	$0	$480	05/15/2017

EXAMINER	ART UNIT	CLASS-SUBCLASS
FIGUEROA, MARISOL	2643	455-456300

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,
(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.

1 Edell, Shapiro & Finnan LLC
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: AFIRMA Consulting & Technologies, S.L.

(B) RESIDENCE: (CITY and STATE OR COUNTRY): Madrid, Spain

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 credits any overpayment, to Deposit Account Number 05-0460 (enclose an extra copy of this form).

5. **Change in Entity Status** (from status indicated above)
- ☐ Applicant certifying micro entity status. See 37 CFR 1.29
  NOTE: Absent a valid certification of Micro Entity Status (see forms PTO/SB/15A and 15B), issue fee payment in the micro entity amount will not be accepted at the risk of application abandonment.
- ☐ Applicant asserting small entity status. See 37 CFR 1.27
  NOTE: If the application was previously under micro entity status, checking this box will be taken to be a notification of loss of entitlement to micro entity status.
- ☐ Applicant changing to regular undiscounted fee status.
  NOTE: Checking this box will be taken to be a notification of loss of entitlement to small or micro entity status, as applicable.

NOTE: This form must be signed in accordance with 37 CFR 1.31 and 1.33. See 37 CFR 1.4 for signature requirements and certifications.

Authorized Signature /Tim L. Kitchen/ Date March 2, 2017

Typed or printed name Tim L. Kitchen Registration No. 41900

PTOL-85 Part B (10-13) Approved for use through 10/31/2013. OMB 0651-0033 U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

OMB Clearance and PRA Burden Statement for PTOL-85 Part B

The Paperwork Reduction Act (PRA) of 1995 requires Federal agencies to obtain Office of Management and Budget approval before requesting most types of information from the public. When OMB approves an agency request to collect information from the public, OMB (i) provides a valid OMB Control Number and expiration date for the agency to display on the instrument that will be used to collect the information and (ii) requires the agency to inform the public about the OMB Control Number's legal significance in accordance with 5 CFR 1320.5(b).

The information collected by PTOL-85 Part B 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. 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.

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.

Electronic Patent Application Fee Transmittal

Application Number:	14738350
Filing Date:	12-Jun-2015
Title of Invention:	METHOD AND SYSTEM FOR MONITORING A MOBILE STATION PRESENCE IN A SPECIAL AREA
First Named Inventor/Applicant Name:	Carlos A. Pérez LaFuente
Filer:	Tim L. Kitchen
Attorney Docket Number:	0572.0001C3

Filed as Small Entity

Filing Fees for Utility under 35 USC 111(a)

Description	Fee Code	Quantity	Amount	Sub-Total in USD($)
Basic Filing:				
Pages:				
Claims:				
Miscellaneous-Filing:				
Petition:				
Patent-Appeals-and-Interference:				
Post-Allowance-and-Post-Issuance:				
UTILITY APPL ISSUE FEE	2501	1	480	480

Description	Fee Code	Quantity	Amount	Sub-Total in USD($)
Extension-of-Time:				
Miscellaneous:				
		Total in USD ($)		**480**

Electronic Acknowledgement Receipt	
EFS ID:	28517038
Application Number:	14738350
International Application Number:	
Confirmation Number:	9146
Title of Invention:	METHOD AND SYSTEM FOR MONITORING A MOBILE STATION PRESENCE IN A SPECIAL AREA
First Named Inventor/Applicant Name:	Carlos A. Pérez LaFuente
Customer Number:	27896
Filer:	Tim L. Kitchen/Janet Dorgan
Filer Authorized By:	Tim L. Kitchen
Attorney Docket Number:	0572.0001C3
Receipt Date:	02-MAR-2017
Filing Date:	12-JUN-2015
Time Stamp:	17:47:53
Application Type:	Utility under 35 USC 111(a)

Payment information:

Submitted with Payment	yes
Payment Type	CARD
Payment was successfully received in RAM	$480
RAM confirmation Number	030317INTEFSW17483000
Deposit Account	
Authorized User	
The Director of the USPTO is hereby authorized to charge indicated fees and credit any overpayment as follows:	

File Listing:

Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1	Issue Fee Payment (PTO-85B)	2017-03-02_IssueFeeTransmittal_Part-B-05720001C3.pdf	226454 a356c6cf1887cdada1c3e0c96c1b658358a693cf	no	2
Warnings:					
Information:					
2	Fee Worksheet (SB06)	fee-info.pdf	30429 1ed6c4a1cad15b3c1aae4debbc6956874887bd17	no	2
Warnings:					
Information:					
		Total Files Size (in bytes):	256883		

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 a 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.

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

27896 7590 02/14/2017

EDELL, SHAPIRO & FINNAN, LLC
9801 Washingtonian Blvd.
Suite 750
Gaithersburg, MD 20878

EXAMINER
FIGUEROA, MARISOL

ART UNIT	PAPER NUMBER
2643	

DATE MAILED: 02/14/2017

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
14/738,350	06/12/2015	Carlos A. Pérez LaFuente	0572.0001C3	9146

TITLE OF INVENTION: METHOD AND SYSTEM FOR MONITORING A MOBILE STATION PRESENCE IN A SPECIAL AREA

APPLN. TYPE	ENTITY STATUS	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	SMALL	$480	$0	$0	$480	05/15/2017

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 ENTITY STATUS shown above. If the ENTITY STATUS is shown as SMALL or MICRO, verify whether entitlement to that entity status still applies.

If the ENTITY STATUS is the same as shown above, pay the TOTAL FEE(S) DUE shown above.

If the ENTITY STATUS is changed from that shown above, on PART B - FEE(S) TRANSMITTAL, complete section number 5 titled "Change in Entity Status (from status indicated above)".

For purposes of this notice, small entity fees are 1/2 the amount of undiscounted fees, and micro entity fees are 1/2 the amount of small entity fees.

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.

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)

27896 7590 02/14/2017
EDELL, SHAPIRO & FINNAN, LLC
9801 Washingtonian Blvd.
Suite 750
Gaithersburg, MD 20878

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.
14/738,350	06/12/2015	Carlos A. Pérez LaFuente	0572.0001C3	9146

TITLE OF INVENTION: METHOD AND SYSTEM FOR MONITORING A MOBILE STATION PRESENCE IN A SPECIAL AREA

APPLN. TYPE	ENTITY STATUS	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	SMALL	$480	$0	$0	$480	05/15/2017

EXAMINER	ART UNIT	CLASS-SUBCLASS
FIGUEROA, MARISOL	2643	455-456300

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,
(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.
1 _____
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 credits any overpayment, to Deposit Account Number _____ (enclose an extra copy of this form).

5. **Change in Entity Status** (from status indicated above)
- ❑ Applicant certifying micro entity status. See 37 CFR 1.29
  NOTE: Absent a valid certification of Micro Entity Status (see forms PTO/SB/15A and 15B), issue fee payment in the micro entity amount will not be accepted at the risk of application abandonment.
- ❑ Applicant asserting small entity status. See 37 CFR 1.27
  NOTE: If the application was previously under micro entity status, checking this box will be taken to be a notification of loss of entitlement to micro entity status.
- ❑ Applicant changing to regular undiscounted fee status.
  NOTE: Checking this box will be taken to be a notification of loss of entitlement to small or micro entity status, as applicable.

NOTE: This form must be signed in accordance with 37 CFR 1.31 and 1.33. See 37 CFR 1.4 for signature requirements and certifications.

Authorized Signature _____ Date _____

Typed or printed name _____ Registration No. _____

PTOL-85 Part B (10-13) Approved for use through 10/31/2013. OMB 0651-0033 U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

UNITED STATES PATENT AND TRADEMARK OFFICE

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

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
14/738,350	06/12/2015	Carlos A. Pérez LaFuente	0572.0001C3	9146

27896 7590 02/14/2017

EDELL, SHAPIRO & FINNAN, LLC
9801 Washingtonian Blvd.
Suite 750
Gaithersburg, MD 20878

EXAMINER	
FIGUEROA, MARISOL	

ART UNIT	PAPER NUMBER
2643	

DATE MAILED: 02/14/2017

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

The Office has discontinued providing a Patent Term Adjustment (PTA) calculation with the Notice of Allowance.

Section 1(h)(2) of the AIA Technical Corrections Act amended 35 U.S.C. 154(b)(3)(B)(i) to eliminate the requirement that the Office provide a patent term adjustment determination with the notice of allowance. See Revisions to Patent Term Adjustment, 78 Fed. Reg. 19416, 19417 (Apr. 1, 2013). Therefore, the Office is no longer providing an initial patent term adjustment determination with the notice of allowance. The Office will continue to provide a patent term adjustment determination with the Issue Notification Letter that is mailed to applicant approximately three weeks prior to the issue date of the patent, and will include the patent term adjustment on the patent. Any request for reconsideration of the patent term adjustment determination (or reinstatement of patent term adjustment) should follow the process outlined in 37 CFR 1.705.

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.

OMB Clearance and PRA Burden Statement for PTOL-85 Part B

The Paperwork Reduction Act (PRA) of 1995 requires Federal agencies to obtain Office of Management and Budget approval before requesting most types of information from the public. When OMB approves an agency request to collect information from the public, OMB (i) provides a valid OMB Control Number and expiration date for the agency to display on the instrument that will be used to collect the information and (ii) requires the agency to inform the public about the OMB Control Number's legal significance in accordance with 5 CFR 1320.5(b).

The information collected by PTOL-85 Part B 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. 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.

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.

Notice of Allowability	Application No. 14/738,350	Applicant(s) PÉREZ LAFUENTE, CARLOS A.	
	Examiner MARISOL FIGUEROA	Art Unit 2643	AIA (First Inventor to File) Status No

-- 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 *11/01/2016*.
   ☐ A declaration(s)/affidavit(s) under **37 CFR 1.130(b)** was/were filed on_____.
2. ☐ An election was made by the applicant in response to a restriction requirement set forth during the interview on _____; the restriction requirement and election have been incorporated into this action.
3. ☒ The allowed claim(s) is/are *1-4,7 and 8*. As a result of the allowed claim(s), you may be eligible to benefit from the **Patent Prosecution Highway** program at a participating intellectual property office for the corresponding application. For more information, please see http://www.uspto.gov/patents/init_events/pph/index.jsp or send an inquiry to PPHfeedback@uspto.gov.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

   Certified copies:

   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.

5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
   ☐ 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. ☐ Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date _____
3. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
4. ☐ Interview Summary (PTO-413), Paper No./Mail Date _____ .
5. ☐ Examiner's Amendment/Comment
6. ☒ Examiner's Statement of Reasons for Allowance
7. ☐ Other _____.

/MARISOL FIGUEROA/
Primary Examiner, Art Unit 2643

ALLOWANCE

1. The following is an examiner's statement of reasons for allowance:

Claims 1-3, 7, and 8 are allowed because applicant's arguments filed on 11/01/2016 are persuasive, the prior art of record fails to particularly disclose:

"the provider of presence related services being different than the mobile telephone network".

Further, the prior art of record either alone or in combination, fails to anticipate or render obvious the limitations of:

"sending from the one or more servers to the mobile station second checking data different from the first checking data to modify the special area".

2. 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."

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MARISOL FIGUEROA whose telephone number is (571)272-7840. The examiner can normally be reached on M-F 8:30 a.m.-5:00 p.m..

Examiner interviews are available via telephone, in-person, and video conferencing using a USPTO supplied web-based collaboration tool. To schedule an interview, applicant is encouraged to use the USPTO Automated Interview Request (AIR) at http://www.uspto.gov/interviewpractice.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jinsong Hu can be reached on (571)272-3965. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/MARISOL FIGUEROA/
Primary Examiner, Art Unit 2643

EAST Search History

EAST Search History (Prior Art)

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L5	179	(modify$4 chang$4 updat$4) near4 (home special) near4 (area zone identifier id ssid) with ((mobile wireless portable) near4 (device terminal phone telephone station))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/02/08 12:43
L6	52	5 and presence	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/02/08 12:45
L8	127	5 not 6	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/02/08 12:55
L15	35636	(h04m3/42365 h04w4/001 h04w4/0021 h04w4/02).cpc.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/02/08 14:40
L16	2324	15 and presence near4 (provider service server)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/02/08 14:41
L17	401	16 and (price cost rate tariff) same (zone area)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/02/08 14:41
L18	9	17 and 455/422.1.ccls.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/02/08 14:41
L19	36	17 and modify$4 near4 (zone area)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/02/08 14:45
S4	145	(notify$4 message notification) with (enter$4 detect$4) with special near3 (cell area location zone network)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/02/07 13:45
S5	22	S4 and "455".clas.	US-PGPUB;	OR	ON	2017/02/07

			USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB			13:46
S6	123	S4 not S5	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/02/07 13:48
S7	16	(notify$4 message notification) with (enter$4 detect$4) with (cheaper low near3 cost) near3 (cell area location zone network)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/02/07 13:56
S8	346	(notify$4 message notification) with (cheaper low$2 near3 (tariff cost)) near3 (cell area location zone network)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/02/07 14:00
S9	330	S8 not S7	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/02/07 14:00
S10	1	S9 and 455/422.1.ccls.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/02/07 14:00
S11	89	S9 and "455".clas.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/02/07 14:00
S16	0	(presence near3 server charging near3 server) same (stor$4 switch$4) near4 (parameter flag rate price) same (location position) near4 (mobile wireless portable) near3 (device terminal station)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/02/07 14:16
S18	141	(presence near3 server charging near3 server) same (determin$4 notify$4 aware updat$4) near4 (location position) near4 (mobile wireless portable) near3 (device terminal station)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/02/07 14:22
S19	80	S18 and "455".clas.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/02/07 14:24
S20	19	special near3 area with updat$4 near3 signal.clm.	US-PGPUB; USPAT; EPO;	OR	ON	2017/02/07 14:39

			JPO; DERWENT; IBM_TDB			
S21	506	presence near3 server same (rate tariff price charge)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/02/07 14:51

EAST Search History (Interference)

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L14	0	((presence near3 (server provider)) and mobile near2 (station device) and stor$4 near4 check$4 near3 data and distinctive near3 signal and special near3 (area zone)and receiv$5 near4 updat$4 near4 signal and mobile near3 network and (operating near3 parameter parameter) near5 value and modify$4 near4 (special near3 (area zone))).clm.	US-PGPUB; USPAT	OR	ON	2017/02/08 14:35

2/8/2017 2:51:07 PM

Issue Classification	Application/Control No.	Applicant(s)/Patent Under Reexamination
	14738350	PÉREZ LAFUENTE, CARLOS A.
	Examiner	**Art Unit**
	MARISOL FIGUEROA	2643

CPC							
Symbol						**Type**	**Version**
H04W		4	/	021		F	2013-01-01
H04W		24	/	00		I	2013-01-01
H04W		28	/	18		A	2013-01-01
H04W		48	/	08		A	2013-01-01
H04W		48	/	16		A	2013-01-01
H04W		64	/	00		I	2013-01-01
H04W		4	/	02		I	2013-01-01
H04M		3	/	42374		I	2013-01-01
H04W		64	/	006		I	2013-01-01
H04M		3	/	42365		I	2013-01-01
H04W		4	/	001		I	2013-01-01
H04W		8	/	005		I	2013-01-01
			/				
			/				
			/				

CPC Combination Sets								
Symbol					**Type**	**Set**	**Ranking**	**Version**
			/					
			/					

NONE		**Total Claims Allowed:**	
(Assistant Examiner)	(Date)	6	
/MARISOL FIGUEROA/ Primary Examiner.Art Unit 2643	02/08/2017	O.G. Print Claim(s)	O.G. Print Figure
(Primary Examiner)	(Date)	1	1

U.S. Patent and Trademark Office

Part of Paper No. 20170208

Issue Classification	Application/Control No.	Applicant(s)/Patent Under Reexamination
	14738350	PÉREZ LAFUENTE, CARLOS A.
	Examiner	**Art Unit**
	MARISOL FIGUEROA	2643

US ORIGINAL CLASSIFICATION		INTERNATIONAL CLASSIFICATION										
CLASS	SUBCLASS	CLAIMED					NON-CLAIMED					
		H	0	4	W	4 / 02 (2009.01.01)						
CROSS REFERENCE(S)		H	0	4	W	24 / 00 (2009.01.01)						
		H	0	4	M	3 / 42 (2006.01.01)						
CLASS	SUBCLASS (ONE SUBCLASS PER BLOCK)											

NONE		Total Claims Allowed:	
(Assistant Examiner)	(Date)	6	
/MARISOL FIGUEROA/ Primary Examiner.Art Unit 2643	02/08/2017	O.G. Print Claim(s)	O.G. Print Figure
(Primary Examiner)	(Date)	1	1

Issue Classification	Application/Control No.	Applicant(s)/Patent Under Reexamination
	14738350	PÉREZ LAFUENTE, CARLOS A.
	Examiner	**Art Unit**
	MARISOL FIGUEROA	2643

☐ Claims renumbered in the same order as presented by applicant ☐ CPA ☐ T.D. ☐ R.1.47

Final	Original	Final	Original	Final	Original	Final	Original	Final	Original	Final	Original	Final	Original	Final	Original
1	1														
2	2														
3	3														
4	4														
5	7														
6	8														

NONE (Assistant Examiner)	(Date)	**Total Claims Allowed:** 6	
/MARISOL FIGUEROA/ Primary Examiner.Art Unit 2643 (Primary Examiner)	02/08/2017 (Date)	O.G. Print Claim(s) 1	O.G. Print Figure 1

Search Notes	Application/Control No.	Applicant(s)/Patent Under Reexamination
	14738350	PÉREZ LAFUENTE, CARLOS A.
	Examiner	Art Unit
	MARISOL FIGUEROA	2643

CPC- SEARCHED		
Symbol	Date	Examiner
H04M3/42365; H04W4/001; H04W4/0021; H04W4/02	02/08/2017	MF

CPC COMBINATION SETS - SEARCHED		
Symbol	Date	Examiner

US CLASSIFICATION SEARCHED			
Class	Subclass	Date	Examiner
455	456.3, 555, 408, 432.2, 406, 458, 414.1, 456.1, 433	7/25/2015	jc
455	456.3, 555, 408, 432.2, 406, 458, 414.1, 456.1, 433	11/15/2015	jc
455	422.1	02/08/2017	MF

SEARCH NOTES		
Search Notes	Date	Examiner
inventor search and text search on East databases for monitor track enter exit special limited discount service area zone mobile wireless device	7/25/2015	jc
update inventor and text search on East database	11/15/2015	jc
Updating EAST keyword search.	11/25/2016	MF
Updated EAST keyword search.	7/12/2016	MF
Updated EAST keyword search.	02/08/2017	MF

INTERFERENCE SEARCH			
US Class/ CPC Symbol	US Subclass / CPC Group	Date	Examiner
455	456.3, 555, 408, 432.2, 406, 458, 414.1, 456.1, 433	7/25/15	JC
455	422.1	02/08/2017	MF
	H04M3/42365; H04W4/001; H04W4/0021; H04W4/02	02/08/2017	MF

PTO/SB/06 (09-11)
Approved for use through 1/31/2014. OMB 0651-0032
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.

PATENT APPLICATION FEE DETERMINATION RECORD Substitute for Form PTO-875	Application or Docket Number 14/738,350	Filing Date 06/12/2015	☐ To be Mailed

ENTITY: ☐ LARGE ☒ SMALL ☐ MICRO

APPLICATION AS FILED – PART I

FOR	(Column 1) NUMBER FILED	(Column 2) NUMBER EXTRA	RATE ($)	FEE ($)
☐ BASIC FEE (37 CFR 1.16(a), (b), or (c))	N/A	N/A	N/A	
☐ SEARCH FEE (37 CFR 1.16(k), (i), or (m))	N/A	N/A	N/A	
☐ EXAMINATION FEE (37 CFR 1.16(o), (p), or (q))	N/A	N/A	N/A	
TOTAL CLAIMS (37 CFR 1.16(i))	minus 20 =	*	X $ =	
INDEPENDENT CLAIMS (37 CFR 1.16(h))	minus 3 =	*	X $ =	
☐ APPLICATION SIZE FEE (37 CFR 1.16(s))	If the specification and drawings exceed 100 sheets of paper, the application size fee due is $310 ($155 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	

APPLICATION AS AMENDED – PART II

AMENDMENT **11/01/2016**

	(Column 1) CLAIMS REMAINING AFTER AMENDMENT		(Column 2) HIGHEST NUMBER PREVIOUSLY PAID FOR	(Column 3) PRESENT EXTRA	RATE ($)	ADDITIONAL FEE ($)
Total (37 CFR 1.16(i))	* 6	Minus	** 20	= 0	X $40 =	0
Independent (37 CFR 1.16(h))	* 2	Minus	***3	= 0	X $210 =	0
☐ Application Size Fee (37 CFR 1.16(s))						
☐ FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))						
					TOTAL ADD'L FEE	**0**

AMENDMENT

	(Column 1) CLAIMS REMAINING AFTER AMENDMENT		(Column 2) HIGHEST NUMBER PREVIOUSLY PAID FOR	(Column 3) PRESENT EXTRA	RATE ($)	ADDITIONAL FEE ($)
Total (37 CFR 1.16(i))	*	Minus	**	=	X $ =	
Independent (37 CFR 1.16(h))	*	Minus	***	=	X $ =	
☐ Application Size Fee (37 CFR 1.16(s))						
☐ FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))						
					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.

LIE
NINA RATANAVONG

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.

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Application No.	:	14/738,350
First Named Inventor	:	Carlos A. Perez Lafuente
Confirmation No.	:	9146
Filed	:	June 12, 2015
TC/A.U.	:	2643
Examiner	:	Marisol Figueroa
Customer No.	:	27896
Docket No.	:	0572.0001C3
Title	:	METHOD AND SYSTEM FOR MONITORING A MOBILE STATION PRESENCE IN A SPECIAL AREA

Mail Stop Amendment
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

RESPONSE TO NON-FINAL OFFICE ACTION

Dear Sir:

In response to the non-final Office Action dated July 19, 2016, please consider the following response. Applicant herewith petitions the Director of the United States Patent and Trademark Office for a One Month Extension of Time to extend the time for reply from October 19, 2016 to November 19, 2016. The fee for this extension is submitted herewith.

The Listing of the Claims begins on page 2 of this paper.

Remarks begin on page 5 of this paper.

Listing of Claims:

1. (Currently Amended) A method associated with a provider of presence related services and a mobile station that stores in a memory first checking data and uses the first checking data to determine whether or not a defining signal received from a radio communication defining device is a distinctive defining signal, the distinctive defining signal at least partly defines a special area by its coverage, the method comprising:

one or more servers of a provider of presence related services receiving from the mobile station via a mobile telephone network an updating signal ~~uncorrelated to any mobile station phone call establishment~~ that identifies the mobile station´s presence in the special area, the provider of presence related services being different than the mobile telephone network; and

storing in the one or more servers a parameters database having an operating parameter whose value is determined at least in part by the updating signal received from the mobile station[[,]]; and

sending from the one or more servers to the mobile station second checking data different from the first checking data to modify the special area

~~determining when the mobile station is switched off; and~~

~~upon determining that the mobile station is switched off setting the value of the operating parameter to an initial value~~.

2. (Original) The method according to claim 1, wherein the operating parameter is a tariff flag or a service flag that enables or disables a special tariff or a service for the mobile station.

3. (Currently Amended) A method associated with the use of a mobile station that stores and uses checking data to determine whether or not a defining signal received from a radio

communication defining device is a distinctive defining signal, the distinctive defining signal at least partly defines a special area by its coverage, the method comprising:

sending from the mobile station to at least one server of a provider of presence related services an updating signal via a mobile telephone network ~~uncorrelated to any mobile station phone call establishment~~ that identifies the mobile station´s presence in the special area, the updating signal being indicative of the mobile station´s presence in the special area, the provider of presence related services being different than the mobile telephone network; and

receiving in the mobile station from the at least one server second checking data different from the first checking data to modify the special area

~~receiving in the mobile station from the at least one server of the provider of presence related services an acknowledgement of a reception of the updating signal~~.

4. (Original) The method according to claim 3, further comprising the mobile station retransmitting the updating signal upon not receiving the acknowledgement from the at least one server.

5. (Previously Cancelled)

6. (Previously Cancelled)

7. (New) The method according to claim 1, further comprising:

determining when the mobile station is switched off; and

upon determining that the mobile station is switched off setting the value of the operating parameter to an initial value.

8. (New) The method according to claim 3, further comprising receiving in the mobile station from the at least one server of the provider of presence related services an acknowledgement of a reception of the updating signal.

REMARKS

Claims 1 and 3 have been amended. Claims 7 and 8 have been added. No claims have been cancelled. Accordingly, claims 1-4, 7 and 8 are pending in the application. Favorable reconsideration of the application and allowance of all the claims are respectfully requested in view of the following remarks.

Claim Rejections – 35 USC §103

Claim 1 was rejected under 35 U.S.C. § 103(a) as being unpatentable over International Appl. No. WO 00/27152 (hereinafter "Vimpari") in view of U.S. Publication No. 2004/0038688 (hereinafter "Zabawshyj").

Claim 2 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Vimpari in view of Zabawshyj and U.S. Publication No. 2007/0097852 (hereinafter "Huyghe").

Claims 3 and 4 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Vimpari in view of Zabawshyj and U.S. Publication No. 2002/0126691 (hereinafter "Strong").

A prima facie case of obviousness can only be established upon there being a comparison that includes all of the limitations of the subject claim(s). "When determining whether a claim is obvious, an Examiner must make 'a searching comparison of the claimed invention – including all its limitations – with the teachings of the prior art.' *In re Ochiai*, 71 F.3d 1565, 1572 (Fed. Cir. 1995) (emphasis added). Thus, 'obviousness requires a suggestion of all limitations in a claim.' *CFMT, Inc. v. Yieldup Int'l. Corp.*, 349 F.3d 1333, 1342 (Fed. Cir. 2003) (citing *In re Royka*, 490 F.2d 981, 985 (CCPA 1974)). The BPAI in *Ex Parte Wehling et al.* held that "absent a fact-based analysis which explicitly compares all the limitations of the claimed invention with the combined teachings of Gioffre and Rockliffe, we are constrained to reverse the rejection

of claims 1, 21, 29, and 31 and the claims dependent thereon under §103 over the combined teachings of Gioffre and Rockliffe."

Each of independent claims 1 and 3 recites a method wherein the provider of presence related services to be different than the mobile telephone network. The Office asserts that the Presence Server 10 of Zabawshyj is outside/different from the mobile telephone network. This is not the case. Zabawshyj teaches the Presence Server 10 to be a part of the telecommunications system. See, for example, the description of FIG. 1 and paragraphs [0025] and [0027].

The following extracts, for example, refer to the Presence Server of Zabawshyj being part of the telecommunication system: "the invention emulates a SMS-C for the purpose to stablishing a notification trigger in the applicable network element (typically in the Home Location Register or Mobile Switching Center)..." (page 2, [0018], lines 15-18); "... a query to the HLR and/or the MSC in order to determine the status of the mobile station ... the use of the Any Time Interrogation (ATI) query which is directed to the HLR ... should it be determined that a mobile station is inactive, the Presence Server emulates a SMS-C ... stablishing a notification trigger in the applicable network element (typically the Home Location Register or Mobile Switching Center)" (page 2, [0019], lines 12-26); "... the Presence Server will initiate the process of stablishing a notification trigger in the applicable network element ..." (page 4, [0039], lines 1-33).

Claim 1 has been amended to recite a sending from the one or more servers to the mobile station second checking data different from the first checking data to modify the special area. Likewise, claim 3 has been amended to recite a receiving in the mobile station from the at least one server second checking data different from the first checking data to modify the special area. Support for the amendments is found in paragraphs [0104] through [0109].

There is no teaching or suggestion in Vimpari, Zabawshyj that the MSC 103 or Presence Server 10 sends any data to the mobile station for the purpose of modifying a special area. In regard to claim 3, Strong does not cure this deficiency.

For at least these reasons, Applicant respectfully submits that each of claims 1 and 3, and all claims depending therefrom, are patentable over the cited prior art references.

Conclusion

In view of the foregoing, Applicant respectfully requests the Examiner to find the application in condition for allowance with claims 1-4, 7 and 8. However, if for any reason the Examiner feels that the application is not now in condition for allowance, the Examiner is respectfully requested to call the undersigned attorney to discuss any unresolved issues and to expedite the disposition of the application.

The Commissioner is hereby authorized to charge payment of any additional fees required for the above-identified application or credit any overpayment to Deposit Account No. 05-0460.

Dated: November 1, 2016

Respectfully submitted by:

/Tim L. Kitchen/
Tim L. Kitchen
Reg. No. 41,900

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Electronic Patent Application Fee Transmittal

Application Number:	14738350
Filing Date:	12-Jun-2015
Title of Invention:	METHOD AND SYSTEM FOR MONITORING A MOBILE STATION PRESENCE IN A SPECIAL AREA
First Named Inventor/Applicant Name:	Carlos A. Pérez LaFuente
Filer:	Tim L. Kitchen
Attorney Docket Number:	0572.0001C3

Filed as Small Entity

Filing Fees for Utility under 35 USC 111(a)

Description	Fee Code	Quantity	Amount	Sub-Total in USD($)
Basic Filing:				
Pages:				
Claims:				
Miscellaneous-Filing:				
Petition:				
Patent-Appeals-and-Interference:				
Post-Allowance-and-Post-Issuance:				
Extension-of-Time:				

Description	Fee Code	Quantity	Amount	Sub-Total in USD($)
Extension - 1 month with $0 paid	2251	1	100	100
Miscellaneous:				
		Total in USD ($)		**100**

Electronic Acknowledgement Receipt	
EFS ID:	27381974
Application Number:	14738350
International Application Number:	
Confirmation Number:	9146
Title of Invention:	METHOD AND SYSTEM FOR MONITORING A MOBILE STATION PRESENCE IN A SPECIAL AREA
First Named Inventor/Applicant Name:	Carlos A. Pérez LaFuente
Customer Number:	27896
Filer:	Tim L. Kitchen/Janet Dorgan
Filer Authorized By:	Tim L. Kitchen
Attorney Docket Number:	0572.0001C3
Receipt Date:	01-NOV-2016
Filing Date:	12-JUN-2015
Time Stamp:	16:27:32
Application Type:	Utility under 35 USC 111(a)

Payment information:

Submitted with Payment	yes
Payment Type	CARD
Payment was successfully received in RAM	$100
RAM confirmation Number	110216INTEFSW16275500
Deposit Account	
Authorized User	
The Director of the USPTO is hereby authorized to charge indicated fees and credit any overpayment as follows:	

File Listing:

Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1	Extension of Time	2016-11-01_EOTxml-0001C3.pdf	100563 14e91408aafe3c7bea383a5616015da2c73b6617	no	1
Warnings:					
Information:					
2		2016-11-01_ResponseToNonFinalOfficeAction-0001C3.pdf	188416 a3f4f9803e50c3b1bf026f59be8f88c4e13737c2	yes	7

Multipart Description/PDF files in .zip description

Document Description	Start	End
Amendment/Req. Reconsideration-After Non-Final Reject	1	1
Claims	2	4
Applicant Arguments/Remarks Made in an Amendment	5	7

Warnings:					
Information:					
3	Fee Worksheet (SB06)	fee-info.pdf	30629 b88091d62926f95e90ccd87bb54a4d18c8bac8c2	no	2
Warnings:					
Information:					
		Total Files Size (in bytes):	319608		

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 a 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.

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Application No.	:	14/738,350
First Named Inventor	:	Carlos A. Perez Lafuente
Confirmation No.	:	9146
Filed	:	June 12, 2015
TC/A.U.	:	2643
Examiner	:	Marisol Figueroa
Customer No.	:	27896
Docket No.	:	0572.0001C3
Title	:	METHOD AND SYSTEM FOR MONITORING A MOBILE STATION PRESENCE IN A SPECIAL AREA

PETITION FOR EXTENSION OF TIME UNDER 37 CFR 1.136(a)

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 applicant herewith petitions the Director of the United States Patent and Trademark Office to extend the time for reply to the Office action dated July 19, 2016 for 1 month(s) from October 19, 2016 to November 19, 2016.

The requested extension and fee are as follows:

- ☒ One month (37 CFR 1.17(a)(1); $200/$100/$50)
- ☐ Two months (37 CFR 1.17(a)(2); $600/$300/$150)
- ☐ Three months (37 CFR 1.17(a)(3); $1400/$700/$350)
- ☐ Four months (37 CFR 1.17(a)(4); $2200/$1100/$550)
- ☐ Five months (37 CFR 1.17(a)(5); $3000/$1500/$750)

Total Fee Due: $100.00. Credit card payment has been submitted concurrently with the filing of this transmittal.

The Director is hereby authorized to charge any additional appropriate fees that may be required for the above-identified application, and to credit any overpayment, to Deposit Account No. **05-0460**.

Dated: November 1, 2016

Respectfully submitted by:

/Tim L. Kitchen/

Tim L. Kitchen
Reg. No. 41,900

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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

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
14/738,350	06/12/2015	Carlos A. Pérez LaFuente	0572.0001C3	9146

27896 7590 07/19/2016

EDELL, SHAPIRO & FINNAN, LLC
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EXAMINER
FIGUEROA, MARISOL

ART UNIT	PAPER NUMBER
2643	

NOTIFICATION DATE	DELIVERY MODE
07/19/2016	ELECTRONIC

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

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

epatent@usiplaw.com

Office Action Summary	Application No. 14/738,350	Applicant(s) PÉREZ LAFUENTE, CARLOS A.	
	Examiner MARISOL FIGUEROA	Art Unit 2643	AIA (First Inventor to File) Status No

-- 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 MONTHS 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 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 *5/4/2016*.

☐ A declaration(s)/affidavit(s) under **37 CFR 1.130(b)** was/were filed on _____.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ An election was made by the applicant in response to a restriction requirement set forth during the interview on _____; the restriction requirement and election have been incorporated into this action.

4)☐ 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*

5)☒ Claim(s) *1-4* is/are pending in the application.

5a) Of the above claim(s) _____ is/are withdrawn from consideration.

6)☐ Claim(s) _____ is/are allowed.

7)☒ Claim(s) *1-4* is/are rejected.

8)☐ Claim(s) _____ is/are objected to.

9)☐ Claim(s) _____ are subject to restriction and/or election requirement.

* If any claims have been determined allowable, you may be eligible to benefit from the **Patent Prosecution Highway** program at a participating intellectual property office for the corresponding application. For more information, please see http://www.uspto.gov/patents/init_events/pph/index.jsp or send an inquiry to PPHfeedback@uspto.gov.

Application Papers

10)☐ The specification is objected to by the Examiner.

11)☐ 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).

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).

Certified copies:

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)).

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

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☒ Information Disclosure Statement(s) (PTO/SB/08a and/or PTO/SB/08b) Paper No(s)/Mail Date _____.

3) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .

4) ☐ Other: _____.

DETAILED ACTION

Notice of Pre-AIA or AIA Status

1. The present application is being examined under the pre-AIA first to invent provisions.

Response to Arguments

2. Applicant's arguments with respect to claims 1-4 have been considered but are moot because of new grounds of rejection. See rejection below.

Claim Rejections - 35 USC § 103

4. The following is a quotation of pre-AIA 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 negatived by the manner in which the invention was made.

5. **Claim 1** is rejected under pre-AIA 35 U.S.C. 103(a) as being unpatentable over VIMPARI (WO 00/27152) in view of ZABAWSHYJ et al. (US 2004/0038688).

Regarding claim 1, Vimpari discloses a method associated with a provider of presence related services and a mobile station (Fig. 1, mobile station 2) that stores in a memory checking data and uses the checking data to determine whether or not a defining signal received from a radio communication defining device is a distinctive defining signal (abstract, lines 1-6; page 2, lines 17-23; page 4, lines 25-31; the mobile station detects its own identity code such as IMEI from a signal received form a transmitter 101 (i.e., radio communication defining device)

installed in a permanent location, the signal is formed so that it can be distinguished from other possible signals active in the same area, it is inherent that the mobile station has stored its own identity code (i.e., checking data)), the distinctive defining signal at least partly defines a special area by its coverage (abstract, lines 1-6; page 2, lines 17-22; the transmitter can be detected within the range of a few tens of meters, for example, in the installed in predetermined area (i.e., special area)), the method comprising:

one or more servers of a provider of presence related services receiving from the mobile station via a mobile telephone network an updating signal uncorrelated to any mobile station phone call establishment that identifies the mobile station's presence in the special area (abstract; lines 6-9; page 2, lines 23-25; when the mobile station detects its own identity code, the mobile station sends a signal message (i.e., updating signal) to the mobile system (i.e., provider of presence related services) that notifies that is in the predetermined area); and

storing in the one or more servers a parameters database having an operating parameter whose value is determined at least in part by the updating signal received from the mobile station (abstract, lines 6-9; page 2, lines 23-27; page 5, lines 9-16; the mobile system sets/switches to a lower tariff (i.e., parameter/value) when it receives the message indicating that it is located in the predetermined area and maintains the lower traffic until the mobile station indicates that located outside the range of the transmitter/guide unit, thus it is inherent that the mobile system includes a database to keep the tariff information (i.e., parameters)),

determining when the mobile station is switched off; and upon determining that the mobile station is switched off setting the value of the operating parameter to an initial value

(page 6, lines 28-31; when the mobile station is determined to be switched off, the system returns for normal tariffs (i.e., initial value) for the mobile station).

But, Vimpari does not particularly disclose the provider of presence related services being different than the mobile telephone network.

However, Zabawshyj teaches mobile telephone network working with one or more servers of a provider of presence related services for providing presence related services to mobile stations/wireless users such as determining the presence of wireless devices in a mobile network (Fig. 1; abstract; p. [0017], [0019], [0029], [0036], [0037]). Therefore, it would have been obvious to a person having ordinary skill in the art at the time that the invention was made, to modify Vimpari so that the mobile system works with provider of presence related services for providing presence related services, as suggested by Zabawshyj, since such a modification would ease the strain and impact on network resources in the mobile network for provision of presence related services (see abstract).

6. **Claim 2** is rejected under pre-AIA 35 U.S.C. 103(a) as being unpatentable over VIMPARI in views of ZABAWSHYJ et al., and HUYGHE et al. (US 2002/0097852).

Regarding claim 2, the combination of Vimpari and Zabawshyj discloses the method according to claim 1, wherein the operating parameter enables or disables a special tariff or a service for the mobile station (Vimpari; abstract, lies 6-end; page 6, lines 27-31; the systems switches from normal tariff to a lower tariff (i.e., special tariff) based on the presence of the mobile station in the predetermined area, and switches back to normal tariff when the mobile station leaves the area).

But, the combination does not particularly disclose wherein the operating parameter is a tariff flag or service flag.

However, Huyghe teaches the use of tariff flag or service flag for enabling /disabling a tariff (p. [0071]-[0073], [0076]). Therefore, it would have been obvious to a person having ordinary skill in the art at the time that the invention was made, to modify the combination of Vimpari and Zabawshyj with the teachings of Huyghe, in order for the system to easily determine tariff changes and charge for services used in the network.

7. **Claims 3 and 4** are rejected under pre-AIA 35 U.S.C. 103(a) as being unpatentable over VIMPARI in views of ZABAWSHYJ et al., and STRONG (US 2002/0126691).

Regarding claim 3, Vimpari discloses a method associated with the use of a mobile station (Fig. 1, mobile station 2) that stores and uses checking data to determine whether or not a defining signal received from a radio communication defining device is a distinctive defining signal (abstract, lines 1-6; page 2, lines 17-23; page 4, lines 25-31; the mobile station detects its own identity code such as IMEI from a signal received form a transmitter 101 (i.e., radio communication defining device) installed in a permanent location, the signal is formed so that it can be distinguished from other possible signals active in the same area, it is inherent that the mobile station has stored its own identity code (i.e., checking data)), the distinctive defining signal at least partly defines a special area by its coverage (abstract, lines 1-6; page 2, lines 17-22; the transmitter can be detected within the range of a few tens of meters, for example, in the installed in predetermined area (i.e., special area)), the method comprising:

sending from the mobile station to at least one provider of presence related services an updating signal via a mobile telephone network uncorrelated to any mobile station phone call establishment that identifies the mobile station's presence in the special area, the updating signal being indicative of the mobile station's presence in the special area (abstract; lines 6-9; page 2, lines 23-25; when the mobile station detects its own identity code, the mobile station sends a signal message (i.e., updating signal) to the mobile system (i.e., provider of presence related services) that notifies that is in the predetermined area).

But, Vimpari does not particularly disclose the provider of presence related services being different than the mobile telephone network; and

receiving in the mobile station from the at least one server of the provider of presence related services an acknowledgement of a reception of the updating signal.

However, Zabawshyj teaches mobile telephone network working with one or more servers of a provider of presence related services for providing presence related services to mobile stations/wireless users such as determining the presence of wireless devices in a mobile network (Fig. 1; abstract; p. [0017], [0019], [0029], [0036], [0037]). Therefore, it would have been obvious to a person having ordinary skill in the art at the time that the invention was made, to modify Vimpari so that the mobile system works with provider of presence related services for providing presence related services, as suggested by Zabawshyj, since such a modification would ease the strain and impact on network resources in the mobile network for provision of presence related services (see abstract).

Further, in the field of wireless communications, Strong teaches receiving an acknowledgment in response to the reception of a signal (p. [0005]; i.e., acknowledgment bit).

Therefore, it would have been obvious to a person having ordinary skill in the art at the time that the invention was made, to modify the combination of Vimpari and Zabawshyj with the teachings of Strong, in order to provide feedback to the sender on whether the updating signal has been received.

Regarding claim 4, the combination of Vimpari, Zabawshyj, and Strong disclose the method according to claim 3, further comprising the mobile station retransmitting the updating signal upon not receiving the acknowledgement from the at least one server (Strong; p. [0005]). Therefore, it would have been obvious to a person having ordinary skill in the art at the time that the invention was made, to modify the combination of Vimpari and Zabawshyj with the teachings of Strong, in order to guarantee delivery of the updating signal.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MARISOL FIGUEROA whose telephone number is (571)272-7840. The examiner can normally be reached on M-F 8:30 a.m.-5:00 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jinsong Hu can be reached on (571)272-3965. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/MARISOL FIGUEROA/
Primary Examiner, Art Unit 2643

Notice of References Cited	Application/Control No. 14/738,350	Applicant(s)/Patent Under Reexamination PÉREZ LAFUENTE, CARLOS A	
	Examiner MARISOL FIGUEROA	Art Unit 2643	Page 1 of 1

U.S. PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Name	CPC Classification	US Classification
*	A	US-2004/0038688 A1	02-2004	Zabawshyj, Bohdan Konstantyn	H04W8/08	455/456.3
*	B	US-2002/0097852 A1	07-2002	HUYGHE, CARLOS	H04M15/28	379/114.01
*	C	US-2002/0126691 A1	09-2002	Strong, Peter	H04L1/0002	370/447
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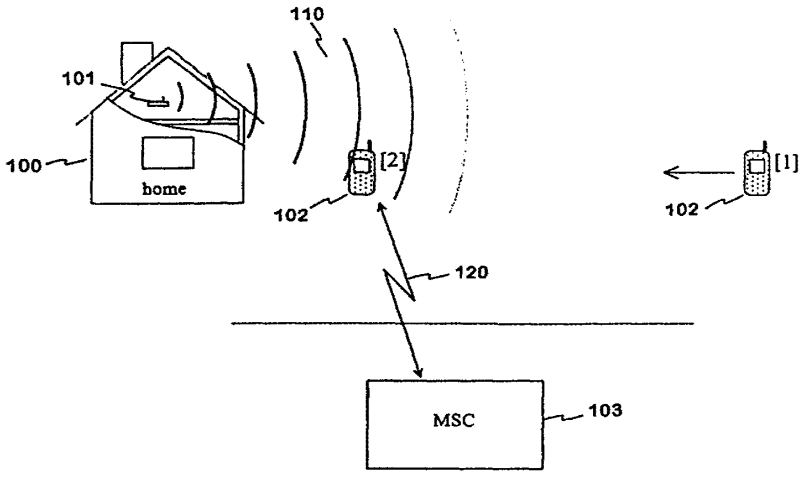
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(57) Abstract

The invention relates to a method and arrangement for locating a mobile station. By means of the invention, it is detected whether said mobile station is located in a predetermined area. The basic idea of the invention is as follows. In the home and/or possibly in some other permanent location of residence, there is installed a transmitter (101), repeatedly transmitting the identity code of said mobile station. The transmission power is so low that the signal can only be detected within the range of a few tens of meters, for example. The signal is formed so that it can be distinguished from other possible signals active in the same area. A mobile station that detects its own identity code in the channel used by the transmitter sends a signal message to the mobile system. The message notifies that the mobile station is in the predetermined area. The system (103) advantageously utilises this information so that at least for those connections originated from said mobile station, there is set a lower tariff than in a case where the mobile station is out of reach of said transmitter (transmitters).

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Method and arrangement for locating a mobile station

The invention relates to a method and arrangement for locating a mobile station. By means of the invention it is observed whether the mobile station is located in a predetermined area. The invention is advantageously applied for defining call tariffs, or for defining available services on the basis of the location of the mobile station in question.

Usually the costs of fixed wireline local calls are fairly moderate in comparison with similar connections by mobile phone, from the subscriber's home or from some other predetermined place. If the mobile system could know when the call has originated from the subscriber's home, lower tariffs could be applied in said connections without cutting the overall rates. Thus a mobile phone operator could more effectively compete of customers with fixed wireline operators also as regards local calls. Mobile phone customers would also benefit. Moreover, operators could offer special services that are available only when the subscriber is "at home". A necessary requirement for the use of the above described applications is that the location of a mobile phone at home or in some other predetermined place can be accurately detected.

The accuracy of the localisation methods belonging to the basic functions of cellular networks is not sufficient with respect to the above mentioned applications. By means of roaming it is found out where the mobile phone is located at each particular moment - in which operator's network and in which location area. On the basis of paging, the location of the mobile station is found out more accurately, but only on the accuracy level of one cell.

In the prior art, there are known the following methods for further improving the localisation of a mobile station:

- Location calculation. Methods are being developed for digital networks, by means of which the location of the mobile station is defined, on the basis of the transfer times of the transmitted messages, for instance at the accuracy of 150 meters. The method offers a more specified localisation within the area of the whole network, and it is mainly designed in order to make help arrive more quickly in emergency situations. A drawback, as regards the objects of the present invention, is that even this accuracy is insufficient for finding out whether the mobile station is "at home." Another drawback is the technically challenging nature of the system.

- The use of a HBS (Home Base Station): A mini base station is installed at home or in another desired location. Thus a sufficiently accurate localisation is made possible within the normal paging method. A drawback with this method is the remarkably high purchase or rental price for the subscriber - the home base station is private by nature. From the point of view of the operator, a drawback arises by the remarkable expenses caused by configuring the radio network.

- The use of a fixed telephone stand. At home, the mobile phone is set in a telephone stand provided with an individual SIM (Subscriber Identity Module) containing subscriber data. When the phone handset attached to the stand is used for making calls, the mobile network knows that the mobile phone is at home and applies a lower call tariff according to the data recorded in the SIM module of the stand. A drawback with this method is the fixed location of the phone.

The object of the invention is to eliminate some of the drawbacks of the prior art by creating a completely new solution, where the location of a mobile station within a determined area can be detected accurately, reliably and by means of fairly simple devices.

The basic idea of the invention is as follows: in the home and/or possibly in some other fixed place of residence, there is installed a transmitter which repeatedly transmits the identity code of said mobile station. The transmission power is so low that the signal is detected for example within a range of a few tens of meters only. The signal is formed so that it can be distinguished from other signals that are active within the same area. This is advantageously realised by applying code division multiplexing. A mobile station that detects its own identity code in the channel used by the transmitters sends a signal message to the mobile system. The message announces that the mobile station is "at home". The system advantageously uses this information so that at least for the mobile originated calls there is set a lower tariff than when the mobile station is outside the range of said transmitter (transmitters).

An advantage of the invention is that the location of the mobile station in a given place can be detected by means of an arrangement which does not cause technical problems in the network nor expenses connected thereto. Another advantage of the invention is that the required facility equipment is simple and thus economical in manufacturing/purchasing costs. Yet another advantage of the invention is that when the mobile station is located at home, all calls directed thereto can, when desired, be automatically transferred to the fixed wireline telephone. Moreover, it is an

advantage of the invention that in a certain mode, it can be provided with a function common to all mobile stations, such as switching the phone off in an aeroplane.

From the network operator's point of view, the invention brings forth the advantage that there opens up a practical possibility to compete of customers who have a traditional fixed wireline telephone; from the the mobile station subscriber's point of view the advantage of the invention is that the operation costs of the mobile station are cut down due to cheaper home calls. Yet another advantage is that the cheaper home calls can be made without having to use the fixed wireline telephone.

The method according to the invention for locating a mobile station, in which method the location of the mobile station within a predetermined home area is detected, and information of said location is sent to the mobile system, is characterised in that

- within said home area, using a guide channel, there is repeatedly transmitted the identity code of said mobile station,

- said mobile station monitors the guide channel,

- from said mobile station, there is sent a home message to the mobile network, if said identity code is detected, and

- the validity of the unit transmitting said identity code is verified.

The arrangement according to the invention for locating a mobile station, said arrangement comprising means for detecting whether the mobile station is located within a predetermined home area, and means for sending the detected information to the mobile system, is characterised in that

- the means for detecting whether the mobile station is located within its home area comprise a guide unit installed in the home area and repeatedly transmitting the identity code of said mobile station, as well as in the mobile station reception circuits corresponding to the channel that the guide unit uses for transmission, and means for processing the signal from the guide unit,

- the means for sending said detected information to the mobile system comprise in the mobile station a program for formulating a home message and a mobile message, and

- the arrangement for locating the mobile station also comprises means for verifying the validity of said guide unit.

A few preferred embodiments of the invention are presented in the dependent claims.

In the following specification, the invention is explained in more detail with reference to the appended drawings, where

figure 1 illustrates the principle of the invention and an example of an arrangement according to it,

figure 2 is a flow diagram illustrating an example of the operation of an arrangement according to figure 1,

figure 3 illustrates another example of the arrangement according to the invention,

figure 4 is a signalling diagram illustrating an example of the arrangement according to figure 3,

figure 5 is a block diagram illustrating an example of the guide unit according to the invention,

figure 6 is a block diagram illustrating another example of the guide unit according to the invention, and

figure 7 is a block diagram illustrating an example of a mobile station according to the invention.

In figure 1, we see an example of the arrangement according to the invention. Operational units are the guide unit 101, the mobile station 102 and the MSC, mobile switching centre 103. The guide unit 101 includes a radio transmitter. The guide unit is installed permanently in the premises 100, and it is realised so that the unit stops operating, if it is detached and moved. The unit 101 repeatedly transmits the identity code of the mobile station 102, which code can be for instance the IMEI (International Mobile station Equipment Identity) of the mobile station. The transmission power is so low that the field 110 of said radio transmitter extends in detectable form only to the premises 100 and to the immediate vicinity thereof. The area where the mobile station identity code can be detected is in the specification and in the appended claims called the home area of said mobile station. The "home

area" can be the subscriber's home or summer cottage with surroundings, working place or some other defined area. The channel on which the guide unit sends the mobile station identity code is in this specification and claims called guide channel, irrespective of the applied technology.

In order to illustrate the principle of the invention, let us observe a situation where the mobile station 102 is first located in a place [1], where the field strength of the guide unit 101 is in practice zero. Then the mobile station is transferred to another place [2], where the field 110 of the guide unit is observed and the signal contained therein detected. Now the mobile station identifies its own identity code in the signal from the guide unit and transmits, by using the network signalling connection 120, to the mobile switching centre 103 a message that it is located in the home area. Thereafter the calls originated from the mobile station 102 are billed according to a tariff that is lower than before the mobile station entered the home area. The mobile switching centre 103 maintains the lower tariff until the mobile station 102 indicates that it is located outside the range of the guide unit 101, or when the base station connection of the mobile station is interrupted. Lower tariffs can also be applied for incoming calls to the mobile station 102, so that the mobile switching centre 103 notifies that switching centre which has the information of the paying customer that the called mobile station is located in its home area.

Figure 2 is a flow diagram of a method according to the invention. In step 201, the operating voltage of the mobile station is switched on. In step 202, the mobile station observes in idle mode the frequency division channel, i.e. the guide channel, reserved for transmitting the identity codes. This channel is advantageously the first or last channel in the frequency area reserved for said mobile network, because these are normally left unused as traffic channels owing to possible interference. However, in the usage according to the invention the transmission powers in said channel are so low that there is no danger of interference. The observation of the guide channel here means that the mobile station receiver is tuned to the channel and the detector output is observed. From the detector output, there is searched, in step 203, a signal to be synchronised with. If such a signal is detected, the identity code connected thereto is decoded in step 204. Separate guide units meant for different mobile stations but using the same guide channel can be located fairly near to each other. In order to distinguish between the various identity codes, the guide signals must be further channelled in the guide channel. In theory, the same time division technique could be applied as in other frequency division channels of said digital network, but the system would become unreasonably complicated and

expensive. It is, however, advantageous to apply in the guide units CDM (Code Division Multiplexing) or frequency hopping. In the latter case, the carrier wave frequency is arranged to fluctuate according to a sequence formed of the numbers of the identity code. When applying code division multiplexing, for instance each bit of the identity code is represented by a given codeword, which is sent in identical or inverted order depending on whether said databit is one or zero. First the receiving mobile station processes the received signal, by means of correlation technique, into the datasignal proper, and thereafter compares the code contained therein to its own identity code in step 205. If the mobile station is not located in its home area, the correlator does not give the signal containing the information, at least not the identity code of said mobile station. Code division multiplexing is suited to be applied in analog mobile networks, too.

If the mobile station has detected its own identity code, it sends to the network a message to that effect in step 206. In the case of a GSM network, the transfer can take place for example in the RACH (Random Access CHannel) or in the SACCH (Slow Associated Control Channel). Let us call said message here and in the claims "home message". When a home message has arrived in the mobile switching centre, the centre program sets lower tariffs for said mobile station, step 207. In proportion, the discount is most remarkable when making local calls. The mobile station announces on the display and possibly by sound signal that the tariffs are lowered. As long as the mobile station is located in its home area, it continues to observe the guide channel in step 208. As long as a signal is detected in the guide channel, and said signal contains the identity code of said mobile station, the mobile station does not do anything new in this respect, steps 208-211. If, on the contrary, a signal is not detected in the guide channel, or a signal is detected, but the identity code of said mobile station is not found therein, a new message is sent to the network in steps 209-212. Let us call this second message here and in the claims a "mobile message". When the mobile message has arrived in the mobile switching centre, the program returns to normal tariffs for said mobile station, step 213. Normal tariffs are returned also if the mobile station is switched off, or if its connection to the base station is interrupted for some other reason. When the mobile station has moved to outside its home area (step 212), it further proceeds to search for its identity code according to the above described steps 202-205. The verification of the appearance and disappearance of the identity code can be arranged in a secured manner, so that when the mobile station is located at the borders of its home area, unnecessary signalling traffic in the network is avoided. This type of hysteresis is not illustrated in figure 2.

Figure 3 illustrates another example of the arrangement according to the invention. It includes a guide unit 301, comprising an infrared transmitter/receiver, and a mobile station, likewise comprising an infrared transmitter/receiver. In this example, the guide unit 301 is installed in the ceiling of the room 300 which serves as the place of residence of the subscriber 350 of the mobile station 302. The unit 301 repeatedly transmits the identity code of the mobile station 302. In the situation of figure 3, the person 350 has stepped in the room 300 and directed the infrared window of the mobile station 302 towards the guide unit 301. Now there is created a two-way infrared connection 310 between the mobile station and the guide unit. In the guide unit signal, the mobile station 302 identifies its own identity code and sends, by using the network messaging connection 320, notice to the mobile switching centre that it is located in its home area. On the basis of said notice, the mobile switching centre for instance lowers tariffs according to the description above.

Figure 4 is a signalling diagram illustrating the operation of a system according to figure 3. The guide unit transmits repeatedly the identity code of the mobile station belonging thereto. In step 401, the mobile station is located outside its home area, in other words outside the reach of the infrared signal of the guide unit. In step 402, the mobile station has been brought to its home area, and in the infrared message it identifies its own identity code. As a consequence, it transmits a home message to the network. When the home message arrives in the mobile switching centre, the centre transmits to the mobile station a random number per each individual case. Said random number is further sent by the mobile station to the guide unit via the infrared link. In this example, the guide unit is provided with its own SIM module, which contains a secret identity number for verifying the validity of the unit. In step 403, the guide unit calculates, according to a given algorithm, a response number on the basis of said secret identity number and said random number, and it sends the obtained response number to the mobile station. The mobile station further sends the response number to the mobile switching centre, which compares the received response number with the one that was earlier calculated in the centre. If the numbers match, the centre for example sets lower tariffs for said mobile station and sends a notice to that effect for the mobile station. At suitable intervals, the mobile station reads the signal transmitted by its infrared receiver. In step 405, the mobile station has not within a predetermined period of time detected its own identity code, and it sends a mobile message to the centre. In the acknowledge message, the centre notifies that normal tariffs are applied again.

Figure 5 shows an example of the guide unit. The guide unit 500 comprises a memory 510, a digital to analog converter 520, a transmitter unit 530, an antenna 531, a control unit 540, a small keyboard 541, a frequency unit 550 and an oscillator 551. In the memory 510, there are recorded recalculated bit patterns, which, when fed in the converter 520 at the right speed, produce the baseband analog signals I and Q conforming to the modulation mode used in said mobile network. Thus the converter 520 contains two separate DA converters, one for the I signal and the other for the Q signal. For example in the case of a GSM network, the signals I and Q conform to the modulation GMSK (Gaussian Minimum Shift Keying). In the transmission unit, the signals I and Q affect directly for instance in the quadrature carrier waves, or first in the quadrature sine waves with the intermediate frequency. In both cases, there is formed a summed radio frequency signal which is then amplified in the radio transmitter proper and fed to the antenna 531.

The picking of the numbers from the memory 510 takes place so that the control unit 540 sends, at regular intervals, successive addresses and a number control signal to the memory. Each memory location contains two numbers, the first of which corresponds to the momentary state of the I signal, and the second corresponds to the momentary state of the Q signal. The parallel numbers are fed to the converter 520, as was explained above. The control unit 540 also sends a timing signal to the converter 520 and a frequency setting signal to the frequency unit 550. In order to manually choose the carrier wave, the guide unit is provided with a small keyboard 541, for example. The frequency unit 550 creates the waves with the necessary frequency advantageously by applying phase lock technique, by utilising the basic frequency wave transmitted by the oscillator 551.

Figure 6 illustrates an example of an guide unit applying frequency hopping. The guide unit 600 includes a control unit 610, a frequency unit 620, and oscillator 621, a transmission unit 630 and an antenna 631. In the control unit, there is recorded the individual code id of the mobile station, which is for instance suitably shortened as IMEI. The control unit 610 sends, as a repeated sequence, the numbers of the code id to the frequency unit 620. This in turn forms, by using the basic-frequency wave transmitted by the oscillator 621, a radio-frequency signal with a fluctuating or "hopping" frequency in correspondence to the numbers obtained from the control unit. In this case, the frequency fluctuation range falls outside the frequency bands used by mobile networks, in some free frequency area. The frequency hopping signal sent by the frequency unit 620 is fed into the transmission unit 630, which feeds it, filtered and amplified, to the antenna 631.

Figure 7 is a block diagram showing an example of a mobile station according to the invention. The mobile station 700 comprises a SIM card 710 for storing user data. The transmission apparatus comprises, in this order, a microphone 731, a speech coder 732, a channel processor 733 and a transmitter unit 734. In the speech coder 732, the voice signal is digitised and compressed. In the channel processor 733, the speech or data signal to be transmitted is channel coded, the bit sequences are interleaved, a possible encryption takes place and the bursts to be located in the system time slots are created. In the transmitter unit 734, there is carried out modulation, the formation of radio frequency signal and setting of the level. The receiver apparatus includes, in this order, a receiver unit 744, a receiver side channel processing apparatus 743, a speech decoder 742 and a earphone 741. In the receiver unit 744, there is carried out, among others, tuning to the reception channel and demodulation. In the processing apparatus 743, there are carried out inverted operations as compared to the operations of the channel processor 733, and in the speech decoder 742 as compared to the operations of the speech coder 732. In common, the transmission and reception arrangements have the antenna 750 and the duplex filter 751 coupled thereto.

In order to operate the mobile station 700, it is provided with a keyboard 761 and a display 762. In order to control the operations, the mobile station includes a control unit 720. Said control unit feeds the message and other data signals to the channel processor 733, as well as receives signals of the same type from the channel processing apparatus 743. The intercommunication of the control unit with the rest of the units takes place via the path 780. The control unit 720 includes a memory 721, where there is stored the software PR required by the mobile phone operations according to the invention. The software PR at least creates the home and mobile messages to be sent in the network. The comparison of the identity code sent by the guide unit can be carried out by means of the PR software, or then by the device itself, in the control unit 720. If the mobile station verifies the validity of the guide unit, the software PR comprises the programme part of the verification process.

Figure 7 does not include some of the additions required by a few preferred embodiments in mobile station. The use of code division multiplexing does not require additions in the hardware. If the guide unit operates according to the frequency hopping principle, there are needed, in the mobile station, receiver devices which can be tuned to the frequency range used in the frequency hopping, and which send a code corresponding to the hopping sequence. If infrared technique

is used in the guide unit, naturally the mobile station also must be provided with an infrared unit with transmitter and receiver.

In the above specification, we have described a few preferred embodiments according to the invention. However, the invention is not restricted to them alone. For example, the identity code can also be transmitted by means of a fairly wide conductor loop. The validity of the guide unit applying radio frequencies can also be verified according to the procedure described in figure 4. The validity of the guide unit of any possible type can also be verified in a simpler fashion, directly in the mobile station, by using the secret identity code in the calculation. When using the invention particularly for defining the price/service connected to the phone call, the mobile station can check its location only when making a call and possibly when receiving one. If the checking proves the device to be in the home area, the mobile switching centre can for instance set lower tariffs for the duration of said call, and cancel the discount when the call is terminated. The inventive idea can be applied in many different ways within the scope of the independent patent claims.

Claims

1. A method for locating a mobile station, in which method the location of the mobile station in a predetermined home area is detected, and the information of said location is fed into the mobile system, **characterised in that**
- within said home area, into the guide channel there is repeatedly transmitted the identity code of said mobile station,
- the guide channel is observed by said mobile station,
- from said mobile station there is transmitted to the mobile network a home message, if said identity code is detected, and
- the validity of the unit transmitting said identity code is verified.

2. A method according to claim 1, **characterised in that** the guide channel is the first or last frequency division channel in the frequency range reserved for said mobile network.

3. A method according to claim 1 or 2, **characterised in that** the guide channel is divided for the use of various different mobile stations by means code division multiplexing (CDM).

4. A method according to any of the claims 1-3, **characterised in that** in the guide channel, there is applied an essentially lower power level than in the rest of the channels in said mobile network.

5. A method according to claim 1, **characterised in that** the guide channel is a frequency range located outside the frequency range reserved for said mobile network.

6. A method according to claim 5, **characterised in that** the guide channel is divided to be used by several mobile stations by applying frequency hopping.

7. A method according to claim 1, **characterised in that** the identity code is transmitted by encoding it in infrared radiation.

8. A method according to claim 1, **characterised in that** in order to verify the validity of the guide unit, i.e. the unit transmitting the identity code,
- in said home message, there is included information as for the transfer of said identity code in the mobile network channel, and
- in the mobile system, there is read the notice regarding the home message.

9. A method according to claim 1, **characterised in that** in order to verify the validity of the guide unit,
- from the mobile system, there is transmitted to the guide unit a random number through said mobile station,
- in the guide unit, there is calculated, according to a predetermined algorithm, a response number on the basis of said random number and a secret identity number,
- the response number is transmitted, through said mobile station, to said system, and
- the response number is compared in the system with the number calculated by the system.

10. A method according to claim 1, **characterised in that** in order to verify the validity of the guide unit,
- a random number is transmitted from the mobile station to the guide unit,
- in the guide unit, there is calculated, according to a predetermined algorithm, a response number on the basis of said random number and a secret identity number,
- the response number is transmitted to said mobile station, and
- the response number is compared in the mobile station with the number calculated by said mobile station.

11. A method according to claim 1, **characterised in that** the guide channel is observed at regular intervals.

12. A method according to claim 1, **characterised in that** the guide channel is observed only in connection with an ongoing call.

13. A arrangement for locating a mobile station (102), said arrangement comprising means for detecting whether the mobile station is located in a predetermined home area, and means for transferring said information to the mobile system (103), **characterised in that**
- the means for detecting the location of the mobile station in the home area comprise a guide unit (101) arranged to repeatedly transmit the identity code of said mobile station, as well as in the mobile station (102), receiver circuits corresponding to the channel used by the guide unit for transmission and means for processing the signal received from the guide unit;
- the means for transferring said detected data to the mobile system comprise in the mobile station a program (PR) for creating a home message and a mobile message, and

- the arrangement for locating the mobile station also includes means for verifying the validity of said guide unit.

14. A guide unit for locating a mobile station, **characterised in that** it comprises means for forming the signal containing the identity code of the mobile station, and means for transmitting said signal in order to detect whether the mobile station is located in a predetermined home area defined by the range of the guide unit transmission signal.

15. A guide unit (500) according to claim 14, **characterised in that** the means for forming the signal containing the identity code of the mobile station are means for converting said identity code into a code division multiplexed form, i.e. to a CDM form, and that the means for transmitting said signal comprise a transmission unit (530) in order to transmit said identity code to a given channel in the mobile network, as well as a frequency unit (550), which is arranged to create a carrier wave corresponding to at least the other border channel of the frequency range reserved for said mobile network.

16. Means according to claim 15 for converting said identity code to CDM form, **characterised in that** they comprise
- a memory (510) containing numbers that correspond to samples extracted from baseband CDM-form signals suitable to said modulator,
- a digital to analog converter (520) for converting said numbers to signals (I, Q) to be transferred to the quadrature branches of said modulator, and
- a control unit (540) for reading said memory and for timing said digital to analog converter.

17. A transmission unit (530) according to claim 15, **characterised in that** it comprises a modulator and a radio transmitter conforming to the modulation method applied in said mobile network.

18. A guide unit (600) according to claim 14, **characterised in that** the means for forming the signal containing the identity code of the mobile station are means (610, 620) for forming a frequency hopping sequence corresponding to said identity code, and the means for transmitting said signal comprise a radio transmitter (630) arranged to use the frequency range outside the frequency range reserved for said mobile network.

19. A guide unit according to claim 14, **characterised in that** the means for transmitting the signal containing said identity code comprise an infrared transmitter, and that said guide unit also comprises an infrared receiver.

20. A guide unit according to claim 14, **characterised in that** there is recorded a secret identity code therein, and that it comprises means for calculating the response number used in verifying the validity of the guide unit, by using said secret identity code and the random number received from outside.

21. A mobile station (700), comprising data signal transmission, reception and processing units, **characterised in that** said mobile station also comprises means for observing the guide channel, and that said processing unit includes means for detecting the identity code of said mobile station from the signal transmitted by the guide channel, and means (PR) for forming a home message and/or a mobile message in order to be transmitted to the mobile system.

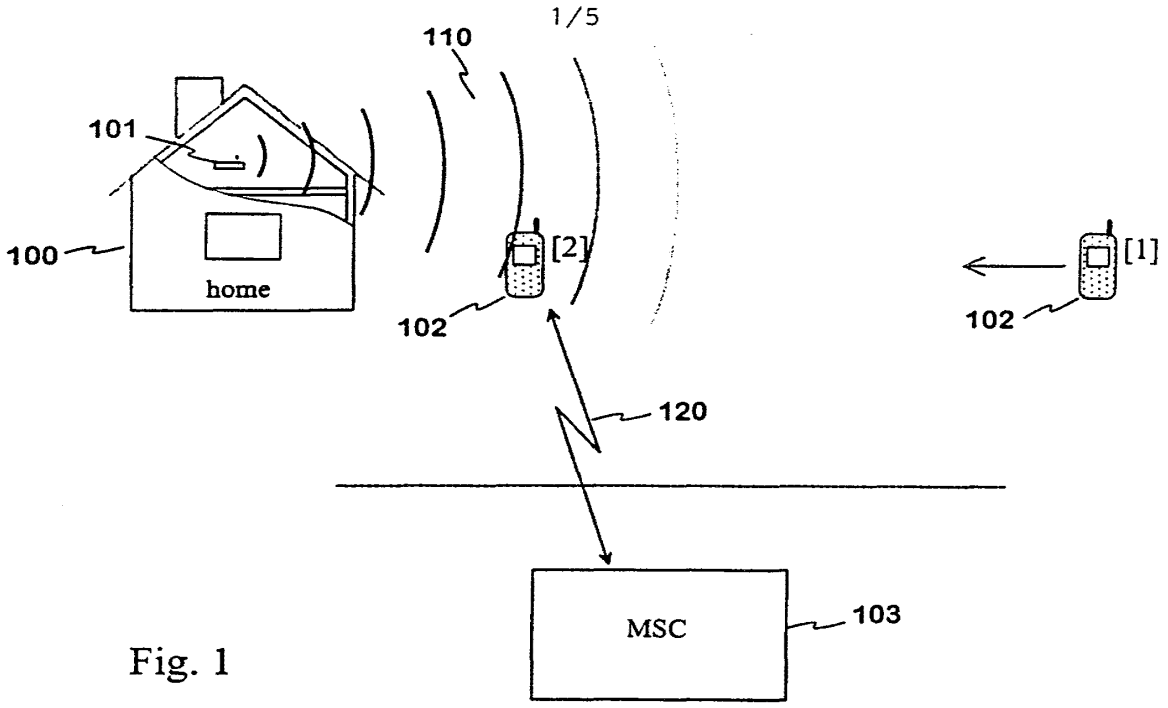


Fig. 1

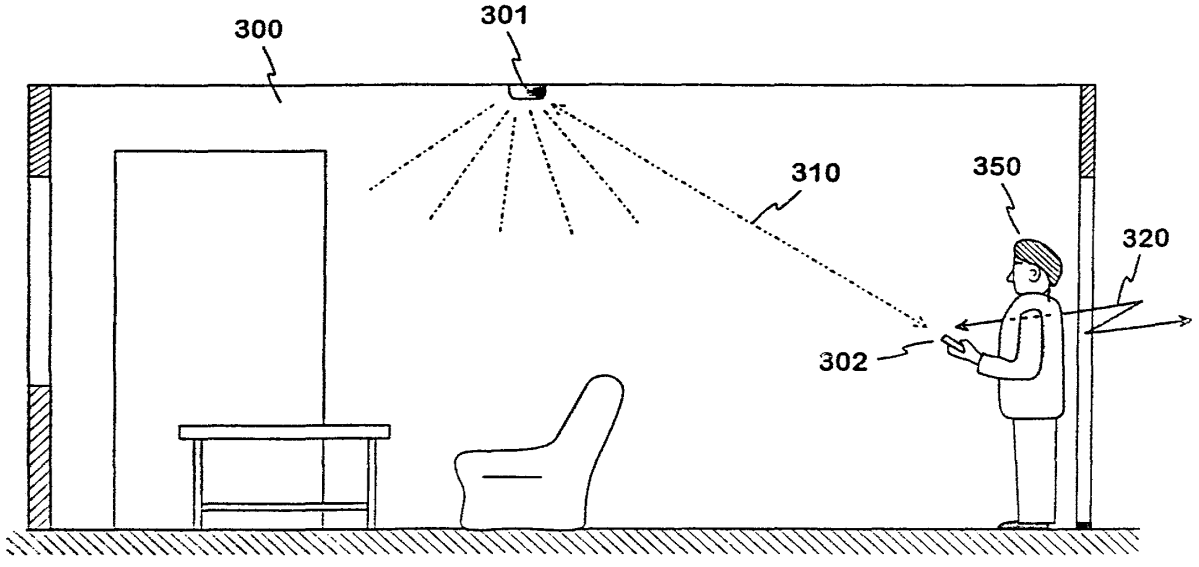


Fig. 3

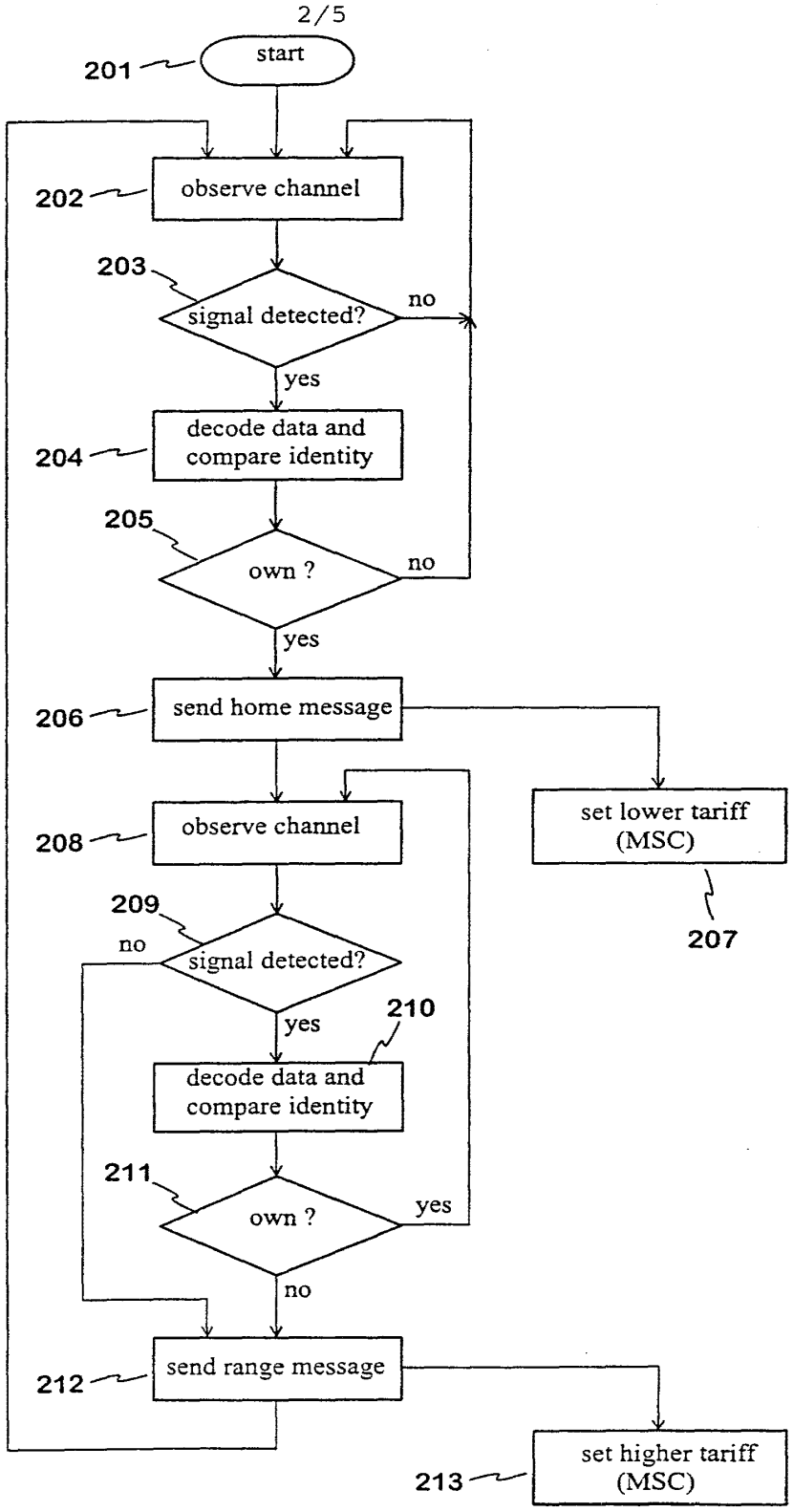

start
201
observe channel
202
203
signal detected?
no
yes
decode data and compare identity
204
205
own ?
no
yes
send home message
206
set lower tariff (MSC)
207
observe channel
208
209
no
signal detected?
yes
210
decode data and compare identity
211
own ?
yes
no
send range message
212
set higher tariff (MSC)
213

Fig. 2

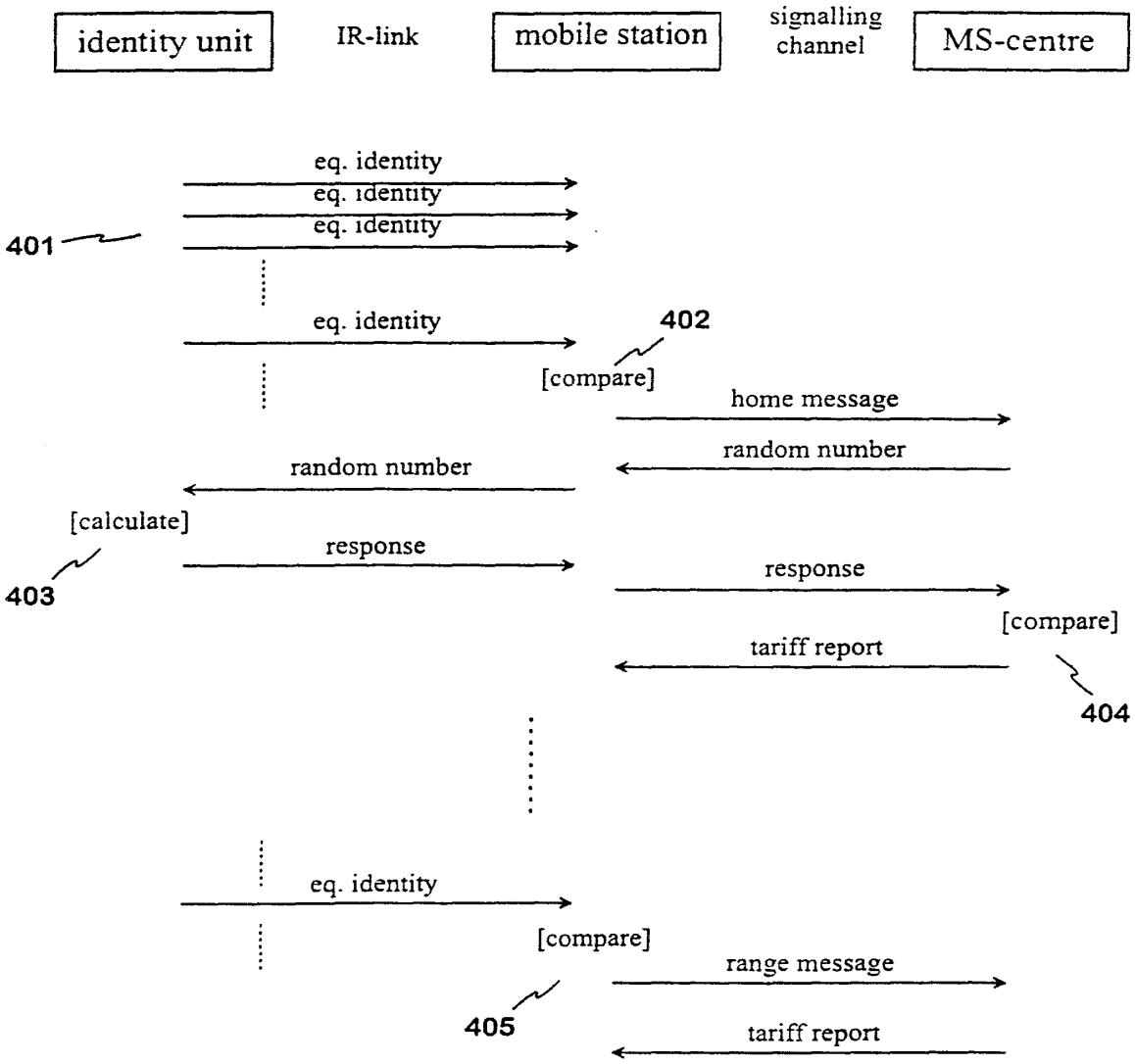

identity unit
IR-link
mobile station
signalling channel
MS-centre
eq. identity
eq. identity
eq. identity
401
eq. identity
402
[compare]
home message
random number
random number
[calculate]
response
response
403
[compare]
tariff report
404
eq. identity
[compare]
range message
405
tariff report

Fig. 4

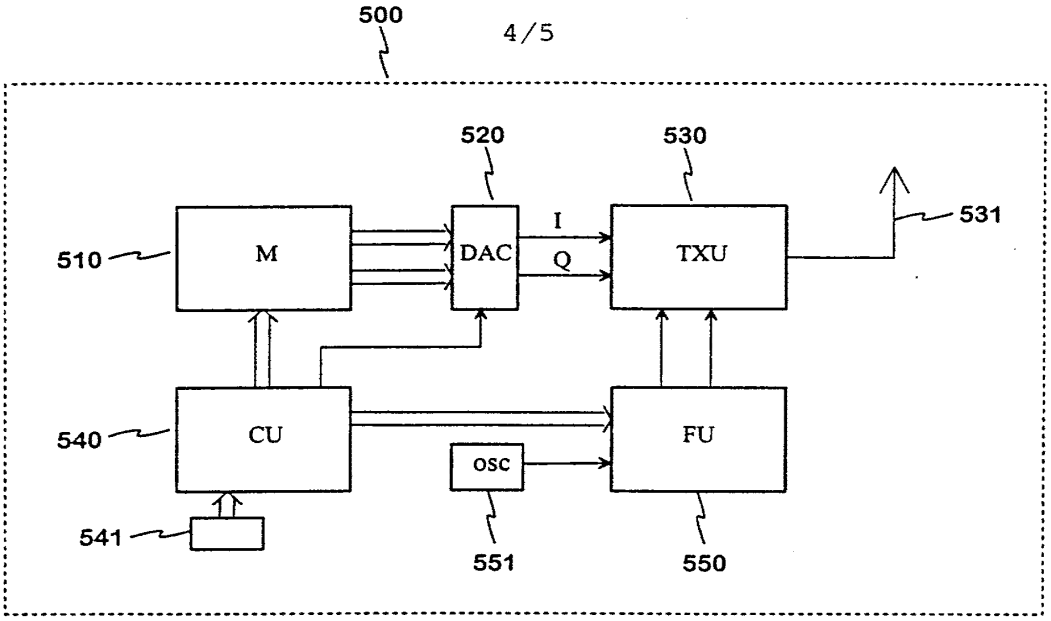

500
520
530
531
510
M
DAC
I
Q
TXU
540
CU
FU
osc
541
551
550

Fig. 5

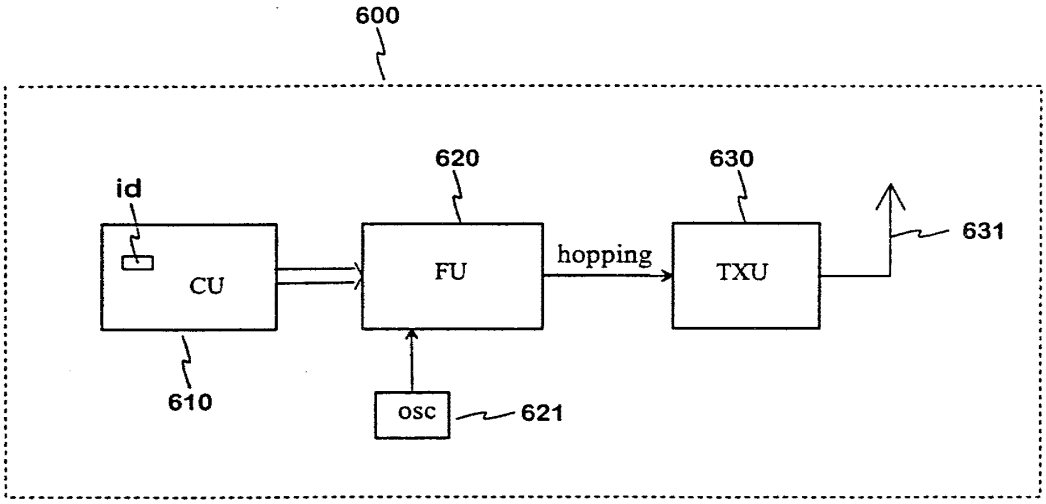

600
620
630
631
id
CU
FU
hopping
TXU
610
osc
621

Fig. 6

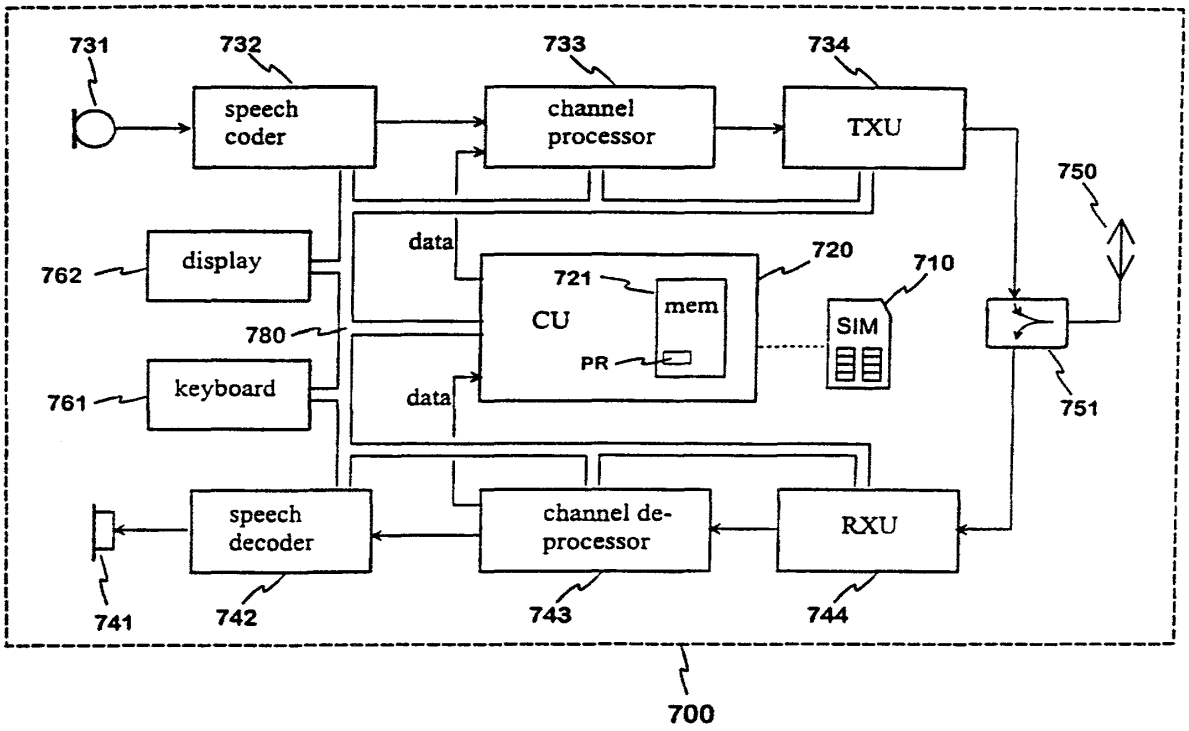

731
732
733
734
speech coder
channel processor
TXU
750
data
762
display
720
710
721
mem
CU
780
SIM
PR
761
keyboard
data
751
speech decoder
channel de-processor
RXU
741
742
743
744
700

Fig. 7

INTERNATIONAL SEARCH REPORT

International application No.
PCT/FI 99/00908

A. CLASSIFICATION OF SUBJECT MATTER

IPC7: H04Q 7/38
According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC7: H04Q

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

SE,DK,FI,NO classes as above

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
P,A	WO 9911085 A1 (NOKIA MOBILE PHONES LTD.), 4 March 1999 (04.03.99) --	1-21
P,A	WO 9952316 A1 (NOKIA TELECOMMUNICATIONS OY), 14 October 1999 (14.10.99) --	1-21
X	CA 2195487 A (BUHRMANN, M.), 21 August 1997 (21.08.97), page 2, line 21 - line 28; page 6, line 17 - line 21, abstract	1,13,14,21
A	--	2-12,15-20

[X] Further documents are listed in the continuation of Box C. [X] See patent family annex.

* Special categories of cited documents:
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"E" erlier document but published on or after the international filing date
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"P" document published prior to the international filing date but later than the priority date claimed
"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
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"Y" document of particular relevance: the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
"&" document member of the same patent family

Date of the actual completion of the international search	Date of mailing of the international search report
13 March 2000	16 -03- 2000
Name and mailing address of the ISA/ Swedish Patent Office Box 5055, S-102 42 STOCKHOLM Facsimile No. +46 8 666 02 86	Authorized officer Sven-Erik Bergdahl / MR Telephone No. +46 8 782 25 00

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INTERNATIONAL SEARCH REPORT

International application No.
PCT/FI 99/00908

C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 5444765 A (K. MARUI ET AL), 22 August 1995 (22.08.95), column 1, line 61 - line 67; column 2, line 26 - line 41; column 7, line 21 - column 8, line 28, figures	1,13,14,21
	--	
X	US 5471643 A (K. MARUI), 28 November 1995 (28.11.95), the whole document	1,13,14,21
A		2-12,15-20
	--	
X	FR 2711033 A1 (COMPAGNIE FINANCIERE POUR LE RADIOTELEPHONE (COFIRA) (S.A.)), 14 April 1995 (14.04.95), page 1, line 11 - line 19, abstract	1,13,14,21
A		2-12,15-20
	--	
X	EP 0344989 A2 (KABUSHIKI KAISHA TOSHIBA), 6 December 1989 (06.12.89), the whole document	1,13,14,21
A		2-12,15-20
	--	
X	EP 0597638 A1 (VODAFONE LIMITED), 18 May 1994 (18.05.94), column 1, line 5 - line 24; column 2, line 4 - line 13; column 2, line 33 - line 54, abstract	1,13,14,21
A		2-12,15-20
	--	
X	EP 0783235 A2 (AT&T CORP.), 9 July 1997 (09.07.97), the whole document	1,13,14,21
A		2-12,15-20
	--	

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INTERNATIONAL SEARCH REPORT

Information on patent family members

02/12/99

International application No.
PCT/FI 99/00908

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
WO 9911085 A1	04/03/99	AU 8864998 A	16/03/99
		EP 0915631 A	12/05/99
		FI 973456 A	23/02/99
WO 9952316 A1	14/10/99	FI 980654 D	00/00/00
CA 2195487 A	21/08/97	US 5950125 A	07/09/99
US 5444765 A	22/08/95	NONE	
US 5471643 A	28/11/95	CA 2035306 C	25/07/95
		JP 3226129 A	07/10/91
FR 2711033 A1	14/04/95	EP 0647076 A	05/04/95
		FR 2711023 A,B	14/04/95
EP 0344989 A2	06/12/89	SE 0344989 T3	
		CA 1318356 A	25/05/93
		DE 68912407 D,T	11/05/94
		JP 1300722 A	05/12/89
		JP 2854579 B	03/02/99
		US 5101500 A	31/03/92
		JP 1300723 A	05/12/89
		JP 2809641 B	15/10/98
EP 0597638 A1	18/05/94	AU 5056893 A	26/05/94
		GB 2272607 A	18/05/94
EP 0783235 A2	09/07/97	JP 9200836 A	31/07/97
		US 5740538 A	14/04/98

Form PCT/ISA/210 (patent family annex) (July 1992)

PUB-NO: WO000027152A1
DOCUMENT-IDENTIFIER: WO 0027152 A1
TITLE: METHOD AND ARRANGEMENT FOR LOCATING A MOBILE STATION
PUBN-DATE: May 11, 2000
PATENT-FAMILY-ID: 8552823

INVENTOR-INFORMATION:

NAME	COUNTRY
KOKKONEN JARI	FI
VIMPARI MARKKU	FI

APPLICANT:

NAME	COUNTRY
KOKKONEN JARI	FI
VIMPARI MARKKU	FI
NOKIA MOBILE PHONES LTD	FI

APPL-NO: FI 9900908 W
APPL-DATE: October 29, 1999

PRIORITY-DATA:

PRIORITY-NO	PRIORITY-APPL-DATE
FI 982365 A	19981030

CPC-CURRENT:

TYPE	CPC/DATE
CPCI	H04W4/24 20130101
CPCI	H04W88/02 20130101

INT-CL-CURRENT:

TYPE	IPC/DATE
IPCP	H04W4/24 20090101
IPCS	H04W88/02 20090101

REF-CITED:

PHASE-COUNTRY/NUMBER/KIND/DATE-NPL-INFO

ISR EP 0783235 A2 19970709
ISR EP 0597638 A1 19940518
ISR EP 0344989 A2 19891206
ISR FR 2711033 A1 19950414
ISR US 5471643 A 19951128
ISR US 5444765 A 19950822
ISR CA 2195487 A1 19970821
ISR WO 9952316 A1 19991014
ISR WO 9911085 A1 19990304

ABSTRACT:

The invention relates to a method and arrangement for locating a mobile station. By means of the invention, it is detected whether said mobile station is located in a predetermined area. The basic idea of the invention is as follows. In the home and/or possibly in some other permanent location of residence, there is installed a transmitter (101), repeatedly transmitting the identity code of said mobile station. The transmission power is so low that the signal can only be detected within the range of a few tens of meters, for example. The signal is formed so that it can be distinguished from other possible signals active in the same area. A mobile station that detects its own identity code in the channel used by the transmitter sends a signal message to the mobile system. The message notifies that the mobile station is in the predetermined area. The system (103) advantageously utilises this information so that at least for those connections originated from said mobile station, there is set a lower tariff than in a case where the mobile station is out of reach of said transmitter (transmitters).

Doc code: IDS
Doc description: Information Disclosure Statement (IDS) Filed

PTO/SB/08a (01-10)
Approved for use through 07/31/2012. OMB 0651-0031
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
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INFORMATION DISCLOSURE STATEMENT BY APPLICANT
(Not for submission under 37 CFR 1.99)

Application Number	14738350
Filing Date	2015-06-12
First Named Inventor	Carlos A. Perez Lafuente
Art Unit	2643
Examiner Name	Marisol Figueroa
Attorney Docket Number	0572.0001C3

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	2	20040166870		2004-08-26	Backes	

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	Application Number	14738350
	Filing Date	2015-06-12
	First Named Inventor	Carlos A. Perez Lafuente
	Art Unit	2643
	Examiner Name	Marisol Figueroa
	Attorney Docket Number	0572.0001C3

Examiner Initials*	Cite No	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc), date, pages(s), volume-issue number(s), publisher, city and/or country where published.	T[5]
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Examiner Signature	/Marisol Figueroa/	Date Considered	07/13/2016

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	Filing Date	2015-06-12
	First Named Inventor	Carlos A. Perez Lafuente
	Art Unit	2643
	Examiner Name	Marisol Figueroa
	Attorney Docket Number	0572.0001C3

CERTIFICATION STATEMENT

Please see 37 CFR 1.97 and 1.98 to make the appropriate selection(s):

That each item of information contained in the information disclosure statement was first cited in any communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of the information disclosure statement. See 37 CFR 1.97(e)(1).

OR

☒ That no item of information contained in the information disclosure statement was cited in a communication from a foreign patent office in a counterpart foreign application, and, to the knowledge of the person signing the certification after making reasonable inquiry, no item of information contained in the information disclosure statement was known to any individual designated in 37 CFR 1.56(c) more than three months prior to the filing of the information disclosure statement. See 37 CFR 1.97(e)(2).

See attached certification statement.

Fee set forth in 37 CFR 1.17 (p) has been submitted herewith.

None

SIGNATURE

A signature of the applicant or representative is required in accordance with CFR 1.33, 10.18. Please see CFR 1.4(d) for the form of the signature.

Signature	/Tim L. Kitchen/	Date (YYYY-MM-DD)	2016-05-25
Name/Print	Tim L. Kitchen	Registration Number	41,900

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 1 hour 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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Index of Claims	Application/Control No.	Applicant(s)/Patent Under Reexamination
	14738350	PÉREZ LAFUENTE, CARLOS A.
	Examiner	Art Unit
	MARISOL FIGUEROA	2643

✓	Rejected	-	Cancelled	N	Non-Elected	A	Appeal
=	Allowed	÷	Restricted	I	Interference	O	Objected

☐ Claims renumbered in the same order as presented by applicant ☐ CPA ☐ T.D. ☐ R.1.47

CLAIM		DATE								
Final	Original	07/24/2015	11/15/2015	04/25/2016	07/13/2016					
	1	✓	✓	✓	✓					
	2	✓	✓	✓	✓					
	3	✓	✓	✓	✓					
	4	✓	✓	✓	✓					
	5	✓	-	-	-					
	6	✓	-	-	-					

EAST Search History

EAST Search History (Prior Art)

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
S1	15	(updat$4 near4 signal same uncorrelated same call near3 establishment).clm.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2016/07/12 11:46
S3	16	((mobile wireless portable) near4 (terminal device station phone telephone) UE MS MT) same (transmit$5 send$4) near4 (signal message) same presence near3 server same (predetermined specified) near4 (area zone location)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2016/07/12 12:08
S4	0	((mobile wireless portable) near4 (terminal device station phone telephone) UE MS MT) same (transmit$5 send$4) near4 (signal message) same presence near3 server same home near3 zone	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2016/07/12 12:23
S5	14	((mobile wireless portable) near4 (terminal device station phone telephone) UE MS MT) same (transmit$5 send$4) near4 (signal message) same server same home near3 zone	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2016/07/12 12:23
S6	15	((mobile wireless portable) near4 (terminal device station phone telephone) UE MS MT) same (transmit$5 send$4) near4 (signal message) same (billing near3 center server) same home near3 zone	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2016/07/12 12:23
S7	1170	((mobile wireless portable) near4 (terminal device station phone telephone) UE MS MT) same (transmit$5 send$4 notification updat$4) near4 (signal message) same (billing near3 center server) same (special near3 (area zone tariff rate) home near3 (network zone))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2016/07/12 12:26
S8	1155	S7 not S6	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2016/07/12 12:26

S9	352	S8 and presence	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2016/07/12 12:26
S10	135	S9 and "455".clas.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2016/07/12 12:27
S11	4	regist$4 near4 signal with home near3 zone	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2016/07/12 12:28
S16	5	home near2 zone same presence near3 server	US-PGPUB; USPAT; USOCR	OR	ON	2016/07/12 12:45
S17	0	notif$5 near4 presence with (special home) near4 (area zone network) same (external) near4 (server provider)	US-PGPUB; USPAT; USOCR	OR	ON	2016/07/12 12:47
S18	28	notif$5 with (special home) near4 (area zone network) same (external) near4 (server provider)	US-PGPUB; USPAT; USOCR	OR	ON	2016/07/12 12:47
S19	0	(signal message notif$5) with (present presence inside enter$4) near5 (special home) near4 (area zone network) same (external) near4 (server provider)	US-PGPUB; USPAT; USOCR	OR	ON	2016/07/12 12:50
S20	0	(signal message notif$5) with (present presence inside enter$4) with (special home) near4 (area zone network) same (external) near4 (server provider)	US-PGPUB; USPAT; USOCR	OR	ON	2016/07/12 12:50
S21	2	(signal message notif$5) with (present presence inside enter$4) with (predetermined) near4 (area zone network) same (external) near4 (server provider)	US-PGPUB; USPAT; USOCR	OR	ON	2016/07/12 12:51
S31	428	mobile near3 network with presence near3 server	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2016/07/12 13:01
S32	198	S31 and "455".clas.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2016/07/12 13:01
S33	40	S31 and 455/456.1-457.ccls.	US-PGPUB; USPAT; USOCR;	OR	ON	2016/07/12 13:01

			FPRS; EPO; JPO; DERWENT; IBM_TDB			

EAST Search History (Interference)

< This search history is empty>

7/ 13/ 2016 2:56:59 PM
C:\ Users\ mfigueroa\ Documents\ EAST\ Workspaces\ 14738350.wsp

Search Notes	Application/Control No.	Applicant(s)/Patent Under Reexamination
	14738350	PÉREZ LAFUENTE, CARLOS A.
	Examiner	Art Unit
	MARISOL FIGUEROA	2643

CPC- SEARCHED		
Symbol	Date	Examiner

CPC COMBINATION SETS - SEARCHED		
Symbol	Date	Examiner

US CLASSIFICATION SEARCHED			
Class	Subclass	Date	Examiner
455	456.3, 555, 408, 432.2, 406, 458, 414.1, 456.1, 433	7/25/2015	jc
455	456.3, 555, 408, 432.2, 406, 458, 414.1, 456.1, 433	11/15/2015	jc

SEARCH NOTES		
Search Notes	Date	Examiner
inventor search and text search on East databases for monitor track enter exit special limited discount service area zone mobile wireless device	7/25/2015	jc
update inventor and text search on East database	11/15/2015	jc
Updating EAST keyword search.	11/25/2016	MF
Updated EAST keyword search.	7/12/2016	MF

INTERFERENCE SEARCH			
US Class/ CPC Symbol	US Subclass / CPC Group	Date	Examiner

PTO/SB/08a (01-10)
Approved for use through 07/31/2012. 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.

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Not for submission under 37 CFR 1.99)

Application Number	14738350
Filing Date	2015-06-12
First Named Inventor	Carlos A. Perez Lafuente
Art Unit	2643
Examiner Name	Marisol Figueroa
Attorney Docket Number	0572.0001C3

U.S.PATENTS Remove

Examiner Initial*	Cite No	Patent Number	Kind Code[1]	Issue Date	Name of Patentee or Applicant of cited Document	Pages,Columns,Lines where Relevant Passages or Relevant Figures Appear
	1					

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Examiner Initial*	Cite No	Publication Number	Kind Code[1]	Publication Date	Name of Patentee or Applicant of cited Document	Pages,Columns,Lines where Relevant Passages or Relevant Figures Appear
	1	20080242298		2008-10-02	Nylander	
	2	20040166870		2004-08-26	Backes	

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FOREIGN PATENT DOCUMENTS Remove

Examiner Initial*	Cite No	Foreign Document Number[3]	Country Code[2] i	Kind Code[4]	Publication Date	Name of Patentee or Applicant of cited Document	Pages,Columns,Lines where Relevant Passages or Relevant Figures Appear	T[5]
	1							

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INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	14738350
	Filing Date	2015-06-12
	First Named Inventor	Carlos A. Perez Lafuente
	Art Unit	2643
	Examiner Name	Marisol Figueroa
	Attorney Docket Number	0572.0001C3

Examiner Initials*	Cite No	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc), date, pages(s), volume-issue number(s), publisher, city and/or country where published.	T[5]
	1		

If you wish to add additional non-patent literature document citation information please click the Add button Add

EXAMINER SIGNATURE

Examiner Signature		Date Considered	

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through a citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

[1] See Kind Codes of USPTO Patent Documents at www.USPTO.GOV or MPEP 901.04. [2] Enter office that issued the document, by the two-letter code (WIPO Standard ST.3). [3] For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. [4] Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. [5] Applicant is to place a check mark here if English language translation is attached.

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	14738350
	Filing Date	2015-06-12
	First Named Inventor	Carlos A. Perez Lafuente
	Art Unit	2643
	Examiner Name	Marisol Figueroa
	Attorney Docket Number	0572.0001C3

CERTIFICATION STATEMENT

Please see 37 CFR 1.97 and 1.98 to make the appropriate selection(s):

That each item of information contained in the information disclosure statement was first cited in any communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of the information disclosure statement. See 37 CFR 1.97(e)(1).

OR

☒ That no item of information contained in the information disclosure statement was cited in a communication from a foreign patent office in a counterpart foreign application, and, to the knowledge of the person signing the certification after making reasonable inquiry, no item of information contained in the information disclosure statement was known to any individual designated in 37 CFR 1.56(c) more than three months prior to the filing of the information disclosure statement. See 37 CFR 1.97(e)(2).

See attached certification statement.

Fee set forth in 37 CFR 1.17 (p) has been submitted herewith.

None

SIGNATURE

A signature of the applicant or representative is required in accordance with CFR 1.33, 10.18. Please see CFR 1.4(d) for the form of the signature.

Signature	/Tim L. Kitchen/	Date (YYYY-MM-DD)	2016-05-25
Name/Print	Tim L. Kitchen	Registration Number	41,900

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 1 hour 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.**

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 the Freedom of Information Act requires disclosure of these record s.

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 inspections 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.

Electronic Acknowledgement Receipt

EFS ID:	25883251
Application Number:	14738350
International Application Number:	
Confirmation Number:	9146
Title of Invention:	METHOD AND SYSTEM FOR MONITORING A MOBILE STATION PRESENCE IN A SPECIAL AREA
First Named Inventor/Applicant Name:	Carlos A. Pérez LaFuente
Customer Number:	27896
Filer:	Tim L. Kitchen/Kelly Elam
Filer Authorized By:	Tim L. Kitchen
Attorney Docket Number:	0572.0001C3
Receipt Date:	25-MAY-2016
Filing Date:	12-JUN-2015
Time Stamp:	17:15:09
Application Type:	Utility under 35 USC 111(a)

Payment information:

Submitted with Payment	no

File Listing:

Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1	Transmittal Letter	IDSxml.pdf	139331 7e001dea17e7448643bccb89f147d614519e1c2b	no	2
Warnings:					
Information:					

2	Information Disclosure Statement (IDS) Form (SB08)	IDSSB08a.pdf	644207 20c2fa340895bdab07ad5b393b4d8452e1407ab3	no	4

Warnings:	
Information:	
Total Files Size (in bytes):	783538

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 a 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.

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Application No.	:	14/738,350
First Named Inventor	:	Carlos A. Perez Lafuente
Confirmation No.	:	9146
Filed	:	June 12, 2015
TC/A.U.	:	2643
Examiner	:	Marisol Figueroa
Customer No.	:	27896
Docket No.	:	0572.0001C3
Title	:	METHOD AND SYSTEM FOR MONITORING A MOBILE STATION PRESENCE IN A SPECIAL AREA

INFORMATION DISCLOSURE STATEMENT UNDER 37 C.F.R. §§ 1.97 & 1.98

Pursuant to the duty imposed by 37 C.F.R. §1.56 to disclose information which may be material to the patentability of the above-identified patent application, the Applicant would like to direct the Examiner's attention to the documents listed on the enclosed Information Disclosure Citation Form (PTO/SB/08A).

Applicant hereby submits the attached IDS under:

☐ 37 C.F.R. 1.97(b) (i.e., within three months of the filing date of the application; within three months of the date of entry of the national stage application; before the mailing of a first Office action; or before the mailing of a first Office action after the filing of a request for continued examination).

☒ 37 C.F.R. 1.97(c) (i.e., after the mailing of a first Office action, but before the close of prosecution). The IDS is accompanied by *one* of: The appropriate statement (indicated on Form PTO/SB08a) or (2) the fee set forth in § 1.17(p).

☐ 37 C.F.R. 1.97 (d) (i.e., after the close of prosecution, but on or before payment of the issue fee). The IDS is accompanied by *both* of (1) the appropriate statement (indicated on Form PTO/SB08a) and the fee set forth in § 1.17(p).

☐ The IDS cites foreign documents not in English. Pursuant to 37 C.F.R. 1.98(a)(3), a concise explanation of the relevance is provided as indicated below:

☐ Enclosed is a copy of a non-English publication(s) _____. Applicant submits an English-language version of the search report or action, which cites such non-English language publication(s) and indicates the degree of relevance found by the foreign office.

☐ Enclosed is a copy of a non-English publication(s) _____. Applicant submits an English language abstract of the non-English publication(s).

☐ Other:

☐ The IDS cites foreign patent documents in English and/or Non-Patent Literature (NPL) Documents. Applicant submits a copy of the Abstract or of the complete publication.

☐ Pursuant to 37 C.F.R. 1.98(a)(2)(iii), enclosed is a copy of pending patent Application Serial No. _____.

☐ No copies of the non-English or non-patent publications listed on the attached Form PTO/SB/08A are being provided pursuant to 37 C.F.R. §1.98(d) because the publications were previously cited by or submitted to the Office in prior Application Serial No. _____, to which the above-identified application claims priority under 35 U.S.C. §120.

The submission of the listed documents is not intended as an admission that any such document constitutes prior art against the claims of the present application. Applicant does not waive any right to take any action that would be appropriate to antedate or otherwise remove any listed document as a competent reference against the claims of the present application.

The Director is hereby authorized to charge any additional appropriate fees that may be required for the above-identified application, and to credit any overpayment, to Deposit Account No. **05-0460**.

Dated: May 25, 2016

Respectfully submitted by:

/Tim L. Kitchen/
Tim L. Kitchen
Reg. No. 41,900

EDELL, SHAPIRO & FINNAN, LLC
Customer No. 27896
9801 Washingtonian Blvd., Suite 750
Gaithersburg, MD 20878
(301) 424-3640

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Application No.	:	14/738,350
First Named Inventor	:	Carlos A. Perez Lafuente
Confirmation No.	:	9146
Filed	:	June 12, 2015
TC/A.U.	:	2643
Examiner	:	Marisol Figueroa
Customer No.	:	27896
Docket No.	:	0572.0001C3
Title	:	METHOD AND SYSTEM FOR MONITORING A MOBILE STATION PRESENCE IN A SPECIAL AREA

Mail Stop Amendment
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

RESPONSE TO NON-FINAL OFFICE ACTION

Dear Madam:

In response to the non-final Office Action dated April 19, 2016, please consider the response as follows:

The Listing of the Claims begins on page 2 of this paper.

Remarks begin on page 4 of this paper.

Listing of Claims:

1. (Previously Presented) A method associated with a provider of presence related services and a mobile station that stores in a memory checking data and uses the checking data to determine whether or not a defining signal received from a radio communication defining device is a distinctive defining signal, the distinctive defining signal at least partly defines a special area by its coverage, the method comprising:

one or more servers of a provider of presence related services receiving from the mobile station via a mobile telephone network an updating signal uncorrelated to any mobile station phone call establishment that identifies the mobile station´s presence in the special area, the provider of presence related services being different than the mobile telephone network; and

storing in the one or more servers a parameters database having an operating parameter whose value is determined at least in part by the updating signal received from the mobile station,

determining when the mobile station is switched off; and

upon determining that the mobile station is switched off setting the value of the operating parameter to an initial value.

2. (Original) The method according to claim 1, wherein the operating parameter is a tariff flag or a service flag that enables or disables a special tariff or a service for the mobile station.

3. (Previously Presented) A method associated with the use of a mobile station that stores and uses checking data to determine whether or not a defining signal received from a radio communication defining device is a distinctive defining signal, the distinctive defining signal at least partly defines a special area by its coverage, the method comprising:

sending from the mobile station to at least one server of a provider of presence related services an updating signal via a mobile telephone network uncorrelated to any mobile station phone call establishment that identifies the mobile station´s presence in the special area, the updating signal being indicative of the mobile station´s presence in the special area, the provider of presence related services being different than the mobile telephone network; and

receiving in the mobile station from the at least one server of the provider of presence related services an acknowledgement of a reception of the updating signal.

4. (Original) The method according to claim 3, further comprising the mobile station retransmitting the updating signal upon not receiving the acknowledgement from the at least one server.

5. (Previously Cancelled)

6. (Previously Cancelled)

REMARKS

No claims have been amended, added or cancelled. Accordingly, claims 1-4 remain pending in the application. Favorable reconsideration of the application and allowance of all the claims are respectfully requested in view of the following remarks.

Claim Rejections – 35 USC §103

Claims 1 and 2 were rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 8,737,996 (hereinafter Ninagawa") in view of U.S. Publication No. 2002/0094801 (hereinafter "Atorf"),

Claims 3 and 4 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Ninagawa in view of U.S. Patent No. 8,019,364 (hereinafter "Toeroe"),

The earliest priority date of the present application is March 28, 2006. The earliest priority date of Ninagawa is September 29, 2006. Because Ninagawa does not predate the present application, Applicant respectfully submits that the rejection of each of claims 1-4 is improper and should be withdrawn.

Conclusion

In view of the foregoing, Applicant respectfully requests the Examiner to find the application in condition for allowance with claims 1-4. However, if for any reason the Examiner feels that the application is not now in condition for allowance, the Examiner is respectfully requested to call the undersigned attorney to discuss any unresolved issues and to expedite the disposition of the application.

The Commissioner is hereby authorized to charge payment of any additional fees required for the above-identified application or credit any overpayment to Deposit Account No. 05-0460.

Dated: May 4, 2016

Respectfully submitted by:

EDELL, SHAPIRO & FINNAN, LLC
CUSTOMER NO. 27896
9801 Washingtonian Blvd., Suite 750
Gaithersburg, MD 20878
(301) 424-3640

/Tim L. Kitchen/
Tim L. Kitchen
Reg. No. 41,900

Electronic Acknowledgement Receipt

EFS ID:	25678415
Application Number:	14738350
International Application Number:	
Confirmation Number:	9146
Title of Invention:	METHOD AND SYSTEM FOR MONITORING A MOBILE STATION PRESENCE IN A SPECIAL AREA
First Named Inventor/Applicant Name:	Carlos A. Pérez LaFuente
Customer Number:	27896
Filer:	Tim L. Kitchen
Filer Authorized By:	
Attorney Docket Number:	0572.0001C3
Receipt Date:	04-MAY-2016
Filing Date:	12-JUN-2015
Time Stamp:	15:09:19
Application Type:	Utility under 35 USC 111(a)

Payment information:

Submitted with Payment	no

File Listing:

Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1		AmdAsFiled.pdf	157396 364a33e934fb38d7a9fd78fe5849cdddae276179	yes	5

	Multipart Description/PDF files in .zip description		
	Document Description	**Start**	**End**
	Amendment/Req. Reconsideration-After Non-Final Reject	1	1
	Claims	2	3
	Applicant Arguments/Remarks Made in an Amendment	4	5
Warnings:			
Information:			
	Total Files Size (in bytes):	157396	

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New Applications Under 35 U.S.C. 111
If a new application is being filed and the application includes the necessary components for a 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.

PTO/SB/06 (09-11)
Approved for use through 1/31/2014. OMB 0651-0032
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.

PATENT APPLICATION FEE DETERMINATION RECORD Substitute for Form PTO-875	Application or Docket Number 14/738,350	Filing Date 06/12/2015	☐ To be Mailed

ENTITY: ☐ LARGE ☒ SMALL ☐ MICRO

APPLICATION AS FILED – PART I

FOR	(Column 1) NUMBER FILED	(Column 2) NUMBER EXTRA	RATE ($)	FEE ($)
☐ BASIC FEE (37 CFR 1.16(a), (b), or (c))	N/A	N/A	N/A	
☐ SEARCH FEE (37 CFR 1.16(k), (i), or (m))	N/A	N/A	N/A	
☐ EXAMINATION FEE (37 CFR 1.16(o), (p), or (q))	N/A	N/A	N/A	
TOTAL CLAIMS (37 CFR 1.16(i))	minus 20 =	*	X $ =	
INDEPENDENT CLAIMS (37 CFR 1.16(h))	minus 3 =	*	X $ =	
☐ APPLICATION SIZE FEE (37 CFR 1.16(s))	If the specification and drawings exceed 100 sheets of paper, the application size fee due is $310 ($155 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	

APPLICATION AS AMENDED – PART II

AMENDMENT **05/04/2016**

	(Column 1) CLAIMS REMAINING AFTER AMENDMENT		(Column 2) HIGHEST NUMBER PREVIOUSLY PAID FOR	(Column 3) PRESENT EXTRA	RATE ($)	ADDITIONAL FEE ($)
Total (37 CFR 1.16(i))	* 4	Minus	** 20	= 0	X $40 =	0
Independent (37 CFR 1.16(h))	* 2	Minus	***3	= 0	X $210 =	0
☐ Application Size Fee (37 CFR 1.16(s))						
☐ FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))						
					TOTAL ADD'L FEE	**0**

AMENDMENT

	(Column 1) CLAIMS REMAINING AFTER AMENDMENT		(Column 2) HIGHEST NUMBER PREVIOUSLY PAID FOR	(Column 3) PRESENT EXTRA	RATE ($)	ADDITIONAL FEE ($)
Total (37 CFR 1.16(i))	*	Minus	**	=	X $ =	
Independent (37 CFR 1.16(h))	*	Minus	***	=	X $ =	
☐ Application Size Fee (37 CFR 1.16(s))						
☐ FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))						
					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.

LIE
/VANESSA HODGES/

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.**

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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
14/738,350	06/12/2015	Carlos A. Pérez LaFuente	0572.0001C3	9146

27896 7590 04/29/2016

EDELL, SHAPIRO & FINNAN, LLC
9801 Washingtonian Blvd.
Suite 750
Gaithersburg, MD 20878

EXAMINER
FIGUEROA, MARISOL

ART UNIT	PAPER NUMBER
2643	

NOTIFICATION DATE	DELIVERY MODE
04/29/2016	ELECTRONIC

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

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

epatent@usiplaw.com

Office Action Summary	Application No. 14/738,350	Applicant(s) PÉREZ LAFUENTE, CARLOS A.	
	Examiner MARISOL FIGUEROA	Art Unit 2643	AIA (First Inventor to File) Status No

-- 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* MONTHS 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 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 *3/23/2016*.

☐ A declaration(s)/affidavit(s) under **37 CFR 1.130(b)** was/were filed on _____.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ An election was made by the applicant in response to a restriction requirement set forth during the interview on _____; the restriction requirement and election have been incorporated into this action.

4)☐ 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*

5)☒ Claim(s) *1-4* is/are pending in the application.

5a) Of the above claim(s) _____ is/are withdrawn from consideration.

6)☐ Claim(s) _____ is/are allowed.

7)☒ Claim(s) *1-4* is/are rejected.

8)☐ Claim(s) _____ is/are objected to.

9)☐ Claim(s) _____ are subject to restriction and/or election requirement.

* If any claims have been determined allowable, you may be eligible to benefit from the **Patent Prosecution Highway** program at a participating intellectual property office for the corresponding application. For more information, please see http://www.uspto.gov/patents/init_events/pph/index.jsp or send an inquiry to PPHfeedback@uspto.gov.

Application Papers

10)☐ The specification is objected to by the Examiner.

11)☐ 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).

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).

Certified copies:

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)).

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

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Information Disclosure Statement(s) (PTO/SB/08a and/or PTO/SB/08b) Paper No(s)/Mail Date _____.

3) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .

4) ☐ Other: _____.

DETAILED ACTION

Notice of Pre-AIA or AIA Status

1. The present application is being examined under the pre-AIA first to invent provisions.

Continued Examination Under 37 CFR 1.114

2. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 03/23/2016 has been entered.

Response to Arguments

3. Applicant's arguments filed on 03/23/2016, with respect to 112, second paragraph rejection of claims 1-4 have been fully considered and are persuasive. The 112, second paragraph rejection of claims 1-14 has been withdrawn. A new rejection is provided below.

Claim Rejections - 35 USC § 103

4. The following is a quotation of pre-AIA 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 negatived by the manner in which the invention was made.

5. **Claims 1 and 2** are rejected under pre-AIA 35 U.S.C. 103(a) as being unpatentable over NINAGAWA (US 8,737,996) in views of ATORF (US 2002/0094801).

Regarding claim 1, Ninagawa discloses a method associated with a provider of presence related services (Fig. 1; charging server 7) and a mobile station (Fig. 1; FMC supported terminal 1) that stores in a memory checking data and uses the checking data to determine whether or not a defining signal received from a radio communication defining device is a distinctive defining signal (col. 4, lines 1-5; col. 6, lines 7-20; the FMC supported terminal (i.e., mobile station) recognizes the AP2 that defines the Fixed Network 3 based on the identifier (i.e., checking data) received from AP which has been previously stored on the FMC supported terminal), the distinctive defining signal at least partly defines a special area by its coverage (col. 1, lines 54-58; col. 4, lines 1-5; col. 4, lines 48-59; the AP2 periodically sends out control signals that includes the identifier that identifies the fixed network coverage inside the home (i.e., special area)), the method comprising:

one or more servers of a provider of presence related services (Fig. 1; charging server 7) receiving from the mobile station via a mobile telephone network an updating signal uncorrelated to any mobile station phone call establishment that identifies the mobile station's presence in the special area (col. 3, lines 64-col. 4, lines 1-5; col. 4, lines 39-52; when the FMC supported terminal 1 succeeds in receiving the control signal from the fixed network AP2 (i.e., defining device), the FMC supported terminal transmits a notification (i.e., updating signal) to the charging server (i.e., server of presence related services), the charging server receiving the notification regards the FMC supported terminal as locating inside the home (i.e., special area)),

the provider of presence related services being different than the mobile telephone network (Fig. 1; charging server 7 is different than the mobile network 5);

and storing in the one or more servers a parameters database having an operating parameter (Fig. 3; col. 6, lines 43-50; col. 6, lines 65-col. 7, lines 1-3; the charging server includes a charging database that stores charging information (i.e., parameters) for the terminal 1, the connection fee for the fixed network (i.e., special area) and connection fee for the mobile network) whose value is determined at least in part by the updating signal received from the mobile station (col. 4, lines 44-59; col. 8, lines 8-14when the charging receives the notification (i.e., updating signal) from terminal 1, the charging server charges the terminal 1 for the fixed network connection fee (i.e., value)).

But, Ninagawa does not particularly disclose determining when the mobile station is switched off; and upon determining that the mobile station is switched off setting the value of the operating parameter to an initial value.

However, in the same field of invention, Atorf teaches determining when the mobile station is switched off; and upon determining that the mobile station is switched off setting the value of the operating parameter to an initial value (p.[0004], [0029]; when the mobile telephone is within the fixed device, the mobile telephone transmits a signal to the base station indicating that is within the fixed device and the base station switches from “rate 1” (i.e., initial value) to “rate 2”, when the base station no longer receives the signal from the mobile terminal, the base station determines that the mobile telephone is no longer within the range of the fixed device or is switched off from the fact that the signal from the mobile terminal is no longer received (see p. [0030]), in that case the rate is preferably switched to the mobile radio rate/rate 1 (i.e., initial

value). Therefore, it would have been obvious to a person having ordinary skill in the art at the time that the invention was made, to modify Ninagawa with the teachings of Atorf, since such a modification would allow the system to dynamically change the charging rate of the mobile station when it is determined that the mobile station is no longer in range or serviced by a fixed network device (i.e., special area).

Regarding claim 2, the combination of Ninagawa and Atorf discloses the method according to claim 1, wherein the operating parameter is a tariff flag or a service flag that enables or disables a special tariff or a service for the mobile station (Atorf – p. [0030]-[0031]).

6. **Claims 3 and 4** are rejected under pre-AIA 35 U.S.C. 103(a) as being unpatentable over NINAGAWA in view of TOEROE (US 8,019,364).

Regarding claim 3, Ninagawa discloses a method associated with the use of a mobile station that stores and uses checking data to determine whether or not a defining signal received from a radio communication defining device is a distinctive defining signal (col. 4, lines 1-5; col. 6, lines 7-20; the FMC supported terminal (i.e., mobile station) recognizes the AP2 that defines the Fixed Network 3 based on the identifier (i.e., checking data) received from AP which has been previously stored on the FMC supported terminal), the distinctive defining signal at least partly defining a special area by its coverage (col. 1, lines 54-58; col. 4, lines 1-5; col. 4, lines 48-59; the AP2 periodically sends out control signals that includes the identifier that identifies the fixed network coverage inside the home (i.e., special area)), the method comprising:

sending from the mobile station to at least one server of a provider of presence related services an updating signal via a mobile telephone network uncorrelated to any mobile station

phone call establishment that identifies the mobile station's presence in the special area, the updating signal being indicative of the mobile station's presence in the special area (col. 3, lines 64-col. 4, lines 1-5; col. 4, lines 39-52; when the FMC supported terminal 1 succeeds in receiving the control signal from the fixed network AP2 (i.e., defining device), the FMC supported terminal transmits a notification (i.e., updating signal) to the charging server (i.e., server of presence related services), the charging server receiving the notification regards the FMC supported terminal as locating inside the home (i.e., special area)), the provider of presence related services being different than the mobile telephone network (Fig. 1; charging server 7 is different than the mobile network 5).

But, Ninagawa does not particularly disclose receiving in the mobile station from the at least one server of the provider of presence related services an acknowledgement of a reception of the updating signal.

However, in the field of wireless communications, Toeroe teaches receiving an acknowledgment in response to the reception of a signal at server (col. 1, lines 24-36; the sending node (i.e., mobile station) sends a message to a receiving node (i.e, server) and awaits for an acknowledgement signal to verify that the message/notification was received). Therefore, it would have been obvious to a person having ordinary skill in the art at the time that the invention was made, to modify Ninagawa with the teachings of Toeroe, in order to provide feedback to the sender on whether the updating signal has been received.

Regarding claim 4, the combination of Ninagawa and Toeroe disclose the method according to claim 3, further comprising the mobile station retransmitting the updating signal upon not receiving the acknowledgement from the at least one server (Toeroe; col. 1, lines 24-

36; if acknowledgement is not received, the message is retransmitted). Therefore, it would have been obvious to a person having ordinary skill in the art at the time that the invention was made, to modify Ninagawa with the teachings of Toeroe, in order to guarantee delivery of the updating signal.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MARISOL FIGUEROA whose telephone number is (571)272-7840. The examiner can normally be reached on M-F 8:30 a.m.-5:00 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jinsong Hu can be reached on (571)272-3965. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/MARISOL FIGUEROA/
Primary Examiner, Art Unit 2643

Notice of References Cited	Application/Control No. 14/738,350	Applicant(s)/Patent Under Reexamination PÉREZ LAFUENTE, CARLOS A	
	Examiner MARISOL FIGUEROA	Art Unit 2643	Page 1 of 1

U.S. PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Name	CPC Classification	US Classification
*	A	US-8,737,996 B2	05-2014	Ninagawa; Takayasu	H04W36/30	455/405
*	B	US-8,019,364 B2	09-2011	Toeroe; Maria	H04L12/5875	379/88.25
	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 Country Code-Number-Kind Code	Date MM-YYYY	Country	Name	CPC Classification
	N					
	O					
	P					
	Q					
	R					
	S					
	T					

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.

Index of Claims	Application/Control No.	Applicant(s)/Patent Under Reexamination
	14738350	PÉREZ LAFUENTE, CARLOS A.
	Examiner	Art Unit
	MARISOL FIGUEROA	2643

✓	Rejected	-	Cancelled	N	Non-Elected	A	Appeal
=	Allowed	÷	Restricted	I	Interference	O	Objected

☐ Claims renumbered in the same order as presented by applicant ☐ CPA ☐ T.D. ☐ R.1.47

CLAIM		DATE								
Final	Original	07/24/2015	11/15/2015	04/25/2016						
	1	✓	✓	✓						
	2	✓	✓	✓						
	3	✓	✓	✓						
	4	✓	✓	✓						
	5	✓	-	-						
	6	✓	-	-						

EAST Search History

EAST Search History (Prior Art)

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
S4	2	S2 and special near3 area	US-PGPUB; USPAT; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2016/04/07 15:07
S5	40	(broadcast$4 transmi$4 send$4) near3 (identification identifier identify$4) same special near3 area	US-PGPUB; USPAT; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2016/04/07 15:08
S7	115	(broadcast$4 transmi$4 send$4) near3 (identification identifier identify$4) same (special lower) near3 (rate tariff)	US-PGPUB; USPAT; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2016/04/07 15:14
S8	17	S7 and "455".clas.	US-PGPUB; USPAT; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2016/04/07 15:14
S10	0	(adverts$6) with (special lower) near3 (rate tariff billing near3 (zone area)) same (short near3 (range distance) wifi "802.11" access near3 point AP DECT cordless near3 transmitter)	US-PGPUB; USPAT; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2016/04/07 15:20
S11	11	(advertis$6) with (special lower) near3 (rate tariff billing near3 (zone area)) same (short near3 (range distance) wifi "802.11" access near3 point AP DECT cordless near3 transmitter)	US-PGPUB; USPAT; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2016/04/07 15:21
S13	75	(advertis$6 notify$4 alert$4 notification inform$4) with (reduced special lower) near3 (rate tariff billing near3 (zone area) cost charges) same (short near3 (range distance) wifi "802.11" access near3 point AP DECT cordless near3 transmitter bluetooth)	US-PGPUB; USPAT; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2016/04/07 15:29
S14	64	S13 not S11	US-PGPUB; USPAT; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2016/04/07 15:29
S15	0	S14 and 455/405-406.ccls.	US-PGPUB;	OR	ON	2016/04/07

			USPAT; FPRS; EPO; JPO; DERWENT; IBM_TDB			15:29
S16	14	S14 and "455".clas.	US-PGPUB; USPAT; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2016/04/07 15:29
S18	4	(advertis$6 notify$4 alert$4 notification inform$4) with (home near2 (zone rate)) same (short near3 (range distance) wifi "802.11" access near3 point AP DECT cordless near3 transmitter bluetooth)	US-PGPUB; USPAT; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2016/04/07 15:34
S19	105	(identify$4 identifier id) with (reduced special lower) near3 (rate tariff billing near3 (zone area) cost charges) same (short near3 (range distance) wifi "802.11" access near3 point AP DECT cordless near3 transmitter bluetooth)	US-PGPUB; USPAT; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2016/04/07 15:35
S20	15	S19 and "455".clas.	US-PGPUB; USPAT; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2016/04/07 15:36
S24	111	(beacon transmi$4) with (alert$4 inform$4 advertis$4 notif$7) same (rate tariff fee) near4 (mobile wireless cellular) near4 (network service)	US-PGPUB; USPAT; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2016/04/07 15:42
S25	1	(transmitter beacon) with (inform$4 identify$4 advertis$6) near4 (tariff (charging billing) near4 rate cost) same (mobile wireless cellular) near4 network same (area home location zone)	US-PGPUB; USPAT; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2016/04/07 15:50
S26	13	(transmitter beacon) with (inform$4 identify$4 advertis$6) near4 (tariff (charging billing) near4 rate cost) same (area home location zone)	US-PGPUB; USPAT; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2016/04/07 15:54
S27	0	(transmitter beacon) with (inform$4 identify$4 advertis$6) with special near4 (tariff (charging billing) near4 rate cost) same (area home location zone)	US-PGPUB; USPAT; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2016/04/07 15:55
S28	25	(inform$4 identify$4 advertis$6) with special near4 (tariff (charging billing) near4 rate cost) same (area home location zone)	US-PGPUB; USPAT; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2016/04/07 15:57
S30	37	(transmitter beacon tag AP access near3	US-PGPUB;	OR	ON	2016/04/07

		point) same special near4 (tariff (charging billing) near4 rate cost fee) same (area home location zone)	USPAT; FPRS; EPO; JPO; DERWENT; IBM_TDB			16:01
S33	0	register$4 near4 (special near4 (rate tariff) near4 (zone area)) same (mobile wireless portable) near4 (phone telephone station device terminal)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2016/04/07 16:12
S34	5	(record$4 register$4 stor$4) with (special near4 (rate tariff) near4 (zone area)) same (mobile wireless portable) near4 (phone telephone station device terminal)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2016/04/07 16:13
S35	8	(record$4 register$4 stor$4) with (special near4 (rate tariff) near4 (zone area location cell)) same (mobile wireless portable) near4 (phone telephone station device terminal)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2016/04/07 16:13
S39	1096	(recogniz$4 detect$4) with special near2 (rate area zone)	US-PGPUB; USPAT; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2016/04/08 13:03
S40	14	S39 and cheaper near2 rate	US-PGPUB; USPAT; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2016/04/08 13:04
S41	962	(recogniz$4 detect$4) with distinctive near3 signal	US-PGPUB; USPAT; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2016/04/08 13:05
S45	3	(recogniz$4 detect$4) with distinctive near3 signal with (id identifier code) same (transmitter AP access near3 point beacon)	US-PGPUB; USPAT; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2016/04/08 13:08
S47	6596	(recogniz$4 detect$4) near6 signal with (id identifier code) same (wireless short near3 range bluetooth dect "802.11" wifi)	US-PGPUB; USPAT; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2016/04/08 13:09
S48	2244	S47 same (stor$4 record$4 register$4)	US-PGPUB; USPAT; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2016/04/08 13:10

EAST Search History (Interference)

<This search history is empty>

4/25/2016 3:29:55 PM
C:\Users\mfigueroa\Documents\EAST\Workspaces\14738256.wsp

Search Notes	Application/Control No.	Applicant(s)/Patent Under Reexamination
	14738350	PÉREZ LAFUENTE, CARLOS A.
	Examiner	Art Unit
	JEAN CHANG	2643

CPC- SEARCHED		
Symbol	Date	Examiner

CPC COMBINATION SETS - SEARCHED		
Symbol	Date	Examiner

US CLASSIFICATION SEARCHED			
Class	Subclass	Date	Examiner
455	456.3, 555, 408, 432.2, 406, 458, 414.1, 456.1, 433	7/25/2015	jc
455	456.3, 555, 408, 432.2, 406, 458, 414.1, 456.1, 433	11/15/2015	jc

SEARCH NOTES		
Search Notes	Date	Examiner
inventor search and text search on East databases for monitor track enter exit special limited discount service area zone mobile wireless device	7/25/2015	jc
update inventor and text search on East database	11/15/2015	jc
Updating EAST keyword search.	11/25/2016	MF

INTERFERENCE SEARCH			
US Class/ CPC Symbol	US Subclass / CPC Group	Date	Examiner

Doc code: RCEX
Doc description: Request for Continued Examination (RCE)

PTO/SB/30EFS (07-09)
Approved for use through 07/31/2012. 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.

REQUEST FOR CONTINUED EXAMINATION(RCE)TRANSMITTAL
(Submitted Only via EFS-Web)

Application Number	14/738,350	Filing Date	2015-06-12	Docket Number (if applicable)	0572.0001C3	Art Unit	2643
First Named Inventor	Carlos A. Perez Lafuente			Examiner Name	Jean Chang		

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. The Instruction Sheet for this form is located at WWW.USPTO.GOV

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).

☐ 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.

- ☐ Consider the arguments in the Appeal Brief or Reply Brief previously filed on _____
- ☐ Other _____

☒ Enclosed

- ☒ Amendment/Reply
- ☐ Information Disclosure Statement (IDS)
- ☐ Affidavit(s)/ Declaration(s)
- ☐ Other _____

MISCELLANEOUS

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

☐ Other _____

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 any underpayment of fees, or credit any overpayments, to Deposit Account No 050460

SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT REQUIRED

☒ Patent Practitioner Signature

Applicant Signature

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Signature of Registered U.S. Patent Practitioner			
Signature	/Tim L. Kitchen/	Date (YYYY-MM-DD)	2016-03-23
Name	Tim L. Kitchen	Registration Number	41900

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.

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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.

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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 inspections 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.

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Application No.	:	14/738,350
First Named Inventor	:	Carlos A. Perez Lafuente
Confirmation No.	:	9146
Filed	:	June 12, 2015
TC/A.U.	:	2643
Examiner	:	Jean Chang
Customer No.	:	27896
Docket No.	:	0572.0001C3
Title	:	METHOD AND SYSTEM FOR MONITORING A MOBILE STATION PRESENCE IN A SPECIAL AREA

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

RESPONSE TO FINAL OFFICE ACTION

Dear Madam:

In response to the Final Office Action dated November 23, 2015, Applicant herewith petitions the Director of the United States Patent and Trademark Office for a One Month Extension of Time to extend the time for reply from February 23, 2016 to March 23, 2016. The fee for this extension is submitted herewith. Please enter the attached RCE pursuant to 37 CFR 1.114, and consider the response as follows:

The Listing of the Claims begins on page 2 of this paper.

Remarks begin on page 4 of this paper.

Listing of Claims:

1. (Previously Presented) A method associated with a provider of presence related services and a mobile station that stores in a memory checking data and uses the checking data to determine whether or not a defining signal received from a radio communication defining device is a distinctive defining signal, the distinctive defining signal at least partly defines a special area by its coverage, the method comprising:

one or more servers of a provider of presence related services receiving from the mobile station via a mobile telephone network an updating signal uncorrelated to any mobile station phone call establishment that identifies the mobile station´s presence in the special area, the provider of presence related services being different than the mobile telephone network; and

storing in the one or more servers a parameters database having an operating parameter whose value is determined at least in part by the updating signal received from the mobile station,

determining when the mobile station is switched off; and

upon determining that the mobile station is switched off setting the value of the operating parameter to an initial value.

2. (Original) The method according to claim 1, wherein the operating parameter is a tariff flag or a service flag that enables or disables a special tariff or a service for the mobile station.

3. (Previously Presented) A method associated with the use of a mobile station that stores and uses checking data to determine whether or not a defining signal received from a radio communication defining device is a distinctive defining signal, the distinctive defining signal at least partly defines a special area by its coverage, the method comprising:

sending from the mobile station to at least one server of a provider of presence related services an updating signal via a mobile telephone network uncorrelated to any mobile station phone call establishment that identifies the mobile station´s presence in the special area, the updating signal being indicative of the mobile station´s presence in the special area, the provider of presence related services being different than the mobile telephone network; and

receiving in the mobile station from the at least one server of the provider of presence related services an acknowledgement of a reception of the updating signal.

4. (Original) The method according to claim 3, further comprising the mobile station retransmitting the updating signal upon not receiving the acknowledgement from the at least one server.

5. (Previously Cancelled)

6. (Previously Cancelled)

REMARKS

No claims have been amended, added or cancelled. Accordingly, claims 1-4 remain pending in the application. Favorable reconsideration of the application and allowance of all the claims are respectfully requested in view of the following remarks.

Claim Rejections – 35 USC §112

Claims 1-4 stand rejected under pre-AIA 35 U.S.C. § 112, second paragraph as being indefinite for failing to particularly point out and distinctly claim the subject matter which the applicant regards as the invention.

The totality of the Examiner's rejection is reproduced below:

> The independent claim 1 recites the limitation of *"one or more servers of a provider of presence related services receiving from the mobile station via the mobile telephone network an updating signal* ***uncorrelated to*** *any mobile station phone call establishment that identifies the mobile station's presence in the special area, the provider of presence related services* ***being different than*** *the mobile telephone network"* which has negative disclosure that is not clearly defined, therefore, as being indefinite for failing to particularly point out and distinctly claim the subject matter which the applicant regards as the invention. Similarly, the independent claim 3 recites the limitation of "*sending from the mobile station to at least one server of a provider of presence related services an updating signal via a mobile telephone network* ***uncorrelated to*** *any mobile station phone call establishment that identifies the mobile station's presence in the special area, ... the provider of presence related services* ***being different than*** *the mobile telephone network"* which has negative disclosure that is not clearly defined, therefore, as being indefinite for failing to particularly point out and distinctly claim the subject matter which the applicant regards as the invention.

The rejection is improper for failing to provide a prima facie case of indefiniteness. *In re Packard*, 751 F.3d 1307, (1311-13) (Fed.Cir. 2014) provides that a prima facie case by the USPTO is required in cases dealing with indefiniteness and requires that the USPTO explain adequately the shortcomings it perceives so that the applicant is properly notified and able to respond. The burden does not shift to the applicant until a prima facie case with evidence and/or argument is provided by the USPTO. *In re Packard* states in part that "[t]he USPTO must be

able to make the congressionally created examination process work so that it fulfills its purpose of producing patents whose claims meet the statutory standards. We earlier approved a procedural mechanism for the USPTO to use in doing this, which we refer to as the "prima facie case." *See In re Piasecki,* 745 F.2d 1468 (Fed.Cir. 1984). "In the prosecution of a patent, the initial burden falls on the PTO [examiner] to set forth the basis for any rejection." *Hyatt v. Dudas,* 492 F.3d 1365, 1369-70 (Fed.Cir. 2007). The USPTO thus meets its obligation to explain adequately the shortcomings it perceives so that the applicant is properly notified and able to respond. "Once the applicant is so notified, the burden shifts to the applicant to rebut the prima facie case with evidence and/or argument." *Id."*

In regard to indefiniteness, the MPEP § 2173.02 states, in part, that "[t]he essential inquiry pertaining to this requirement is whether the claims set out and circumscribe a particular subject matter with a reasonable degree of clarity and particularity." Definiteness of claims is not to be analyzed in a vacuum, but rather in light of:

- (A) The content of the particular application disclosure;
- (B) The teachings of the prior art; and
- (C) The claim interpretation that would be given by one possessing the ordinary level of skill in the pertinent art at the time the invention was made.

(*Id.*). "The test for definiteness under the second paragraph of 35 U.S.C. § 112 is whether 'those skilled in the art would understand what is claimed when the claim is read in light of the specification.' *Orthokinetics, Inc. v. Safety Travel Chairs, Inc.*, 806 F.2d 1565, 1576, 1 USPQ2d 1081, 1088 (Fed. Cir. 1986)" (*Id.*).

The MPEP 2173.02 further states: "The Office action must set forth the specific term or phrase that is indefinite and why the metes and bounds are unclear. Since a rejection requires the applicant to respond by explaining why claim language is definite or by amending the claim, the Office action should provide enough information for the applicant to prepare a meaningful response. "Because claims delineate the patentee's right to exclude, the patent statute requires that the scope of the claims be sufficiently definite to inform the public of the bounds of the

protected invention, i.e., what subject matter is covered by the exclusive rights of the patent." *Halliburton Energy Servs., Inc. v. M-I LLC,* 514 F.3d 1244, 1249, 85 USPQ2d 1654, 1658 (Fed. Cir. 2008). Thus, claims are given their broadest reasonable interpretation during prosecution "to facilitate sharpening and clarifying the claims at the application stage" when claims are readily changed. *In re Buszard,* 504 F.3d 1364, 1366 (Fed. Cir. 2007); see also *In re Yamamoto,* 740 F.2d 1569, 1571 (Fed. Cir. 1984); *In re Zletz,* 893 F.2d 319, 322, 13 USPQ2d 1320, 1322 (Fed. Cir. 1989)."

The MPEP 2173.02 goes on to state: "Accordingly, when rejecting a claim as indefinite under 35 U.S.C. 112(b) or pre-AIA 35 U.S.C. 112, second paragraph, the examiner should provide enough information in the Office action to permit applicant to make a meaningful response, as the indefiniteness rejection requires the applicant to explain or provide evidence as to why the claim language is not indefinite or amend the claim. For example, the examiner should point out the specific term or phrase that is indefinite, explain in detail why such term or phrase renders the metes and bounds of the claim scope unclear and, whenever practicable, indicate how the indefiniteness issues may be resolved to overcome the rejection. See MPEP § 707.07(d)."

In regard to negative claim recitations, the MPEP 2173.05 states: "The current view of the courts is that there is nothing inherently ambiguous or uncertain about a negative limitation. So long as the boundaries of the patent protection sought are set forth definitely, albeit negatively, the claim complies with the requirements of 35 U.S.C. 112(b) or pre-AIA 35 U.S.C. 112, second paragraph." In *In re Barr* the court stated that the real issue is. . .whether the recital sets definite boundaries on the patent protection sought— that is, whether those skilled in the relevant art can determine what the claim does or does not read on.

As is readily apparent in the reproduced indefiniteness rejection above, the Office has failed to provide any evidence or analysis to support its position. The rejections of claims 1-4 are conclusory and contrary to Federal Circuit jurisprudence and the MPEP. The inclusion of negative claim limitations in a claim does not in itself render the claim indefinite, which appears to be the Examiner's position.

As noted above, the MPEP requires that the definiteness of a claim be analyzed in light of:

- (A) The content of the particular application disclosure;
- (B) The teachings of the prior art; and
- (C) The claim interpretation that would be given by one possessing the ordinary level of skill in the pertinent art at the time the invention was made.

In the present case, the Office has provided no such analysis.

In regard to the language "uncorrelated to any mobile station phone call establishment", it is important to note that the current Examiner herself initially endorsed the use of the language in the claims of the parent application serial no. 12/294,641 (now U.S. Patent No. 8,738,040). The Examiner has further repeatedly found the language to be definite in application serial nos. 14/250,517 (now U.S. Patent No. 9,042,910), 14/315,703 (now U.S. Patent No. 8,934,922), 14/561,436 (now U.S. Patent No. 9,119,030) and 14/743,237. Further, in regard to "the provider of presence related services being different than the mobile telephone network", support is unequivocally provided in at least paragraph [0020] of the Detailed Description.

Accordingly, it is respectfully submitted that the35 U.S.C. § 112, second paragraph rejection is improper and respectfully requested that the rejection be withdrawn.

Conclusion

In view of the foregoing, Applicant respectfully requests the Examiner to find the application in condition for allowance with claims 1-4. However, if for any reason the Examiner feels that the application is not now in condition for allowance, the Examiner is respectfully requested to call the undersigned attorney to discuss any unresolved issues and to expedite the disposition of the application.

The Commissioner is hereby authorized to charge payment of any additional fees required for the above-identified application or credit any overpayment to Deposit Account No. 05-0460.

Dated: March 23, 2016

Respectfully submitted by:

/Tim L. Kitchen/
Tim L. Kitchen
Reg. No. 41,900

EDELL, SHAPIRO & FINNAN, LLC
CUSTOMER NO. 27896
9801 Washingtonian Blvd., Suite 750
Gaithersburg, MD 20878
(301) 424-3640

Electronic Patent Application Fee Transmittal

Application Number:	14738350
Filing Date:	12-Jun-2015
Title of Invention:	METHOD AND SYSTEM FOR MONITORING A MOBILE STATION PRESENCE IN A SPECIAL AREA
First Named Inventor/Applicant Name:	Carlos A. Pérez LaFuente
Filer:	Tim L. Kitchen
Attorney Docket Number:	0572.0001C3

Filed as Small Entity

Filing Fees for Utility under 35 USC 111(a)

Description	Fee Code	Quantity	Amount	Sub-Total in USD($)
Basic Filing:				
Pages:				
Claims:				
Miscellaneous-Filing:				
Petition:				
Patent-Appeals-and-Interference:				
Post-Allowance-and-Post-Issuance:				
Extension-of-Time:				

Description	Fee Code	Quantity	Amount	Sub-Total in USD($)
Extension - 1 month with $0 paid	2251	1	100	100
Miscellaneous:				
Request for Continued Examination	2801	1	600	600
		Total in USD ($)		**700**

Electronic Acknowledgement Receipt	
EFS ID:	25268223
Application Number:	14738350
International Application Number:	
Confirmation Number:	9146
Title of Invention:	METHOD AND SYSTEM FOR MONITORING A MOBILE STATION PRESENCE IN A SPECIAL AREA
First Named Inventor/Applicant Name:	Carlos A. Pérez LaFuente
Customer Number:	27896
Filer:	Tim L. Kitchen
Filer Authorized By:	
Attorney Docket Number:	0572.0001C3
Receipt Date:	23-MAR-2016
Filing Date:	12-JUN-2015
Time Stamp:	09:38:30
Application Type:	Utility under 35 USC 111(a)

Payment information:

Submitted with Payment	yes
Payment Type	Credit Card
Payment was successfully received in RAM	$700
RAM confirmation Number	7835
Deposit Account	
Authorized User	
The Director of the USPTO is hereby authorized to charge indicated fees and credit any overpayment as follows:	

File Listing:

Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1	Request for Continued Examination (RCE)	RCExml.pdf	819974 187f04221b69cd9c8084e4688483f861bc09d775	no	3
Warnings:					
Information:					
2	Amendment Submitted/Entered with Filing of CPA/RCE	AmdAFAsFiled.pdf	196609 c23b718d131c02e7da4f56f0ac77546b66b0ed06	no	8
Warnings:					
Information:					
3	Fee Worksheet (SB06)	fee-info.pdf	32494 d9e4c66246f6bae6105de7599544965c4e9ebe0d	no	2
Warnings:					
Information:					
		Total Files Size (in bytes):	1049077		

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.

<u>New Applications Under 35 U.S.C. 111</u>
If a new application is being filed and the application includes the necessary components for a 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.

<u>National Stage of an International Application under 35 U.S.C. 371</u>
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.

<u>New International Application Filed with the USPTO as a Receiving Office</u>
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PTO/SB/06 (09-11)
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U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
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PATENT APPLICATION FEE DETERMINATION RECORD Substitute for Form PTO-875	Application or Docket Number 14/738,350	Filing Date 06/12/2015	☐ To be Mailed

ENTITY: ☐ LARGE ☒ SMALL ☐ MICRO

APPLICATION AS FILED – PART I

FOR	(Column 1) NUMBER FILED	(Column 2) NUMBER EXTRA	RATE ($)	FEE ($)
☐ BASIC FEE (37 CFR 1.16(a), (b), or (c))	N/A	N/A	N/A	
☐ SEARCH FEE (37 CFR 1.16(k), (i), or (m))	N/A	N/A	N/A	
☐ EXAMINATION FEE (37 CFR 1.16(o), (p), or (q))	N/A	N/A	N/A	
TOTAL CLAIMS (37 CFR 1.16(i))	minus 20 =	*	X $ =	
INDEPENDENT CLAIMS (37 CFR 1.16(h))	minus 3 =	*	X $ =	
☐ APPLICATION SIZE FEE (37 CFR 1.16(s))	If the specification and drawings exceed 100 sheets of paper, the application size fee due is $310 ($155 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	

APPLICATION AS AMENDED – PART II

AMENDMENT		(Column 1) CLAIMS REMAINING AFTER AMENDMENT		(Column 2) HIGHEST NUMBER PREVIOUSLY PAID FOR	(Column 3) PRESENT EXTRA	RATE ($)	ADDITIONAL FEE ($)
	Total (37 CFR 1.16(i))	*	Minus	**	=	X $ =	
	Independent (37 CFR 1.16(h))	*	Minus	***	=	X $ =	
	☐ Application Size Fee (37 CFR 1.16(s))						
	☐ FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))						
						TOTAL ADD'L FEE	

AMENDMENT	03/23/2016	(Column 1) CLAIMS REMAINING AFTER AMENDMENT		(Column 2) HIGHEST NUMBER PREVIOUSLY PAID FOR	(Column 3) PRESENT EXTRA	RATE ($)	ADDITIONAL FEE ($)
	Total (37 CFR 1.16(i))	* 4	Minus	** 20	= 0	X $40 =	0
	Independent (37 CFR 1.16(h))	* 2	Minus	*** 3	= 0	X $210 =	0
	☐ Application Size Fee (37 CFR 1.16(s))						
	☐ FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))						
						TOTAL ADD'L FEE	**0**

* 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.

LIE
/Chantae Dessau/

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.**

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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

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
14/738,350	06/12/2015	Carlos A. Pérez LaFuente	0572.0001C3	9146

27896 7590 11/23/2015

EDELL, SHAPIRO & FINNAN, LLC
9801 Washingtonian Blvd.
Suite 750
Gaithersburg, MD 20878

EXAMINER
CHANG, JEAN

ART UNIT	PAPER NUMBER
2643	

NOTIFICATION DATE	DELIVERY MODE
11/23/2015	ELECTRONIC

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

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

epatent@usiplaw.com

Office Action Summary	Application No. 14/738,350	Applicant(s) PÉREZ LAFUENTE, CARLOS A.	
	Examiner JEAN CHANG	Art Unit 2643	AIA (First Inventor to File) Status No

-- 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 MONTHS 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 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 *10/21/2015*.

☐ A declaration(s)/affidavit(s) under **37 CFR 1.130(b)** was/were filed on _____.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ An election was made by the applicant in response to a restriction requirement set forth during the interview on _____; the restriction requirement and election have been incorporated into this action.

4)☐ 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*

5)☒ Claim(s) *1-4* is/are pending in the application.

5a) Of the above claim(s) _____ is/are withdrawn from consideration.

6)☐ Claim(s) _____ is/are allowed.

7)☒ Claim(s) *1-4* is/are rejected.

8)☐ Claim(s) _____ is/are objected to.

9)☐ Claim(s) _____ are subject to restriction and/or election requirement.

* If any claims have been determined allowable, you may be eligible to benefit from the **Patent Prosecution Highway** program at a participating intellectual property office for the corresponding application. For more information, please see http://www.uspto.gov/patents/init_events/pph/index.jsp or send an inquiry to PPHfeedback@uspto.gov.

Application Papers

10)☐ The specification is objected to by the Examiner.

11)☐ 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).

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).

Certified copies:

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)).

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

Attachment(s)

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

2) ☐ Information Disclosure Statement(s) (PTO/SB/08a and/or PTO/SB/08b) Paper No(s)/Mail Date _____.

3) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .

4) ☐ Other: _____.

DETAILED ACTION

1. The present application is being examined under the pre-AIA first to invent provisions.

Response to Amendment

2. The applicant's amendments, filed on Oct. 21, 2015, have been considered and have overcome prior art rejections.

Claim Rejections - 35 USC § 112

The following is a quotation of 35 U.S.C. 112 (pre-AIA), second paragraph:
The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 1-4 are rejected under 35 U.S.C. 112(b) or 35 U.S.C. 112 (pre-AIA), second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which the inventor or a joint inventor, or for pre-AIA the applicant regards as the invention. The independent claim 1 recites the limitation of "*one or more servers of a provider of presence related services receiving from the mobile station via a mobile telephone network an updating signal* ***uncorrelated to*** *any mobile station phone call establishment that identifies the mobile station's presence in the special area, the provider of presence related services* ***being different than*** *the mobile telephone network"* which has negative disclosure that is not clearly defined, therefore, as being indefinite for failing to particularly point out and distinctly claim the subject matter which the applicant regards as the invention. Similarly, the independent claim 3 recites the limitation of "*sending from the mobile station to at least one server of a provider of*

presence related services an updating signal via a mobile telephone network ***uncorrelated to*** *any mobile station phone call establishment that identifies the mobile station's presence in the special area, … the provider of presence related services* ***being different than*** *the mobile telephone network"* which has negative disclosure that is not clearly defined, therefore, as being indefinite for failing to particularly point out and distinctly claim the subject matter which the applicant regards as the invention.

Conclusion

4. **THIS ACTION IS MADE FINAL.** See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jean Chang whose telephone number is (571) 270-7979. The examiner can normally be reached on Mon-Thursday from

9:00-5:00. If attempts to reach the examiner by telephone are unsuccessful, the examiner's Supervisor, Jinsong Hu can be reached on (571) 272-3965. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Jean Chang/

Examiner, Art Unit 2643

/JINSONG HU/

Supervisory Patent Examiner, Art Unit 2643

Index of Claims	Application/Control No.	Applicant(s)/Patent Under Reexamination
	14738350	PÉREZ LAFUENTE, CARLOS A.
	Examiner	Art Unit
	JEAN CHANG	2643

✓	Rejected	-	Cancelled	N	Non-Elected	A	Appeal
=	Allowed	÷	Restricted	I	Interference	O	Objected

☐ Claims renumbered in the same order as presented by applicant ☐ CPA ☐ T.D. ☐ R.1.47

CLAIM		DATE								
Final	Original	07/24/2015	11/15/2015							
	1	✓	✓							
	2	✓	✓							
	3	✓	✓							
	4	✓	✓							
	5	✓	-							
	6	✓	-							

EAST Search History

EAST Search History (Prior Art)

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L1	61	"lafuente, carlos".inv.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2015/11/15 23:13
L2	42988	455/456.4.ccls. or 455/555.ccls. or 455/408.ccls. or 455/432.2.ccls. or 455/406.ccls. or 455/458.ccls. or 455/414.1.ccls. or 455/446.ccls. or 455/456.1.ccls. or 455/433.ccls.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2015/11/15 23:13
L3	171	(mobile or wireless) (station or device or terminal) and (activat$3 or enabl$3 or trigger3 or deactivat$3 or updat$4) same (enter$3 or exit) near20 (special or discount or limited or home) (area or service or zone)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2015/11/15 23:15
L4	14	l3 and l1	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2015/11/15 23:15
L5	40	l3 and l2	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2015/11/15 23:15
S1	29	"6334052"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2011/09/26 17:50
S2	5	"6785536"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2011/09/26 17:55
S3	20	"6826414"	US-PGPUB;	ADJ	ON	2011/09/26

			USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB			17:56
S4	4	"20020094801"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2011/09/28 08:40
S5	4	"2000027152"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2011/09/28 08:42
S6	4	"7212804"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2011/09/28 08:44
S7	3	"20080004045"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2011/09/28 09:17
S8	3	"20030092450"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2011/09/28 09:20
S9	14589	(special or distint or different or preferred or discount) near10 (service or tarrif or rate) near10 (area or coverage)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2011/09/28 09:27
S10	2969	(special or distint or different or preferred or discount) near10 (service or tarrif or rate) near10 (area or coverage) same (signal or code or identifier or identification or parameter or flag)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2011/09/28 09:29
S11	607	(special or distint or different or preferred or discount) near10 (service or tarrif or rate) near10 (area or coverage) same (signal or code or identifier or identification or parameter or flag) same ((base station) or cell or	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT;	ADJ	ON	2011/09/28 09:30

		AP)	IBM_TDB			
S12	236	(special or distint or different or preferred or discount) near10 (service or tarrif or rate) near10 (area or coverage) same (signal or code or identifier or identification or parameter or flag) same ((base station) or cell or AP) and monitor	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2011/09/28 09:30
S13	308	(special or distint or different or preferred or discount) near10 (service or tarrif or rate) near10 (area or coverage) same (signal or code or identifier or identification or parameter or flag) same ((base station) or cell or AP) and (monitor or presence)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2011/09/28 09:31
S14	52	(special or distint or different or preferred or discount) near10 (service or tarrif or rate) near10 (area or coverage) same (signal or code or identifier or identification or parameter or flag) same ((base station) or cell or AP) and (monitor or presence) and multimedia	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2011/09/28 09:31
S15	1006	(special or distint or different or preferred or discount) near20 (service or tarrif or rate or billing or charg$3 or zone) near20 (area or coverage) same (signal or code or identifier or identification or parameter or flag) same ((base station) or cell or AP)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2011/09/28 10:44
S16	399	S15 not S11	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2011/09/28 10:44
S17	16	S16 and special service	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2011/09/28 10:45
S18	18	S16 and (special or distinct) (service or zone)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2011/09/28 10:45
S19	19	S16 and (special or distinct) (service or zone or area)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2011/09/28 10:45
S20	313	455/456.4.ccls.	US-PGPUB; USPAT; USOCR;	ADJ	ON	2011/09/28 10:48

			FPRS; EPO; JPO; DERWENT; IBM_TDB			
S21	6	"lafuente, carlos".inv.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2011/09/28 10:48
S22	1	S20 and S16	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2011/09/28 10:49
S23	16	"6625442"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2011/09/28 10:49
S24	20	"6516193"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2011/09/28 10:52
S25	5	"6785536"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2011/09/30 18:40
S26	6	"6920317"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2011/09/30 18:42
S27	1182	(special or limited or distint or different or preferred or discount or home) near10 (service or tarrif or rate) near10 (area or coverage or location or zone) same (signal or code or identifier or identification or parameter or flag) same ((base station) or cell or AP or device) same (wireless or mobile) and (monitor or presence)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2012/06/21 10:39
S28	15	(special or limited or distint or different or preferred or discount or home) near10 (service or tarrif or rate) near10 (area or coverage or location or zone) same (signal or code or identifier or identification or parameter or flag) same	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT;	ADJ	ON	2012/06/21 10:44

		((base station) or cell or AP or device) same (wireless or mobile) and (monitor or presence) near10 (mobile or wireless) (station or device or phone) near10 (determin$4 or recogniz$4 or realiz$3 or check$3)	IBM_TDB			
S29	368	455/456.4.ccls.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2012/06/21 11:35
S30	6	"lafuente, carlos".inv.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2012/06/21 11:36
S31	15	(special or limited or distint or different or preferred or discount or home) near10 (service or tarrif or rate) near10 (area or coverage or location or zone) same (signal or code or identifier or identification or parameter or flag) same ((base station) or cell or AP or device) same (wireless or mobile) and (monitor or presence) near10 (mobile or wireless) (station or device or phone) near10 (determin$4 or recogniz$4 or realiz$3 or check$3)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2012/06/21 11:36
S32	0	S31 and S29	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2012/06/21 11:36
S33	18	(special or limited or distint or different or preferred or discount or home) near10 (service or tarrif or rate) near10 (area or coverage or location or zone) same (signal or code or identifier or identification or parameter or flag) same ((base station) or cell or AP or device) same (wireless or mobile) and (monitor or presence) near10 (mobile or wireless) (station or device or phone) near10 (determin$4 or recogniz$4 or realiz$3 or check$3)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2012/06/25 01:08
S34	6	"lafuente, carlos".inv.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2012/06/25 01:10
S35	1	S33 and S34	US-PGPUB; USPAT; USOCR; FPRS;	ADJ	ON	2012/06/25 01:10

			EPO; JPO; DERWENT; IBM_TDB			
S36	1	"12294641"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2012/06/25 18:36
S37	771	(mobile or wireless or electronic or communication) (station or device or phone or terminal or equipment) near10 (presence or enter$4 or exit$4 or leav$4 or detect$4 or identify$4 or determin$4 or recogniz$4 or realiz$3 or check$3) near10 (special or limited or distint or different or preferred or discount or home) near10 ((service or tarrif or rate) or (area or coverage or location or zone)) same (send$4 or transmit$5 or transmi$6) near10 (signal or code or identifier or identification or parameter or flag or messag$3) same ((base station) or cell or AP or device)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2013/06/01 12:34
S38	211	(mobile or wireless or electronic or communication) (station or device or phone or terminal or equipment) near10 (presence or enter$4 or exit$4 or leav$4 or detect$4 or identify$4 or determin$4 or recogniz$4 or realiz$3 or check$3) near10 (special or limited or distint or different or preferred or discount or home) near5 ((service or tarrif or rate) or (area or coverage or location or zone)) near10 (send$4 or transmit$5 or transmi$6) near10 (signal or code or identifier or identification or parameter or flag or messag$3) near10 ((base station) or cell or AP or device or network)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2013/06/01 12:38
S39	150	(mobile or wireless or electronic or communication) (station or device or phone or terminal or equipment) near10 (presence or enter$4 or exit$4 or leav$4 or detect$4 or identify$4 or determin$4 or recogniz$4 or realiz$3 or check$3) near10 (special or limited or distint or different or preferred or discount or home) near5 ((service or tarrif or rate) or (area or coverage or location or zone)) near10 (send$4 or transmit$5 or transmi$6) near10 (signal or code or identifier or identification or parameter or flag or messag$3) near10 ((base station) or cell or AP or device or network)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	OFF	2013/06/01 12:49
S40	1	"12294641"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO;	ADJ	ON	2013/06/01 13:53

			DERWENT; IBM_TDB			
S41	30	(mobile or wireless or electronic or communication) (station or device or phone or terminal or equipment) near10 (enter$4 or exit$4 or leav$4) near10 (special or limited or distint or different or preferred or discount or home) near5 ((service or tarrif or rate) or (area or coverage or location or zone)) near10 (send$4 or transmit$5 or transmi$6) near10 (signal or code or identifier or identification or parameter or flag or messag$3) near10 ((base station) or cell or AP or device or network)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	OFF	2013/06/01 19:14
S42	771	(mobile or wireless or electronic or communication) (station or device or phone or terminal or equipment) near10 (presence or enter$4 or exit$4 or leav$4 or detect$4 or identify$4 or determin$4 or recogniz$4 or realiz$3 or check$3) near10 (special or limited or distint or different or preferred or discount or home) near10 ((service or tarrif or rate) or (area or coverage or location or zone)) same (send$4 or transmit$5 or transmi$6) near10 (signal or code or identifier or identification or parameter or flag or messag$3) same ((base station) or cell or AP or device)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2013/06/01 19:20
S43	106	S42 and (location or zone or area) service	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2013/06/01 19:20
S44	11	(mobile or wireless or electronic or communication) (station or device or phone or terminal or equipment) near10 (presence or enter$4 or exit$4 or leav$4) near10 (special or limited or distint or different or preferred or discount or home) near10 ((service or tarrif or rate) (area or coverage or location or zone)) same (send$4 or transmit$5 or transmi$6) near10 (signal or code or identifier or identification or parameter or flag or messag$3)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2013/06/01 19:29
S45	19	(mobile or wireless or electronic or communication) (station or device or phone or terminal or equipment) near10 (presence or enter$4 or exit$4 or leav$4) near10 (special or limited or distint or different or preferred or discount or home) near10 ((service or tarrif or rate) near5 (area or coverage or location or zone)) same (send$4 or transmit$5 or transmi$6) near10 (signal or code or identifier or identification or parameter or flag or messag$3)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2013/06/01 19:30
S46	81	(mobile or wireless or electronic or	US-PGPUB;	ADJ	ON	2013/06/01

		communication) (station or device or phone or terminal or equipment) near10 (presence or enter$4 or exit$4 or leav$4) near10 (special or limited or distint or different or preferred or discount or home) near10 ((service or tarrif or rate) near5 (area or coverage or location or zone)) and (LBS or (location near6 service))	USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB			19:36
S47	81	(mobile or wireless or electronic or communication) (station or device or phone or terminal or equipment) near10 (presence or enter$4 or exit$4 or leav$4) near10 (special or limited or distint or different or preferred or discount or home) near10 ((service or tarrif or rate) near5 (area or coverage or location or zone)) and (LBS or ((location or geo$6) near6 service))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2013/06/01 19:36
S48	128	(mobile or wireless or electronic or communication) (station or device or phone or terminal or equipment) near10 (presence or enter$4 or exit$4 or leav$4) near10 (special or limited or distint or different or preferred or discount or home) near10 ((service or tarrif or rate) near5 (area or coverage or location or zone))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2013/06/01 19:59
S49	39	(mobile or wireless or electronic or communication) (station or device or phone or terminal or equipment) near10 (presence or enter$4 or exit$4 or leav$4) near10 (special or limited or distint or different or preferred or discount or home) near10 ((service or tarrif or rate) near5 (area or coverage or location or zone)) same (report$4 or send$4 or transmi$5 or notify$6)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2013/06/01 20:01
S50	128	(mobile or wireless or electronic or communication) (station or device or phone or terminal or equipment) near10 (presence or enter$4 or exit$4 or leav$4) near10 (special or limited or distint or different or preferred or discount or home) near10 ((service or tarrif or rate) near5 (area or coverage or location or zone))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2013/06/01 20:05
S51	89	S50 not S49	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2013/06/01 20:07
S52	3	"2008171531"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2013/06/01 22:55
S53	2	"20080171531"	US-PGPUB;	ADJ	ON	2013/06/01

			USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB			22:55
S54	29	(US-20020094801-$ or US-20080004045-$ or US-20030092450-$ or US-20080261604-$ or US-20050148297-$ or US-20050075124-$ or US-20040224682-$ or US-20040192267-$ or US-20100167725-$ or US-20080171531-$).did. or (US-6334052-$ or US-6625442-$ or US-6785536-$ or US-6826414-$ or US-7778652-$ or US-7142869-$ or US-7171189-$ or US-6836653-$ or US-6516193-$ or US-6671506-$ or US-7634255-$ or US-7266366-$ or US-6920317-$ or US-6516190-$).did. or (WO-2007009297-$).did. or (WO-0027152-$ or WO-9858505-$ or WO-2007014714-$ or JP-2000050335-$).did.	US-PGPUB; USPAT; EPO; DERWENT	ADJ	ON	2013/06/01 23:06
S55	9	S54 and (enter$4 or exit$4 or leav$4) same (zone or (service area))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2013/06/01 23:07
S56	3822	(mobile or wireless or electronic or communication) (station or device or phone or terminal or equipment) same (presence or enter$4 or exit$4 or leav$4 or detect$4 or identify$4 or determin$4 or recogniz$4 or realiz$3 or check$3) near10 (special or limited or distint or different or preferred or discount or home) near10 ((service or tarrif or rate) or (area or coverage or location or zone)) same (send$4 or transmit$5 or transmi$6 or report$5 or notify$5)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2013/06/01 23:12
S57	1223	(mobile or wireless or electronic or communication) (station or device or phone or terminal or equipment) same (presence or enter$4 or exit$4 or leav$4 or detect$4 or identify$4 or determin$4 or recogniz$4 or realiz$3 or check$3) near10 (special or limited or distint or different or preferred or discount or home) near10 ((service or tarrif or rate) or (area or coverage or location or zone)) same (send$4 or transmit$5 or transmi$6 or report$5 or notify$5) and (zone or (service area) or LSA)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2013/06/01 23:14
S58	197	S57 and (enter$4 or exit$4) near10 (zone or (service area))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2013/06/01 23:16

S59	6	"lafuente, carlos".inv.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2013/06/02 23:49
S60	22527	455/456.4.ccls. or 455/555.ccls. or 455/408.ccls. or 455/432.2.ccls. or 455/406.ccls. or 455/458.ccls. or 455/414.1.ccls. or 455/446.ccls. or 455/456.1.ccls. or 455/433.ccls.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2013/06/02 23:51
S61	1222	(mobile or wireless or electronic or communication) (station or device or phone or terminal or equipment) same (presence or enter$4 or exit$4 or leav$4 or detect$4 or identify$4 or determin$4 or recogniz$4 or realiz$3 or check$3) near10 (special or limited or distint or different or preferred or discount or home) near10 ((service or tarrif or rate) or (area or coverage or location or zone)) same (send$4 or transmit$5 or transmi$6 or report$5 or notify$5) and (zone or (service area) or LSA)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2013/06/02 23:52
S62	197	S61 and (enter$4 or exit$4) near10 (zone or (service area))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2013/06/02 23:52
S63	0	S62 and S59	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2013/06/02 23:52
S64	59	S62 and S60	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2013/06/02 23:52
S65	1	"12294641"	US-PGPUB; USPAT; EPO; DERWENT	ADJ	ON	2014/01/06 23:30
S66	1	S65 and updating signal	US-PGPUB; USPAT; EPO; DERWENT	ADJ	ON	2014/01/06 23:30
S67	1	S65 and updating signal same (period$5 or enter$4 or exit$4)	US-PGPUB; USPAT; EPO; DERWENT	ADJ	ON	2014/01/06 23:46
S68	1	S65 and updating signal and (period$5	US-PGPUB;	ADJ	ON	2014/01/06

		or enter$4 or exit$4)	USPAT; EPO; DERWENT			23:50
S69	1	S65 and updating signal and (periodically or enter$4 or exit$4)	US-PGPUB; USPAT; EPO; DERWENT	ADJ	ON	2014/01/07 00:31
S70	1	"12294641"	US-PGPUB; USPAT; EPO; DERWENT	ADJ	ON	2014/01/20 18:22
S71	24	"lafuente, carlos".inv.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2014/01/20 19:24
S72	30466	455/456.4.ccls. or 455/555.ccls. or 455/408.ccls. or 455/432.2.ccls. or 455/406.ccls. or 455/458.ccls. or 455/414.1.ccls. or 455/446.ccls. or 455/456.1.ccls. or 455/433.ccls.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2014/01/20 19:25
S73	987	(mobile or wireless or electronic or communication) (station or device or phone or terminal or equipment) same (presence or enter$4 or exit$4 or leav$4 or detect$4 or identify$4 or determin$4 or recogniz$4 or realiz$3 or check$3) near15 (special or limited or distinct$5 or different or preferred or discount or home) near10 ((service or tarrif or rate) or (area or coverage or location or zone)) near20 (send$4 or transmit$5 or transmi$6 or report$5 or notify$5 or signal$4) and (zone or (service area) or LSA)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2014/01/20 19:27
S74	247	(mobile or wireless or electronic or communication) (station or device or phone or terminal or equipment) same (presence or enter$4 or exit$4 or leav$4 or detect$4 or identify$4 or determin$4 or recogniz$4 or realiz$3 or check$3) near15 (special or limited or distinct$5 or different or preferred or discount or home) near10 ((service or tarrif or rate) or (area or coverage or location or zone)) near20 (send$4 or transmit$5 or transmi$6 or report$5 or notify$5 or signal$4) same (memory or stor$4) near10 (data or check$4 or identifier or identification)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2014/01/20 19:32
S75	42	((mobile or wireless or electronic or communication) (station or device or phone or terminal or equipment) same (presence or enter$4 or exit$4 or leav$4 or detect$4 or identify$4 or determin$4 or recogniz$4 or realiz$3 or check$3) near15 (special or limited or distinct$5 or different or preferred or discount or	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2014/01/20 19:34

		home) near10 ((service or tarrif or rate) or (area or coverage or location or zone)) near20 (send$4 or transmit$5 or transmi$6 or report$5 or notify$5 or signal$4) same (memory or stor$4) near10 (data or check$4 or identifier or identification)).clm.				
S76	1	S74 and S71	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2014/01/20 19:34
S77	60	S74 and S72	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2014/01/20 19:34
S78	48	S77 not S75	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2014/01/20 20:05
S79	13	S78 and (special or limited or preferred or discount$4) near5 (area or zone or service)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2014/01/20 20:06
S80	2	(mobile or wireless or electronic or communication) (station or device or phone or terminal or equipment) same (receiv$4) near5 (signal or transmission or broadcast or data) near15 (detect$4 or identify$4 or determin$4 or recogniz$4 or presence) near15 (special or limited or distinct$5 or different or preferred or discount or home) near10 ((service or tarrif or rate) (area or coverage or location or zone)) near20 (send$4 or transmit$5 or transmi$6 or report$5 or notify$5 or signal$4) near10 (periodically or enter$4 or exit$4 or leav$4 or presence) near5 (special or limited or distinct$5 or preferred or discount or home) near10 ((service or tarrif or rate) (area or coverage or location or zone))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2014/01/20 23:05
S81	19	(mobile or wireless or electronic or communication) (station or device or phone or terminal or equipment) same (receiv$4) near5 (signal or transmission or broadcast or data) near30 (detect$4 or identify$4 or determin$4 or recogniz$4 or presence) near20 (special or limited or distinct$5 or different or	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2014/01/20 23:13

		preferred or discount or home) near10 ((service or tarrif or rate) or (area or coverage or location or zone)) near20 (send$4 or transmit$5 or transmi$6 or report$5 or notify$5 or signal$4) near10 (periodically or enter$4 or exit$4 or leav$4 or presence) near10 (special or limited or distinct$5 or preferred or discount or home) near10 ((service or tarrif or rate) or (area or coverage or location or zone))				
S82	24	"lafuente, carlos".inv.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2014/01/20 23:27
S83	30466	455/456.4.ccls. or 455/555.ccls. or 455/408.ccls. or 455/432.2.ccls. or 455/406.ccls. or 455/458.ccls. or 455/414.1.ccls. or 455/446.ccls. or 455/456.1.ccls. or 455/433.ccls.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2014/01/20 23:27
S84	1	S81 and S82	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2014/01/20 23:27
S85	6	S81 and S83	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2014/01/20 23:27
S86	4	((mobile or wireless or electronic or communication) (station or device or phone or terminal or equipment) same (receiv$4) near5 (signal or transmission or broadcast or data) near30 (detect$4 or identify$4 or determin$4 or recogniz$4 or presence) near20 (special or limited or distinct$5 or different or preferred or discount or home) near10 ((service or tarrif or rate) or (area or coverage or location or zone)) near20 (send$4 or transmit$5 or transmi$6 or report$5 or notify$5 or signal$4) near10 (periodically or enter$4 or exit$4 or leav$4 or presence) near10 (special or limited or distinct$5 or preferred or discount or home) near10 ((service or tarrif or rate) or (area or coverage or location or zone))).clm.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2014/01/20 23:30
S93	3	"12294641"	US-PGPUB; USPAT; USOCR; FPRS;	ADJ	ON	2014/09/19 13:31

			EPO; JPO; DERWENT; IBM_TDB			
S94	1	"14250517"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2014/09/19 13:33
S95	56	(statistics or count or measur$5 or track$4) near20 (mobile or wireless) (station or terminal or device) near20 (home or special or desginated) (area or service or zone)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2015/07/23 17:02
S96	0	"14738350"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2015/07/23 17:34
S97	8	"12294641"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2015/07/23 17:35
S98	8	S97 and statistics	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2015/07/23 17:35
S99	0	S97 and statistics same mobile station same use same special area	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2015/07/23 17:35
S100	8	S97 and statistics same mobile station same special area	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2015/07/23 17:36
S101	8	statistics same mobile station same special area	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2015/07/23 17:44
S102	8	statistics same (mobile or wireless) (station or device or terminal) same	US-PGPUB; USPAT;	ADJ	ON	2015/07/23 17:44

		special area	USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB			
S103	13	statistics same (mobile or wireless) (station or device or terminal) same special (area or zone or service)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2015/07/23 17:45
S104	96	(statistics or track$4 or log) same (mobile or wireless) (station or device or terminal) same (special or home) (area or zone or service)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2015/07/23 17:47
S105	63	(statistics or track$4 or log) near30 (mobile or wireless) (station or device or terminal) near30 (special or home) (area or zone or service)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2015/07/23 17:48
S106	82	S104 not S105	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2015/07/23 17:54
S107	104	(statistics or track$4 or log or duration) same (mobile or wireless) (station or device or terminal) same (special or home) (area or zone or service)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2015/07/23 17:57
S108	8	S107 not S104	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2015/07/23 17:57
S109	216	"5642303"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2015/07/23 18:06
S110	422	"6122520"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2015/07/23 18:07

S111	166	"7848765"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2015/07/23 18:08
S112	42	"6516193"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2015/07/25 11:26
S113	12	(mobile or wireless) (station or device or terminal) same (application or software) same (activat$3 or enabl$3 or trigger3 or deactivat$3) same (enter$3 or exit) near20 (special or discount or limited or home) (area or service or zone)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2015/07/25 11:42
S114	12	(mobile or wireless) (station or device or terminal) same (application or software or program) same (activat$3 or enabl$3 or trigger3 or deactivat$3) same (enter$3 or exit) near20 (special or discount or limited or home) (area or service or zone)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2015/07/25 11:44
S115	25	(mobile or wireless) (station or device or terminal) same (activat$3 or enabl$3 or trigger3 or deactivat$3) same (enter$3 or exit) near20 (special or discount or limited or home) (area or service or zone)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2015/07/25 11:45
S116	79	(mobile or wireless) (station or device or terminal) and (activat$3 or enabl$3 or trigger3 or deactivat$3) same (enter$3 or exit) near20 (special or discount or limited or home) (area or service or zone)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2015/07/25 11:49
S117	54	S116 not S115	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2015/07/25 11:49
S118	11	(track$3 or monitor$3 or record$3) near20 (enter$3 or exit$3) near10 (special or limited or discount or home) (service or area or zone) same (mobile or wireless) (station or device or terminal)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2015/07/25 16:12
S119	30	(track$3 or monitor$3 or record$3) same (enter$3 or exit$3) same (special or limited or discount or home) (service or area or zone) same (mobile or wireless) (station or device or terminal)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO;	ADJ	ON	2015/07/25 16:13

			DERWENT; IBM_TDB			
S120	30	S119 not S118	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2015/07/25 16:13
S121	166	"7848765"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2015/07/25 16:18
S122	49	"lafuente, carlos".inv.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2015/07/25 16:45
S123	41998	455/456.4.ccls. or 455/555.ccls. or 455/408.ccls. or 455/432.2.ccls. or 455/406.ccls. or 455/458.ccls. or 455/414.1.ccls. or 455/446.ccls. or 455/456.1.ccls. or 455/433.ccls.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2015/07/25 16:45
S124	1	S119 and S122	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2015/07/25 16:46
S125	5	S119 and S123	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2015/07/25 16:46
S126	66	("20020094801" | "20030092450" | "20040192267" | "20040224682" | "20050075124" | "20050148297" | "20080004045" | "20080261604" | "20100167725" | "5642303" | "6122520" | "6334052" | "6516190" | "6516193" | "6625442" | "6671506" | "6785536" | "6826414" | "6836653" | "6920317" | "7142869" | "7171189" | "7266366" | "7634255" | "7778652" | "7848765" | "8723664").PN.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2015/07/25 16:59
S127	16	"6526267"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT;	ADJ	ON	2015/07/26 10:11

			IBM_TDB			

11/ 15/ 2015 11:16:13 PM
C:\ Users\ jchang7\ Documents\ EAST\ Workspaces\ 14738350.wsp

Search Notes	Application/Control No.	Applicant(s)/Patent Under Reexamination
	14738350	PÉREZ LAFUENTE, CARLOS A.
	Examiner	Art Unit
	JEAN CHANG	2643

CPC- SEARCHED		
Symbol	Date	Examiner

CPC COMBINATION SETS - SEARCHED		
Symbol	Date	Examiner

US CLASSIFICATION SEARCHED			
Class	Subclass	Date	Examiner
455	456.3, 555, 408, 432.2, 406, 458, 414.1, 456.1, 433	7/25/2015	jc
455	456.3, 555, 408, 432.2, 406, 458, 414.1, 456.1, 433	11/15/2015	jc

SEARCH NOTES		
Search Notes	Date	Examiner
inventor search and text search on East databases for monitor track enter exit special limited discount service area zone mobile wireless device	7/25/2015	jc
update inventor and text search on East database	11/15/2015	jc

INTERFERENCE SEARCH			
US Class/ CPC Symbol	US Subclass / CPC Group	Date	Examiner

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Application No.	:	14/738,350
First Named Inventor	:	Carlos A. Perez Lafuente
Confirmation No.	:	9146
Filed	:	June 12, 2015
TC/A.U.	:	2643
Examiner	:	Jean Chang
Customer No.	:	27896
Docket No.	:	0572.0001C3
Title	:	METHOD AND SYSTEM FOR MONITORING A MOBILE STATION PRESENCE IN A SPECIAL AREA

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

AMENDMENT

Madam:

In response to the Office Action mailed August 3, 2015, please amend the above-identified application as follows:

Amendments to the Claims are reflected in the listing of claims, which begins on page 2 of this paper.

Remarks begin on page 4 of this paper.

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1. (Currently Amended) A method associated with a provider of presence related services and the use of a mobile station that stores in a memory checking data and uses the checking data to determine whether or not a defining signal received from a radio communication defining device is a distinctive defining signal, the distinctive defining signal at least partly defining ~~defines~~ a special area by its coverage, the method comprising:

one or more servers of a provider of presence related services receiving from the mobile station via a mobile telephone network an updating signal uncorrelated to any mobile station phone call establishment that identifies the mobile station's presence in the special area, the provider of presence related services being different than the mobile telephone network; ~~and~~

storing in the one or more servers a parameters database having an operating parameter whose value is determined at least in part by the updating signal received from the mobile station; [[,]]

determining when the mobile station is switched off; and

upon determining that the mobile station is switched off setting the value of the operating parameter to an initial value.

2. (Original) The method according to claim 1, wherein the operating parameter is a tariff flag or a service flag that enables or disables a special tariff or a service for the mobile station.

3. (Currently Amended) A method associated with the use of a mobile station that stores and uses checking data to determine whether or not a defining signal received from a radio communication defining device is a distinctive defining signal, the distinctive defining signal at least partly defining ~~defines~~ a special area by its coverage, the method comprising:

sending from the mobile station to at least one server of a provider of presence related services an updating signal via a mobile telephone network uncorrelated to any mobile station phone call establishment that identifies the mobile station's presence in the special area, the updating signal being indicative of the mobile station's presence in the special area, the provider of presence related services being different than the mobile telephone network; and

receiving in the mobile station from the at least one server of the provider of presence related services an acknowledgement of a reception of the updating signal.

4. (Original) The method according to claim 3, further comprising the mobile station retransmitting the updating signal upon not receiving the acknowledgement from the at least one server.

5. (Canceled)

6. (Canceled)

REMARKS

Claims 1-6 have been examined and stand rejected. By the above amendments, claims 1 and 3 have been amended, and claims 5 and 6 have been canceled. Accordingly, claims 1-4 now are pending in the application. Favorable reconsideration of the application and allowance of all the claims are respectfully requested in view of the above amendments and the following remarks.

Claim Objections

Claim 1 has been amended to correct the informality identified by the Office on page 2 of the Office Action.

Obviousness Rejections

Claims 1 and 2 stand rejected under pre-AIA 35 U.S.C. § 103(a) as being unpatentable over U.S. Publication No. 2002/0094801 (hereinafter "Atorf") in view of U.S. Patent No. 6,516,193 (hereinafter "Salmela") and further in view of U.S. Patent No. 6,526,267 (hereinafter "Jokimies"). Applicant respectfully traverses this rejection insofar as it applies to the amended claims.

A prima facie case of obviousness can be established only upon there being a comparison that includes all of the limitations of the subject claim(s). "When determining whether a claim is obvious, an Examiner must make 'a searching comparison of the claimed invention – including all its limitations – with the teachings of the prior art.' *In re Ochiai*, 71 F.3d 1565, 1572 (Fed. Cir. 1995) (emphasis added). Thus, 'obviousness requires a suggestion of all limitations in a claim.' *CFMT, Inc. v. Yieldup Int'l. Corp.*, 349 F.3d 1333, 1342 (Fed. Cir. 2003) (citing *In re Royka*, 490 F.2d 981, 985 (CCPA 1974)). The BPAI in *Ex Parte Wehling et al.* held that "absent a fact-based analysis which explicitly compares all the limitations of the claimed invention with the combined teachings of Gioffre and Rockliffe, we are constrained to reverse the rejection of claims 1, 21, 29, and 31 and the claims dependent thereon under § 103 over the combined teachings of Gioffre and Rockliffe."

Atorf discloses a mobile telephone network that includes a base station 11. Upon the base station receiving a signal 10 or 13 from a mobile telephone 7, switching means 12 located in the base station itself alters the calling rate for the mobile telephone. In claim 1 of the present application, the provider of presence related services is not the mobile telephone network. The mobile telephone network serves the role of providing a gateway (via) to the one or more servers of the provider of presence related services. Claim 1 also recites the step of "determining when the mobile station is turned off." Atorf teaches that when the signal 10 is no longer transmitted by the mobile telephone 7, an assumption is made that either the mobile telephone is out of range of the fixed station 1 or the mobile telephone has been switched off. Nowhere in Atorf is there an actual process of determining if the mobile telephone has actually been switched off. Salmela and Jokimies fail to cure these deficiencies of Atorf. The Applicant respectfully submits, therefore, that claim 1, and all claims depending therefrom, are patentable over Atorf in view of Salmela, and further in view of Jokimies, as a result of less than all of the limitations of the claim being collectively found in the cited references.

It is important to note that a mobile station-centric presence determination process does not exist in Salmela. As such, a presence status updating signal is never sent by the mobile station to the network means of Salmela. Thus, for the foregoing reasons, Applicant respectfully requests the Examiner to reconsider and withdraw this rejection.

Claims 3 and 4 stand rejected under pre-AIA 35 U.S.C. 103(a) as being unpatentable over Atorf in view of Jokimies. Applicant respectfully traverse this rejection insofar as it applies to the amended claims.

In both Atorf and Jokimies, unlike amended claim 3, the mobile telephone network is itself the provider of presence related services. Atorf and Jokimies further fail to disclose "receiving in the mobile station from the at least one server of the provider of presence related services an acknowledgement of a reception of the updating signal." At column 3, line 60 through column 4, line 5, Jokimies teaches that a confirmation message is transmitted by the mobile station to the operator of the mobile telephone network when the home area data has been stored in the mobile station. Jokimies teaches that the operator of the mobile telephone network may in turn confirm the use of local call tariffs and services. The confirmation is not related to a

signal indicative of the mobile station's presence in a special area as recited in amended claim 3. As a result of less than all of the limitations of claim 3 being collectively found in Atorf and Jokimies, Applicant respectfully submits that the claim, and all claims depending therefrom, are patentable over the references.

In regard to claim 4, neither Atorf nor Jokimies disclose the mobile station retransmitting the updating signal upon not receiving the acknowledgement from the at least one server of the provider of presence related services. As a result of less than all of the limitations of claim 4 being collectively found in Atorf and Jokimies, Applicant respectfully submits that the claim is patentable over the references. Thus, for the foregoing reasons, Applicant respectfully requests the Examiner to reconsider and withdraw this rejection.

Claims 5 and 6 were rejected under pre-AIA 35 U.S.C. 103(a) as being unpatentable over Jokimies in view of U.S. Patent No. 7,848,765 ("Phillips"). Claims 5 and 6 have been canceled, thereby rendering moot this rejection.

Conclusion

In view of the foregoing, Applicant respectfully requests the Examiner to find the application in condition for allowance with claims 1-4. However, if for any reason the Examiner feels that the application is not now in condition for allowance, the Examiner is respectfully requested to call the undersigned attorney to discuss any unresolved issues and to expedite the disposition of the application.

Applicant hereby petitions for any extension of time that may be necessary to maintain the pendency of this application. The Commissioner is hereby authorized to charge payment of any additional fees required for the above-identified application or credit any overpayment to Deposit Account No. 05-0460.

Dated: October 21, 2015

Respectfully submitted by:

/Patrick J. Finnan/

Patrick J. Finnan
Reg. No. 39189

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Electronic Acknowledgement Receipt

EFS ID:	23846248
Application Number:	14738350
International Application Number:	
Confirmation Number:	9146
Title of Invention:	METHOD AND SYSTEM FOR MONITORING A MOBILE STATION PRESENCE IN A SPECIAL AREA
First Named Inventor/Applicant Name:	Carlos A. Pérez LaFuente
Customer Number:	27896
Filer:	Patrick J. Finnan/Janet Dorgan
Filer Authorized By:	Patrick J. Finnan
Attorney Docket Number:	122358-387201
Receipt Date:	21-OCT-2015
Filing Date:	12-JUN-2015
Time Stamp:	15:44:26
Application Type:	Utility under 35 USC 111(a)

Payment information:

Submitted with Payment	no

File Listing:

Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1		2015-10-21_Amendment-0001C3.pdf	139728 db72424e4f180a0b3c615b4387127964110afe88	yes	7

	Multipart Description/PDF files in .zip description		
	Document Description	**Start**	**End**
	Amendment/Req. Reconsideration-After Non-Final Reject	1	1
	Claims	2	3
	Applicant Arguments/Remarks Made in an Amendment	4	7
Warnings:			
Information:			
	Total Files Size (in bytes):	139728	

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New Applications Under 35 U.S.C. 111
If a new application is being filed and the application includes the necessary components for a 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
14/738,350	06/12/2015	Carlos A. Pérez LaFuente	122358-387201

CONFIRMATION NO. 9146

27896
EDELL, SHAPIRO & FINNAN, LLC
9801 Washingtonian Blvd.
Suite 750
Gaithersburg, MD 20878

POA ACCEPTANCE LETTER

OC000000078135403

Date Mailed: 10/20/2015

NOTICE OF ACCEPTANCE OF POWER OF ATTORNEY

This is in response to the Power of Attorney filed 10/07/2015.

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**.

/yteferra/

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APPLICATION NUMBER	FILING OR 371(C) DATE	FIRST NAMED APPLICANT	ATTY. DOCKET NO./TITLE
14/738,350	06/12/2015	Carlos A. Pérez LaFuente	122358-387201

CONFIRMATION NO. 9146

26694
VENABLE LLP
P.O. BOX 34385
WASHINGTON, DC 20043-9998

POWER OF ATTORNEY NOTICE

OC000000078135365

Date Mailed: 10/20/2015

NOTICE REGARDING CHANGE OF POWER OF ATTORNEY

This is in response to the Power of Attorney filed 10/07/2015.

- The Power of Attorney to you in this application has been revoked by the applicant. 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**.

/yteferra/

POWER OF ATTORNEY BY APPLICANT

☑ I hereby appoint Practitioner(s) associated with the following Customer Number as my/our attorney(s) or agent(s), and to transact all business in the United States Patent and Trademark Office connected therewith for the application referenced in the attached transmittal letter or submitted concurrently herewith:

27896

OR

☐ I hereby appoint Practitioner(s) named below as my/our attorney(s) or agent(s), and to transact all business in the United States Patent and Trademark Office connected therewith for the application referenced in the attached transmittal letter (form PTO/AIA/82A or equivalent):

Name	Registration Number	Name	Registration Number

Please recognize or change the correspondence address for the application identified in the attached transmittal letter to:

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OR

☐ Firm or Individual Name					
Address					
City		State		Zip	
Country					
Telephone		Email			

I am the Applicant:

☐ Inventor or Joint Inventor

☐ Legal Representative of a Deceased or Legally Incapacitated Inventor

☑ Assignee or Person to Whom the Inventor is Under an Obligation to Assign

☐ Person Who Otherwise Shows Sufficient Proprietary Interest (*e.g.*, a petition under 37 CFR 1.46(b)(2) was granted in the application or is concurrently being filed with this document)

SIGNATURE of Applicant for Patent

Signature		Date	24 September, 2015
Name	Carlos Alberto Pérez Lafuente	Telephone	(34) 627442681
Title and Company	CEO / Afirma Consulting & Technologies, S.L.		

NOTE: Signature - This form must be signed by the applicant in accordance with 37 CFR 1.33. See 37 CFR 1.4 for signature requirements and certifications. Submit multiple forms for more than one signature, see below *.

Schedule A

UNITED STATES PATENT APPLICATIONS

Application No.
14/738,083
14/738,176
14/738,256
14/738,350
14/743,237

Electronic Acknowledgement Receipt

EFS ID:	23712761
Application Number:	14738350
International Application Number:	
Confirmation Number:	9146
Title of Invention:	METHOD AND SYSTEM FOR MONITORING A MOBILE STATION PRESENCE IN A SPECIAL AREA
First Named Inventor/Applicant Name:	Carlos A. Pérez LaFuente
Customer Number:	26694
Filer:	Patrick J. Finnan/Janet Dorgan
Filer Authorized By:	Patrick J. Finnan
Attorney Docket Number:	122358-387201
Receipt Date:	07-OCT-2015
Filing Date:	12-JUN-2015
Time Stamp:	17:13:32
Application Type:	Utility under 35 USC 111(a)

Payment information:

Submitted with Payment	no

File Listing:

Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1	Power of Attorney	PowerOfAttorney-Afirma-Signed.pdf	460828 78d8c10803268311e441eb06d0af8925c079d257	no	2

Warnings:	
Information:	

Total Files Size (in bytes):	460828

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New Applications Under 35 U.S.C. 111
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National Stage of an International Application under 35 U.S.C. 371
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New International Application Filed with the USPTO as a Receiving Office
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APPLICATION NUMBER	FILING OR 371(C) DATE	FIRST NAMED APPLICANT	ATTY. DOCKET NO./TITLE
14/738,350	06/12/2015	Carlos A. Perez LaFuente	122358-387201

CONFIRMATION NO. 9146

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P.O. BOX 34385
WASHINGTON, DC 20043-9998

PUBLICATION NOTICE

OC000000077796177

Title:METHOD AND SYSTEM FOR MONITORING A MOBILE STATION PRESENCE IN A SPECIAL AREA

Publication No.US-2015-0281898-A1
Publication Date:10/01/2015

NOTICE OF PUBLICATION OF APPLICATION

The above-identified application will be electronically published as a patent application publication pursuant to 37 CFR 1.211, et seq. The patent application publication number and publication date are set forth above.

The publication may be accessed through the USPTO's publically available Searchable Databases via the Internet at www.uspto.gov. The direct link to access the publication is currently http://www.uspto.gov/patft/.

The publication process established by the Office does not provide for mailing a copy of the publication to applicant. A copy of the publication may be obtained from the Office upon payment of the appropriate fee set forth in 37 CFR 1.19(a)(1). Orders for copies of patent application publications are handled by the USPTO's Office of Public Records. The Office of Public Records can be reached by telephone at (703) 308-9726 or (800) 972-6382, by facsimile at (703) 305-8759, by mail addressed to the United States Patent and Trademark Office, Office of Public Records, Alexandria, VA 22313-1450 or via the Internet.

In addition, information on the status of the application, including the mailing date of Office actions and the dates of receipt of correspondence filed in the Office, may also be accessed via the Internet through the Patent Electronic Business Center at www.uspto.gov using the public side of the Patent Application Information and Retrieval (PAIR) system. The direct link to access this status information is currently http://pair.uspto.gov/. Prior to publication, such status information is confidential and may only be obtained by applicant using the private side of PAIR.

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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
14/738,350	06/12/2015	Carlos A. Pérez LaFuente	122358-387201	9146

26694 7590 08/03/2015

VENABLE LLP
P.O. BOX 34385
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EXAMINER
CHANG, JEAN

ART UNIT	PAPER NUMBER
2643	

NOTIFICATION DATE	DELIVERY MODE
08/03/2015	ELECTRONIC

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

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

PTOMail@Venable.com
lahill@venable.com
ksfeatherston@venable.com

Office Action Summary	Application No. 14/738,350	Applicant(s) PÉREZ LAFUENTE, CARLOS A.	
	Examiner JEAN CHANG	Art Unit 2643	AIA (First Inventor to File) Status No

-- 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* MONTHS 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 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 *6/12/2015*.

☐ A declaration(s)/affidavit(s) under **37 CFR 1.130(b)** was/were filed on _____.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ An election was made by the applicant in response to a restriction requirement set forth during the interview on _____; the restriction requirement and election have been incorporated into this action.

4)☐ 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*

5)☒ Claim(s) *1-6* is/are pending in the application.

5a) Of the above claim(s) _____ is/are withdrawn from consideration.

6)☐ Claim(s) _____ is/are allowed.

7)☒ Claim(s) *1-6* is/are rejected.

8)☐ Claim(s) _____ is/are objected to.

9)☐ Claim(s) _____ are subject to restriction and/or election requirement.

* If any claims have been determined allowable, you may be eligible to benefit from the **Patent Prosecution Highway** program at a participating intellectual property office for the corresponding application. For more information, please see http://www.uspto.gov/patents/init_events/pph/index.jsp or send an inquiry to PPHfeedback@uspto.gov.

Application Papers

10)☐ The specification is objected to by the Examiner.

11)☐ 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).

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).

Certified copies:

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)).

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

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☒ Information Disclosure Statement(s) (PTO/SB/08a and/or PTO/SB/08b) Paper No(s)/Mail Date _____.

3) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .

4) ☐ Other: _____.

DETAILED ACTION

1. The present application is being examined under the pre-AIA first to invent provisions.

Information Disclosure Statement

2. The information disclosure statement (IDS) submitted is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement has been considered by the examiner.

Claim Objections

3. Claim 1 is objected to because of the following informalities:

   - Claim 1 recites the limitation "A method associated with the use of a mobile station …" However, the claimed limitation is related to the method operational on a provider of presence related services.

   Appropriate correction is required.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a):

(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 negatived by the manner in which the invention was made.

The factual inquiries set forth in Graham v. John Deere Co., 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows: *(See MPEP Ch. 2141)*

a. Determining the scope and contents of the prior art;
b. Ascertaining the differences between the prior art and the claims in issue;
c. Resolving the level of ordinary skill in the pertinent art; and
d. Evaluating evidence of secondary considerations for indicating obviousness or nonobviousness.

4. **Claims 1-2 are rejected under 35 U.S.C. 103(a) as being unpatentable over Atorf (US 2002/0094801 A1) in view of Salmela et al. (US 6,516,193) further in view of Jokimies et al. (US 6,526,267 B1).**

Claim 1.

Atorf teaches

A method associated with the use of a mobile station that stores in a memory checking data and uses the checking data to determine whether or not a defining signal received from a radio communication defining device is a distinctive defining signal, the distinctive defining signal at least partly defines a special area by its coverage, the method comprising:

one or more servers of a provider of presence related services receiving from the mobile station via a mobile telephone network an updating signal uncorrelated to any mobile station phone call establishment that identifies the mobile station's presence in the special area (para. 0030 – 0031)*; and*

storing in the one or more servers a parameters database having an operating parameter whose value is determined at least in part by the updating signal received from the mobile station (implied, para. 0030 – 0032),

determining when the mobile station is switched off (para. 0030 – 0032)*; and*

upon determining that the mobile station is switched off setting the value of the operating parameter to an initial value (para. 0030 – 0032).

To further elaborate, in an analogous art, Salmela et al. teach a parameters database (col. 3, lines 16-18; col. 4, lines 11-31).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teaching of Atorf to include in the servers a parameters database as taught by Salmela et al., as well known in the art, such that *storing in the one or more servers a parameters database having an operating parameter whose value is determined at least in part by the updating signal received from the mobile station,* for tracking the presence of the mobile station in (or not in) the special area.

Atorf in combination with Salmela et al. does not elaborate on
a mobile station that stores in a memory checking data and uses the checking data to determine whether or not a defining signal received from a radio communication defining device is a distinctive defining signal, the distinctive defining signal at least partly defines a special area by its coverage.

In an analogous art, Jokimies et al. teach
a mobile station that stores in a memory checking data and uses the checking data to determine whether or not a defining signal received from a radio communication defining device is a distinctive defining signal, the distinctive

defining signal at least partly defines a special area by its coverage (Abstract, col. 3, line 24 to col. 4, line 5).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of Jokimies et al. into the teaching of Atorf in combination with Salmela et al. to configure *a mobile station* to store *in a memory checking data and use the checking data to determine whether or not a defining signal received from a radio communication defining device is a distinctive defining signal, the distinctive defining signal at least partly defines a special area by its coverage*, so that the mobile station may determine whether it is in the coverage of a special area to take advantage of special tariff or request for location based service.

Claim 2.

Atorf in combination with Salmela et al. and Jokimies et al. teach
The method according to claim 1, wherein the operating parameter is a tariff flag or a service flag that enables or disables a special tariff or a service for the mobile station (Atorf, para. 0031 - 0032).

5. **Claims 3-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Atorf (US 2002/0094801 A1) in view of Jokimies et al. (US 6,526,267 B1).**

Claim 3.

Atorf teach

A method associated with the use of a mobile station that stores and uses checking data to determine whether or not a defining signal received from a radio communication defining device is a distinctive defining signal, the distinctive defining signal at least partly defines a special area by its coverage, the method comprising:

sending from the mobile station to at least one server of a provider of presence related services a updating signal via a mobile telephone network uncorrelated to any mobile station phone call establishment that identifies the mobile station's presence in the special area (para. 0030, 0007).

Atorf in combination does not elaborate on

a mobile station that stores and uses checking data to determine whether or not a defining signal received from a radio communication defining device is a distinctive defining signal, the distinctive defining signal at least partly defines a special area by its coverage.

In an analogous art, Jokimies et al. teach

a mobile station that stores and uses checking data to determine whether or not a defining signal received from a radio communication defining device is a

distinctive defining signal, the distinctive defining signal at least partly defines a special area by its coverage (Abstract, col. 3, line 24 to col. 4, line 5).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of Jokimies et al. into the teaching of Atorf to configure *a mobile station* to store *and use checking data to determine whether or not a defining signal received from a radio communication defining device is a distinctive defining signal, the distinctive defining signal at least partly defines a special area by its coverage*, so that the mobile station may determine whether it is in the coverage of a special area to take advantage of special tariff or request for location based service.

Claim 4.

Atorf in combination with Jokimies et al. teach

The method according to claim 3, that the mobile station reports to the cellular network whether the mobile station is within its home area and if required the operator will confirm the use of local call tariffs and services (Jokimies et al. col. 3, line 64 to col. 4, line 5).

Atorf in combination with Jokimies et al. does not elaborate on *further comprising the mobile station retransmitting the updating signal upon not receiving the acknowledgement from the at least one server.*

However, in view of the combined teaching of Atorf and Jokimies et al., it would have been obvious to one of ordinary skill in the art at the time the invention was made to configure *the mobile station retransmitting the updating signal upon not receiving the acknowledgement from the at least one server*, without exercising an inventive step, to confirm the use of local call tariffs and services.

6. **Claims 5-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jokimies et al. (US 6,526,267 B1) in view of Phillips et al. (US 7,848,765 B2).**

Claim 5.

Jokimies et al. teach

A method associated with the use of a mobile station and at least one radio communication defining device that transmits a distinctive defining signal that at least partly defines a special area by its coverage, the distinctive defining signal including data (Abstract, col. 3, line 24 to col. 4, line 5)*, the method comprising: receiving and processing a defining signal in the mobile station to determine, based on a previously obtained at least portion of the data, whether or not the defining signal is a distinctive defining signal and to determine whether or not the mobile station is present in the special area* (Jokimies et al., col. 3, lines 27-44).

Jokimies et al. does not elaborate on

generating in the mobile station statistics about the use of the mobile station in the special area.

In an analogous art, Phillips et al. teach that the mobile station may comprise a location tracking application and send location-based alerts which may be sent if a mobile station enters or exits a geofence or enters or exits a geofence for a certain period of time (FIG. 12, col. 17, lines 45 – 62; col. 20, lines 11 - 16; col. 21, lines 17 – 27; col. 21, line 65 to col. 22, line 7; col. 24, lines 15 - 30; col. 24, lines 44 - 56).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of Phillips et al. into the teaching of Jokimies et al. to provide location based tracking and *generating in the mobile station statistics about the use of the mobile station in the special area,* to provide the user of the mobile station with information about the use of the mobile station in the special area.

Claim 6.

Claim 6, pertaining to *A non-transitory computer readable medium storing computer readable program code for causing a processor of a mobile station to perform a method associated with the use of at least one radio communication defining device that transmits a distinctive defining signal that at least partly*

defines a special area by its coverage, the distinctive defining signal including data, the method comprising: receiving and processing a defining signal in the mobile station to determine, based on a previously obtained at least portion of the data, whether or not the defining signal is a distinctive defining signal and to determine whether or not the mobile station is present in the special area; and generating in the mobile station statistics about the use of the mobile station in the special area, corresponding to the subject matter of claim 5, therefore, is rejected with the same rationale as analyzed in claim 5.

Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jean Chang whose telephone number is (571) 270-7979. The examiner can normally be reached on Mon-Thursday from 9:00-5:00. If attempts to reach the examiner by telephone are unsuccessful, the examiner's Supervisor, Jinsong Hu can be reached on (571) 272-3965. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on

access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Jean Chang/

Examiner, Art Unit 2643

/JINSONG HU/

Supervisory Patent Examiner, Art Unit 2643

Notice of References Cited	Application/Control No. 14/738,350	Applicant(s)/Patent Under Reexamination PÉREZ LAFUENTE, CARLOS A	
	Examiner JEAN CHANG	Art Unit 2643	Page 1 of 1

U.S. PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Name	Classification
*	A	US-2002/0094801 A1	07-2002	Atorf, Manfred	455/406
*	B	US-6,516,193 B1	02-2003	Salmela et al.	455/432.3
*	C	US-6,526,267 B1	02-2003	Jokimies et al.	455/161.1
*	D	US-6,671,506 B1	12-2003	Lee, Yun-Hee	455/406
*	E	US-6,920,317 B1	07-2005	Muhonen, Ahti	455/405
*	F	US-2008/0261604 A1	10-2008	Ritter, Rudolf	455/446
*	G	US-7,848,765 B2	12-2010	Phillips et al.	455/456.3
	H	US-			
	I	US-			
	J	US-			
	K	US-			
	L	US-			
	M	US-			

FOREIGN PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Country	Name	Classification
	N					
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	S					
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NON-PATENT DOCUMENTS

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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.

Search Notes	Application/Control No.	Applicant(s)/Patent Under Reexamination
	14738350	PÉREZ LAFUENTE, CARLOS A.
	Examiner	Art Unit
	JEAN CHANG	2643

CPC- SEARCHED		
Symbol	Date	Examiner

CPC COMBINATION SETS - SEARCHED		
Symbol	Date	Examiner

US CLASSIFICATION SEARCHED			
Class	Subclass	Date	Examiner
455	456.3, 555, 408, 432.2, 406, 458, 414.1, 456.1, 433	7/25/2015	jc

SEARCH NOTES		
Search Notes	Date	Examiner
inventor search and text search on East databases for monitor track enter exit special limited discount service area zone mobile wireless device	7/25/2015	jc

INTERFERENCE SEARCH			
US Class/ CPC Symbol	US Subclass / CPC Group	Date	Examiner

PTO/SB/08b (07-09)
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Substitute for form 1449/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Use as many sheets as necessary)

Sheet 1 of 2

Complete if Known	
Application Number	14/738,350
Filing Date	June 12, 2015
First Named Inventor	Carlos A. Pérez LaFuente
Art Unit	Not Yet Assigned 2643
Examiner Name	Not Yet Assigned Jean Chang
Attorney Docket Number	122358-387201

U. S. PATENT DOCUMENTS

Examiner Initials*	Cite No.[1]	Document Number Number-Kind Code[2] *(if known)*	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
	AA*	US-2002/0094801	07-18-2002	Atorf	
	AB*	US-6,516,190	02-04-2003	Linkola	
	AC*	US-6,516,193	02-04-2003	Salmela et al.	
	AD*	US-6,826,414	11-30-2004	Reynolds et al.	
	AE*	US-6,920,317	07-19-2005	Muhonen	
	AF*	US-6,671,506	12-30-2003	Lee	
	AG*	US-6,785,536	08-31-2004	Lee et al.	
	AH*	US-6,334,052	12-25-2001	Nordstrand	
	AI*	US-8,723,664	05-13-2014	Rezvani et al.	
	AJ*	US-20030092450	05-15-2003	Juppi et al.	
	AK*	US-6,625,442	09-23-2003	Kojima	
	AL*	US-20040192267	09-30-2004	Kettunen et al.	
	AM*	US-20040224682	11-11-2004	Kang	
	AN*	US-6,836,653	12-28-2004	Kang	
	AO*	US-20050075124	04-07-2005	Willenegger et al.	
	AP*	US-20050148297	07-07-2005	Lu et al.	
	AQ*	US-7,142,869	11-28-2006	Juppi et al.	
	AR*	US-7,171,189	01-30-2007	Bianconi et al.	
	AS*	US-7,266,366	09-04-2007	Kall	

FOREIGN PATENT DOCUMENTS

Examiner Initials*	Cite No.[1]	Foreign Patent Document Country Code[3]-Number[4]-Kind Code[5] *(if known)*	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages Or Relevant Figures Appear	T[6]
	BA**	WO-0103372-A1	01-11-2001	Samsung Electronics Co., Ltd		

Examiner Signature	/Jean Chang/	Date Considered	07/18/2015

*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. * CITE NO.: Those application(s) which are marked with an single asterisk (*) next to the Cite No. are not supplied (under 37 CFR 1.98(a)(2)(iii)) because that application was filed after June 30, 2003 or is available in the IFW. ** CITE NO.: Those document(s) which are marked with an double asterisk (**) next to the Cite No. are not supplied because they were previously cited by or submitted to the Office in a prior application relied upon in this application for an earlier filing date under 35 U.S.C. 120. [1] Applicant's unique citation designation number (optional). [2] See Kinds Codes of USPTO Patent Documents at **www.uspto.gov** or MPEP 901.04. [3] Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). [4] For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. [5]Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. [6] Applicant is to place a check mark here if English language Translation is attached.

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /J.C./

PTO/SB/08b (07-09)
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Substitute for form 1449/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Use as many sheets as necessary)

Sheet 2 of 2

Complete if Known	
Application Number	14/738,350
Filing Date	June 12, 2015
First Named Inventor	Carlos A. Pérez LaFuente
Art Unit	Not Yet Assigned 2643
Examiner Name	Not Yet Assigned Jean Chang
Attorney Docket Number	122358-387201

U. S. PATENT DOCUMENTS

Examiner Initials*	Cite No.[1]	Document Number Number-Kind Code[2] (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
	AT*	US-20080004045	01-03-2008	Srey et al.	
	AU*	US-20080261604	10-23-2008	Ritter	
	AV*	US-7,634,255	12-15-2009	Ko et al.	
	AW*	US-20100167725	07-01-2010	Noldus et al.	
	AX*	US-7,778,652	08-17-2010	Srey et al.	
	AY*	US-5,642,303	06-24-1997	Small et al.	
	AZ*	US-6,122,520	09-19-2000	Want et al.	
	AA1*	US-7,848,765	12-07-2010	Phillips et al.	

NON PATENT LITERATURE DOCUMENTS

Examiner Initials*	Cite No.[1]	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T[2]
	CA**	International Search Report issued in PCT/EP2007/052939 dated June 21, 2007	

Examiner Signature	/Jean Chang/	Date Considered	07/18/2015

*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. * CITE NO.: Those application(s) which are marked with an single asterisk (*) next to the Cite No. are not supplied (under 37 CFR 1.98(a)(2)(iii)) because that application was filed after June 30, 2003 or is available in the IFW. ** CITE NO.: Those document(s) which are marked with an double asterisk (**) next to the Cite No. are not supplied because they were previously cited by or submitted to the Office in a prior application relied upon in this application for an earlier filing date under 35 U.S.C. 120. [1] Applicant's unique citation designation number (optional). [2] See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. [3] Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). [4] For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. [5]Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. [6] Applicant is to place a check mark here if English language Translation is attached.

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /J.C./

EAST Search History

EAST Search History (Prior Art)

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L1	11	(track$3 or monitor$3 or record$3) near20 (enter$3 or exit$3) near10 (special or limited or discount or home) (service or area or zone) same (mobile or wireless) (station or device or terminal)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2015/07/25 16:12
L2	30	(track$3 or monitor$3 or record$3) same (enter$3 or exit$3) same (special or limited or discount or home) (service or area or zone) same (mobile or wireless) (station or device or terminal)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2015/07/25 16:13
L3	30	l2 not l1	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2015/07/25 16:13
L4	166	"7848765"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2015/07/25 16:18
L6	49	"lafuente, carlos".inv.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2015/07/25 16:45
L7	41998	455/456.4.ccls. or 455/555.ccls. or 455/408.ccls. or 455/432.2.ccls. or 455/406.ccls. or 455/458.ccls. or 455/414.1.ccls. or 455/446.ccls. or 455/456.1.ccls. or 455/433.ccls.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2015/07/25 16:45
L8	1	l2 and l6	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2015/07/25 16:46
L9	5	l2 and l7	US-PGPUB;	ADJ	ON	2015/07/25

			USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB			16:46
S1	29	"6334052"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2011/09/26 17:50
S2	5	"6785536"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2011/09/26 17:55
S3	20	"6826414"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2011/09/26 17:56
S4	4	"20020094801"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2011/09/28 08:40
S5	4	"2000027152"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2011/09/28 08:42
S6	4	"7212804"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2011/09/28 08:44
S7	3	"20080004045"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2011/09/28 09:17
S8	3	"20030092450"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT;	ADJ	ON	2011/09/28 09:20

			IBM_TDB			
S9	14589	(special or distint or different or preferred or discount) near10 (service or tarrif or rate) near10 (area or coverage)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2011/09/28 09:27
S10	2969	(special or distint or different or preferred or discount) near10 (service or tarrif or rate) near10 (area or coverage) same (signal or code or identifier or identification or parameter or flag)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2011/09/28 09:29
S11	607	(special or distint or different or preferred or discount) near10 (service or tarrif or rate) near10 (area or coverage) same (signal or code or identifier or identification or parameter or flag) same ((base station) or cell or AP)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2011/09/28 09:30
S12	236	(special or distint or different or preferred or discount) near10 (service or tarrif or rate) near10 (area or coverage) same (signal or code or identifier or identification or parameter or flag) same ((base station) or cell or AP) and monitor	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2011/09/28 09:30
S13	308	(special or distint or different or preferred or discount) near10 (service or tarrif or rate) near10 (area or coverage) same (signal or code or identifier or identification or parameter or flag) same ((base station) or cell or AP) and (monitor or presence)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2011/09/28 09:31
S14	52	(special or distint or different or preferred or discount) near10 (service or tarrif or rate) near10 (area or coverage) same (signal or code or identifier or identification or parameter or flag) same ((base station) or cell or AP) and (monitor or presence) and multimedia	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2011/09/28 09:31
S15	1006	(special or distint or different or preferred or discount) near20 (service or tarrif or rate or billing or charg$3 or zone) near20 (area or coverage) same (signal or code or identifier or identification or parameter or flag) same ((base station) or cell or AP)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2011/09/28 10:44
S16	399	S15 not S11	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2011/09/28 10:44
S17	16	S16 and special service	US-PGPUB; USPAT; USOCR;	ADJ	ON	2011/09/28 10:45

			FPRS; EPO; JPO; DERWENT; IBM_TDB			
S18	18	S16 and (special or distinct) (service or zone)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2011/09/28 10:45
S19	19	S16 and (special or distinct) (service or zone or area)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2011/09/28 10:45
S20	313	455/456.4.ccls.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2011/09/28 10:48
S21	6	"lafuente, carlos".inv.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2011/09/28 10:48
S22	1	S20 and S16	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2011/09/28 10:49
S23	16	"6625442"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2011/09/28 10:49
S24	20	"6516193"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2011/09/28 10:52
S25	5	"6785536"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2011/09/30 18:40
S26	6	"6920317"	US-PGPUB;	ADJ	ON	2011/09/30

			USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB			18:42
S27	1182	(special or limited or distint or different or preferred or discount or home) near10 (service or tarrif or rate) near10 (area or coverage or location or zone) same (signal or code or identifier or identification or parameter or flag) same ((base station) or cell or AP or device) same (wireless or mobile) and (monitor or presence)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2012/06/21 10:39
S28	15	(special or limited or distint or different or preferred or discount or home) near10 (service or tarrif or rate) near10 (area or coverage or location or zone) same (signal or code or identifier or identification or parameter or flag) same ((base station) or cell or AP or device) same (wireless or mobile) and (monitor or presence) near10 (mobile or wireless) (station or device or phone) near10 (determin$4 or recogniz$4 or realiz$3 or check$3)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2012/06/21 10:44
S29	368	455/456.4.ccls.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2012/06/21 11:35
S30	6	"lafuente, carlos".inv.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2012/06/21 11:36
S31	15	(special or limited or distint or different or preferred or discount or home) near10 (service or tarrif or rate) near10 (area or coverage or location or zone) same (signal or code or identifier or identification or parameter or flag) same ((base station) or cell or AP or device) same (wireless or mobile) and (monitor or presence) near10 (mobile or wireless) (station or device or phone) near10 (determin$4 or recogniz$4 or realiz$3 or check$3)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2012/06/21 11:36
S32	0	S31 and S29	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2012/06/21 11:36
S33	18	(special or limited or distint or different or preferred or discount or home)	US-PGPUB; USPAT;	ADJ	ON	2012/06/25 01:08

		near10 (service or tarrif or rate) near10 (area or coverage or location or zone) same (signal or code or identifier or identification or parameter or flag) same ((base station) or cell or AP or device) same (wireless or mobile) and (monitor or presence) near10 (mobile or wireless) (station or device or phone) near10 (determin$4 or recogniz$4 or realiz$3 or check$3)	USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB			
S34	6	"lafuente, carlos".inv.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2012/06/25 01:10
S35	1	S33 and S34	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2012/06/25 01:10
S36	1	"12294641"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2012/06/25 18:36
S37	771	(mobile or wireless or electronic or communication) (station or device or phone or terminal or equipment) near10 (presence or enter$4 or exit$4 or leav$4 or detect$4 or identify$4 or determin$4 or recogniz$4 or realiz$3 or check$3) near10 (special or limited or distint or different or preferred or discount or home) near10 ((service or tarrif or rate) or (area or coverage or location or zone)) same (send$4 or transmit$5 or transmi$6) near10 (signal or code or identifier or identification or parameter or flag or messag$3) same ((base station) or cell or AP or device)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2013/06/01 12:34
S38	211	(mobile or wireless or electronic or communication) (station or device or phone or terminal or equipment) near10 (presence or enter$4 or exit$4 or leav$4 or detect$4 or identify$4 or determin$4 or recogniz$4 or realiz$3 or check$3) near10 (special or limited or distint or different or preferred or discount or home) near5 ((service or tarrif or rate) or (area or coverage or location or zone)) near10 (send$4 or transmit$5 or transmi$6) near10 (signal or code or identifier or identification or parameter or flag or messag$3) near10 ((base station) or cell or AP or device or network)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2013/06/01 12:38

S39	150	(mobile or wireless or electronic or communication) (station or device or phone or terminal or equipment) near10 (presence or enter$4 or exit$4 or leav$4 or detect$4 or identify$4 or determin$4 or recogniz$4 or realiz$3 or check$3) near10 (special or limited or distint or different or preferred or discount or home) near5 ((service or tarrif or rate) or (area or coverage or location or zone)) near10 (send$4 or transmit$5 or transmi$6) near10 (signal or code or identifier or identification or parameter or flag or messag$3) near10 ((base station) or cell or AP or device or network)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	OFF	2013/06/01 12:49
S40	1	"12294641"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2013/06/01 13:53
S41	30	(mobile or wireless or electronic or communication) (station or device or phone or terminal or equipment) near10 (enter$4 or exit$4 or leav$4) near10 (special or limited or distint or different or preferred or discount or home) near5 ((service or tarrif or rate) or (area or coverage or location or zone)) near10 (send$4 or transmit$5 or transmi$6) near10 (signal or code or identifier or identification or parameter or flag or messag$3) near10 ((base station) or cell or AP or device or network)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	OFF	2013/06/01 19:14
S42	771	(mobile or wireless or electronic or communication) (station or device or phone or terminal or equipment) near10 (presence or enter$4 or exit$4 or leav$4 or detect$4 or identify$4 or determin$4 or recogniz$4 or realiz$3 or check$3) near10 (special or limited or distint or different or preferred or discount or home) near10 ((service or tarrif or rate) or (area or coverage or location or zone)) same (send$4 or transmit$5 or transmi$6) near10 (signal or code or identifier or identification or parameter or flag or messag$3) same ((base station) or cell or AP or device)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2013/06/01 19:20
S43	106	S42 and (location or zone or area) service	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2013/06/01 19:20
S44	11	(mobile or wireless or electronic or communication) (station or device or phone or terminal or equipment) near10 (presence or enter$4 or exit$4 or	US-PGPUB; USPAT; USOCR; FPRS;	ADJ	ON	2013/06/01 19:29

		leav$4) near10 (special or limited or distint or different or preferred or discount or home) near10 ((service or tarrif or rate) (area or coverage or location or zone)) same (send$4 or transmit$5 or transmi$6) near10 (signal or code or identifier or identification or parameter or flag or messag$3)	EPO; JPO; DERWENT; IBM_TDB			
S45	19	(mobile or wireless or electronic or communication) (station or device or phone or terminal or equipment) near10 (presence or enter$4 or exit$4 or leav$4) near10 (special or limited or distint or different or preferred or discount or home) near10 ((service or tarrif or rate) near5 (area or coverage or location or zone)) same (send$4 or transmit$5 or transmi$6) near10 (signal or code or identifier or identification or parameter or flag or messag$3)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2013/06/01 19:30
S46	81	(mobile or wireless or electronic or communication) (station or device or phone or terminal or equipment) near10 (presence or enter$4 or exit$4 or leav$4) near10 (special or limited or distint or different or preferred or discount or home) near10 ((service or tarrif or rate) near5 (area or coverage or location or zone)) and (LBS or (location near6 service))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2013/06/01 19:36
S47	81	(mobile or wireless or electronic or communication) (station or device or phone or terminal or equipment) near10 (presence or enter$4 or exit$4 or leav$4) near10 (special or limited or distint or different or preferred or discount or home) near10 ((service or tarrif or rate) near5 (area or coverage or location or zone)) and (LBS or ((location or geo$6) near6 service))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2013/06/01 19:36
S48	128	(mobile or wireless or electronic or communication) (station or device or phone or terminal or equipment) near10 (presence or enter$4 or exit$4 or leav$4) near10 (special or limited or distint or different or preferred or discount or home) near10 ((service or tarrif or rate) near5 (area or coverage or location or zone))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2013/06/01 19:59
S49	39	(mobile or wireless or electronic or communication) (station or device or phone or terminal or equipment) near10 (presence or enter$4 or exit$4 or leav$4) near10 (special or limited or distint or different or preferred or discount or home) near10 ((service or tarrif or rate) near5 (area or coverage or location or zone)) same (report$4 or send$4 or transmi$5 or notify$6)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2013/06/01 20:01
S50	128	(mobile or wireless or electronic or communication) (station or device or phone or terminal or equipment) near10	US-PGPUB; USPAT; USOCR;	ADJ	ON	2013/06/01 20:05

		(presence or enter$4 or exit$4 or leav$4) near10 (special or limited or distint or different or preferred or discount or home) near10 ((service or tarrif or rate) near5 (area or coverage or location or zone))	FPRS; EPO; JPO; DERWENT; IBM_TDB			
S51	89	S50 not S49	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2013/06/01 20:07
S52	3	"2008171531"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2013/06/01 22:55
S53	2	"20080171531"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2013/06/01 22:55
S54	29	(US-20020094801-$ or US-20080004045-$ or US-20030092450-$ or US-20080261604-$ or US-20050148297-$ or US-20050075124-$ or US-20040224682-$ or US-20040192267-$ or US-20100167725-$ or US-20080171531-$).did. or (US-6334052-$ or US-6625442-$ or US-6785536-$ or US-6826414-$ or US-7778652-$ or US-7142869-$ or US-7171189-$ or US-6836653-$ or US-6516193-$ or US-6671506-$ or US-7634255-$ or US-7266366-$ or US-6920317-$ or US-6516190-$).did. or (WO-2007009297-$).did. or (WO-0027152-$ or WO-9858505-$ or WO-2007014714-$ or JP-2000050335-$).did.	US-PGPUB; USPAT; EPO; DERWENT	ADJ	ON	2013/06/01 23:06
S55	9	S54 and (enter$4 or exit$4 or leav$4) same (zone or (service area))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2013/06/01 23:07
S56	3822	(mobile or wireless or electronic or communication) (station or device or phone or terminal or equipment) same (presence or enter$4 or exit$4 or leav$4 or detect$4 or identify$4 or determin$4 or recogniz$4 or realiz$3 or check$3) near10 (special or limited or distint or different or preferred or discount or home) near10 ((service or tarrif or rate) or (area or coverage or location or zone)) same (send$4 or transmit$5 or	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2013/06/01 23:12

		transmi$6 or report$5 or notify$5)				
S57	1223	(mobile or wireless or electronic or communication) (station or device or phone or terminal or equipment) same (presence or enter$4 or exit$4 or leav$4 or detect$4 or identify$4 or determin$4 or recogniz$4 or realiz$3 or check$3) near10 (special or limited or distint or different or preferred or discount or home) near10 ((service or tarrif or rate) or (area or coverage or location or zone)) same (send$4 or transmit$5 or transmi$6 or report$5 or notify$5) and (zone or (service area) or LSA)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2013/06/01 23:14
S58	197	S57 and (enter$4 or exit$4) near10 (zone or (service area))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2013/06/01 23:16
S59	6	"lafuente, carlos".inv.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2013/06/02 23:49
S60	22527	455/456.4.ccls. or 455/555.ccls. or 455/408.ccls. or 455/432.2.ccls. or 455/406.ccls. or 455/458.ccls. or 455/414.1.ccls. or 455/446.ccls. or 455/456.1.ccls. or 455/433.ccls.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2013/06/02 23:51
S61	1222	(mobile or wireless or electronic or communication) (station or device or phone or terminal or equipment) same (presence or enter$4 or exit$4 or leav$4 or detect$4 or identify$4 or determin$4 or recogniz$4 or realiz$3 or check$3) near10 (special or limited or distint or different or preferred or discount or home) near10 ((service or tarrif or rate) or (area or coverage or location or zone)) same (send$4 or transmit$5 or transmi$6 or report$5 or notify$5) and (zone or (service area) or LSA)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2013/06/02 23:52
S62	197	S61 and (enter$4 or exit$4) near10 (zone or (service area))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2013/06/02 23:52
S63	0	S62 and S59	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2013/06/02 23:52

S64	59	S62 and S60	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2013/06/02 23:52
S65	1	"12294641"	US-PGPUB; USPAT; EPO; DERWENT	ADJ	ON	2014/01/06 23:30
S66	1	S65 and updating signal	US-PGPUB; USPAT; EPO; DERWENT	ADJ	ON	2014/01/06 23:30
S67	1	S65 and updating signal same (period$5 or enter$4 or exit$4)	US-PGPUB; USPAT; EPO; DERWENT	ADJ	ON	2014/01/06 23:46
S68	1	S65 and updating signal and (period$5 or enter$4 or exit$4)	US-PGPUB; USPAT; EPO; DERWENT	ADJ	ON	2014/01/06 23:50
S69	1	S65 and updating signal and (periodically or enter$4 or exit$4)	US-PGPUB; USPAT; EPO; DERWENT	ADJ	ON	2014/01/07 00:31
S70	1	"12294641"	US-PGPUB; USPAT; EPO; DERWENT	ADJ	ON	2014/01/20 18:22
S71	24	"lafuente, carlos".inv.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2014/01/20 19:24
S72	30466	455/456.4.ccls. or 455/555.ccls. or 455/408.ccls. or 455/432.2.ccls. or 455/406.ccls. or 455/458.ccls. or 455/414.1.ccls. or 455/446.ccls. or 455/456.1.ccls. or 455/433.ccls.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2014/01/20 19:25
S73	987	(mobile or wireless or electronic or communication) (station or device or phone or terminal or equipment) same (presence or enter$4 or exit$4 or leav$4 or detect$4 or identify$4 or determin$4 or recogniz$4 or realiz$3 or check$3) near15 (special or limited or distinct$5 or different or preferred or discount or home) near10 ((service or tarrif or rate) or (area or coverage or location or zone)) near20 (send$4 or transmit$5 or transmi$6 or report$5 or notify$5 or signal$4) and (zone or (service area) or LSA)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2014/01/20 19:27
S74	247	(mobile or wireless or electronic or	US-PGPUB;	ADJ	ON	2014/01/20

		communication) (station or device or phone or terminal or equipment) same (presence or enter$4 or exit$4 or leav$4 or detect$4 or identify$4 or determin$4 or recogniz$4 or realiz$3 or check$3) near15 (special or limited or distinct$5 or different or preferred or discount or home) near10 ((service or tarrif or rate) or (area or coverage or location or zone)) near20 (send$4 or transmit$5 or transmi$6 or report$5 or notify$5 or signal$4) same (memory or stor$4) near10 (data or check$4 or identifier or identification)	USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB			19:32
S75	42	((mobile or wireless or electronic or communication) (station or device or phone or terminal or equipment) same (presence or enter$4 or exit$4 or leav$4 or detect$4 or identify$4 or determin$4 or recogniz$4 or realiz$3 or check$3) near15 (special or limited or distinct$5 or different or preferred or discount or home) near10 ((service or tarrif or rate) or (area or coverage or location or zone)) near20 (send$4 or transmit$5 or transmi$6 or report$5 or notify$5 or signal$4) same (memory or stor$4) near10 (data or check$4 or identifier or identification)).clm.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2014/01/20 19:34
S76	1	S74 and S71	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2014/01/20 19:34
S77	60	S74 and S72	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2014/01/20 19:34
S78	48	S77 not S75	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2014/01/20 20:05
S79	13	S78 and (special or limited or preferred or discount$4) near5 (area or zone or service)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2014/01/20 20:06
S80	2	(mobile or wireless or electronic or communication) (station or device or phone or terminal or equipment) same (receiv$4) near5 (signal or transmission or broadcast or data) near15 (detect$4	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO;	ADJ	ON	2014/01/20 23:05

		or identify$4 or determin$4 or recogniz$4 or presence) near15 (special or limited or distinct$5 or different or preferred or discount or home) near10 ((service or tarrif or rate) (area or coverage or location or zone)) near20 (send$4 or transmit$5 or transmi$6 or report$5 or notify$5 or signal$4) near10 (periodically or enter$4 or exit$4 or leav$4 or presence) near5 (special or limited or distinct$5 or preferred or discount or home) near10 ((service or tarrif or rate) (area or coverage or location or zone))	DERWENT; IBM_TDB			
S81	19	(mobile or wireless or electronic or communication) (station or device or phone or terminal or equipment) same (receiv$4) near5 (signal or transmission or broadcast or data) near30 (detect$4 or identify$4 or determin$4 or recogniz$4 or presence) near20 (special or limited or distinct$5 or different or preferred or discount or home) near10 ((service or tarrif or rate) or (area or coverage or location or zone)) near20 (send$4 or transmit$5 or transmi$6 or report$5 or notify$5 or signal$4) near10 (periodically or enter$4 or exit$4 or leav$4 or presence) near10 (special or limited or distinct$5 or preferred or discount or home) near10 ((service or tarrif or rate) or (area or coverage or location or zone))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2014/01/20 23:13
S82	24	"lafuente, carlos".inv.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2014/01/20 23:27
S83	30466	455/456.4.ccls. or 455/555.ccls. or 455/408.ccls. or 455/432.2.ccls. or 455/406.ccls. or 455/458.ccls. or 455/414.1.ccls. or 455/446.ccls. or 455/456.1.ccls. or 455/433.ccls.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2014/01/20 23:27
S84	1	S81 and S82	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2014/01/20 23:27
S85	6	S81 and S83	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2014/01/20 23:27
S86	4	((mobile or wireless or electronic or	US-PGPUB;	ADJ	ON	2014/01/20

		communication) (station or device or phone or terminal or equipment) same (receiv$4) near5 (signal or transmission or broadcast or data) near30 (detect$4 or identify$4 or determin$4 or recogniz$4 or presence) near20 (special or limited or distinct$5 or different or preferred or discount or home) near10 ((service or tarrif or rate) or (area or coverage or location or zone)) near20 (send$4 or transmit$5 or transmi$6 or report$5 or notify$5 or signal$4) near10 (periodically or enter$4 or exit$4 or leav$4 or presence) near10 (special or limited or distinct$5 or preferred or discount or home) near10 ((service or tarrif or rate) or (area or coverage or location or zone))).clm.	USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB			23:30
S93	3	"12294641"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2014/09/19 13:31
S94	1	"14250517"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2014/09/19 13:33
S95	56	(statistics or count or measur$5 or track$4) near20 (mobile or wireless) (station or terminal or device) near20 (home or special or desginated) (area or service or zone)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2015/07/23 17:02
S96	0	"14738350"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2015/07/23 17:34
S97	8	"12294641"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2015/07/23 17:35
S98	8	S97 and statistics	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2015/07/23 17:35
S99	0	S97 and statistics same mobile station same use same special area	US-PGPUB; USPAT;	ADJ	ON	2015/07/23 17:35

			USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB			
S100	8	S97 and statistics same mobile station same special area	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2015/07/23 17:36
S101	8	statistics same mobile station same special area	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2015/07/23 17:44
S102	8	statistics same (mobile or wireless) (station or device or terminal) same special area	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2015/07/23 17:44
S103	13	statistics same (mobile or wireless) (station or device or terminal) same special (area or zone or service)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2015/07/23 17:45
S104	96	(statistics or track$4 or log) same (mobile or wireless) (station or device or terminal) same (special or home) (area or zone or service)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2015/07/23 17:47
S105	63	(statistics or track$4 or log) near30 (mobile or wireless) (station or device or terminal) near30 (special or home) (area or zone or service)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2015/07/23 17:48
S106	82	S104 not S105	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2015/07/23 17:54
S107	104	(statistics or track$4 or log or duration) same (mobile or wireless) (station or device or terminal) same (special or home) (area or zone or service)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2015/07/23 17:57

S108	8	S107 not S104	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2015/07/23 17:57
S109	216	"5642303"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2015/07/23 18:06
S110	422	"6122520"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2015/07/23 18:07
S111	166	"7848765"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2015/07/23 18:08
S112	42	"6516193"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2015/07/25 11:26
S113	12	(mobile or wireless) (station or device or terminal) same (application or software) same (activat$3 or enabl$3 or trigger3 or deactivat$3) same (enter$3 or exit) near20 (special or discount or limited or home) (area or service or zone)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2015/07/25 11:42
S114	12	(mobile or wireless) (station or device or terminal) same (application or software or program) same (activat$3 or enabl$3 or trigger3 or deactivat$3) same (enter$3 or exit) near20 (special or discount or limited or home) (area or service or zone)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2015/07/25 11:44
S115	25	(mobile or wireless) (station or device or terminal) same (activat$3 or enabl$3 or trigger3 or deactivat$3) same (enter$3 or exit) near20 (special or discount or limited or home) (area or service or zone)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2015/07/25 11:45
S116	79	(mobile or wireless) (station or device or terminal) and (activat$3 or enabl$3 or trigger3 or deactivat$3) same (enter$3 or exit) near20 (special or discount or limited or home) (area or service or	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO;	ADJ	ON	2015/07/25 11:49

		zone)	DERWENT; IBM_TDB			
S117	54	S116 not S115	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2015/07/25 11:49

7/25/2015 4:48:56 PM
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BIB DATA SHEET

CONFIRMATION NO. 9146

SERIAL NUMBER	FILING or 371(c) DATE	CLASS	GROUP ART UNIT	ATTORNEY DOCKET NO.
14/738,350	06/12/2015 RULE	455	2643	122358-387201

APPLICANTS
AFIRMA CONSULTING & TECHNOLOGIES, S.L., Madrid, SPAIN;

INVENTORS
Carlos A. Pérez LaFuente, Madrid, SPAIN;

**** CONTINUING DATA **********************
This application is a CON of 14/561,426 12/05/2014
which is a CON of 14/315,703 06/26/2014 PAT 8934922
which is a CON of 14/250,517 04/11/2014 PAT 9042910
which is a CON of 12/294,641 04/12/2010 PAT 8738040

**** FOREIGN APPLICATIONS **********************

**** IF REQUIRED, FOREIGN FILING LICENSE GRANTED **** ** SMALL ENTITY **
06/23/2015

Foreign Priority claimed ☑ Yes ☐ No 35 USC 119(a-d) conditions met ☐ Yes ☑ No Verified and Acknowledged /JEAN CHANG/ Examiner's Signature	☐ Met after Allowance Initials	STATE OR COUNTRY	SHEETS DRAWINGS	TOTAL CLAIMS	INDEPENDENT CLAIMS
		SPAIN	7	6	4

ADDRESS
VENABLE LLP
P.O. BOX 34385
WASHINGTON, DC 20043-9998
UNITED STATES

TITLE
METHOD AND SYSTEM FOR MONITORING A MOBILE STATION PRESENCE IN A SPECIAL AREA

FILING FEE RECEIVED		
940	FEES: Authority has been given in Paper No._____ to charge/credit DEPOSIT ACCOUNT No._____ for following:	☐ All Fees ☐ 1.16 Fees (Filing) ☐ 1.17 Fees (Processing Ext. of time) ☐ 1.18 Fees (Issue) ☐ Other _____ ☐ Credit

BIB (Rev. 05/07).

Index of Claims	Application/Control No.	Applicant(s)/Patent Under Reexamination
	14738350	PÉREZ LAFUENTE, CARLOS A.
	Examiner	Art Unit
	JEAN CHANG	2643

✓	Rejected	-	Cancelled	N	Non-Elected	A	Appeal
=	Allowed	÷	Restricted	I	Interference	O	Objected

☐ Claims renumbered in the same order as presented by applicant ☐ CPA ☐ T.D. ☐ R.1.47

CLAIM		DATE								
Final	Original	07/24/2015								
	1	✓								
	2	✓								
	3	✓								
	4	✓								
	5	✓								
	6	✓								

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APPLICATION NUMBER	FILING OR 371(C) DATE	FIRST NAMED APPLICANT	ATTY. DOCKET NO./TITLE
14/738,350	06/12/2015	Carlos A. Pérez LaFuente	122358-387201

CONFIRMATION NO. 9146

26694
VENABLE LLP
P.O. BOX 34385
WASHINGTON, DC 20043-9998

POA ACCEPTANCE LETTER

OC000000076314589

Date Mailed: 07/16/2015

NOTICE OF ACCEPTANCE OF POWER OF ATTORNEY

This is in response to the Power of Attorney filed 07/08/2015.

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**.

/sibrahim/

PTO/AIA/84 (07-12)
Approved for use through 11/30/2014. OMB 0651-0035
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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: 26694

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	Name	Registration Number

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: 26694

OR

☐	Firm or Individual Name		
	Address		
	City	State	Zip
	Country		
	Telephone	Email	

Assignee Name and Address: Afirma Consulting & Technologies, S.L.
c/ Julio Palacios 13, 8º, 28029 Madrid, SPAIN

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		Date	12 JUNE 2015
Name	Carlos A. Pérez LaFuente	Telephone	(34) 627442681
Title	CEO		

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.

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.

PTO/SB/96 (07-09)
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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.

STATEMENT UNDER 37 CFR 3.73(b)

Applicant/Patent Owner: Carlos Alberto Pérez LaFuente

Application No./Patent No.: 14/738,350 Filed/Issue Date: 12 June 2015

Titled: METHOD AND SYSTEM FOR MONITORING A MOBILE STATION PRESENCE IN A SPECIAL AREA

Afirma Consulting & Technologies, S.L. (Name of Assignee), Company (Type of Assignee, e.g., corporation, partnership, university, government agency, etc.)

states that it is:

1. [x] the assignee of the entire right, title, and interest in;

[ ] an assignee of less than the entire right, title, and interest in
(The extent (by percentage) of its ownership interest is _____ %); or

3. [ ] an assignee of an undivided interest in the entirety of (a complete assignment from one of the joint inventors was made) the patent application/patent identified above by virtue of either:

A. [x] 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 035831, Frame 0288, or for which a copy thereof is attached.

OR

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.

3. 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).

[x] As required by 37 CFR 3.73(b)(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.

/Jeffri A. Kaminski/	July 8, 2015
Signature	Date
Jeffi A. Kaminski	Attorney/Agent 42,709
Printed or Typed Name	Title

9892761-v1

Electronic Acknowledgement Receipt

EFS ID:	22861101
Application Number:	14738350
International Application Number:	
Confirmation Number:	9146
Title of Invention:	METHOD AND SYSTEM FOR MONITORING A MOBILE STATION PRESENCE IN A SPECIAL AREA
First Named Inventor/Applicant Name:	Carlos A. Pérez LaFuente
Customer Number:	26694
Filer:	Jeffri Kaminski/Shana Stiles
Filer Authorized By:	Jeffri Kaminski
Attorney Docket Number:	122358-387201
Receipt Date:	08-JUL-2015
Filing Date:	12-JUN-2015
Time Stamp:	16:54:52
Application Type:	Utility under 35 USC 111(a)

Payment information:

Submitted with Payment	no

File Listing:

Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1	Power of Attorney	AFIRMAGENPOA.pdf	4122632 4f0686b0d55bb9f3802338ffdc11402352eec1c1	no	2
Warnings:					
Information:					

2	Assignee showing of ownership per 37 CFR 3.73	387201Statement373b.pdf	135320 8b73acd1afba90942787f26e71d9bf1e3e4ae0f6	no	1

Warnings:	
Information:	
Total Files Size (in bytes):	4257952

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 a 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.

PATENT APPLICATION FEE DETERMINATION RECORD

Substitute for Form PTO-875

Application or Docket Number: 14/738,350

APPLICATION AS FILED - PART I

FOR	(Column 1) NUMBER FILED	(Column 2) NUMBER EXTRA	SMALL ENTITY RATE($)	SMALL ENTITY FEE($)	OR	OTHER THAN SMALL ENTITY RATE($)	OTHER THAN SMALL ENTITY FEE($)
BASIC FEE (37 CFR 1.16(a), (b), or (c))	N/A	N/A	N/A	70		N/A	
SEARCH FEE (37 CFR 1.16(k), (i), or (m))	N/A	N/A	N/A	300		N/A	
EXAMINATION FEE (37 CFR 1.16(o), (p), or (q))	N/A	N/A	N/A	360		N/A	
TOTAL CLAIMS (37 CFR 1.16(i))	6 minus 20 =	*	x 40 =	0.00	OR		
INDEPENDENT CLAIMS (37 CFR 1.16(h))	4 minus 3 =	* 1	x 210 =	210			
APPLICATION SIZE FEE (37 CFR 1.16(s))	If the specification and drawings exceed 100 sheets of paper, the application size fee due is $310 ($155 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).			0.00			
MULTIPLE DEPENDENT CLAIM PRESENT (37 CFR 1.16(j))				0.00			
* If the difference in column 1 is less than zero, enter "0" in column 2.			TOTAL	940		TOTAL	

APPLICATION AS AMENDED - PART II

AMENDMENT A

	(Column 1) CLAIMS REMAINING AFTER AMENDMENT		(Column 2) HIGHEST NUMBER PREVIOUSLY PAID FOR	(Column 3) PRESENT EXTRA	SMALL ENTITY RATE($)	SMALL ENTITY ADDITIONAL FEE($)	OR	OTHER THAN SMALL ENTITY RATE($)	OTHER THAN SMALL ENTITY ADDITIONAL FEE($)
Total (37 CFR 1.16(i))	*	Minus	**	=	x =		OR	x =	
Independent (37 CFR 1.16(h))	*	Minus	***	=	x =		OR	x =	
Application Size Fee (37 CFR 1.16(s))									
FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))							OR		
					TOTAL ADD'L FEE		OR	TOTAL ADD'L FEE	

AMENDMENT B

	(Column 1) CLAIMS REMAINING AFTER AMENDMENT		(Column 2) HIGHEST NUMBER PREVIOUSLY PAID FOR	(Column 3) PRESENT EXTRA	RATE($)	ADDITIONAL FEE($)	OR	RATE($)	ADDITIONAL FEE($)
Total (37 CFR 1.16(i))	*	Minus	**	=	x =		OR	x =	
Independent (37 CFR 1.16(h))	*	Minus	***	=	x =		OR	x =	
Application Size Fee (37 CFR 1.16(s))									
FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))							OR		
					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 found in the appropriate box in column 1.

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

APPLICATION NUMBER	FILING or 371(c) DATE	GRP ART UNIT	FIL FEE REC'D	ATTY.DOCKET.NO	TOT CLAIMS	IND CLAIMS
14/738,350	06/12/2015	2642	940	122358-387201	6	4

CONFIRMATION NO. 9146

FILING RECEIPT

26694
VENABLE LLP
P.O. BOX 34385
WASHINGTON, DC 20043-9998

OC000000075889895

Date Mailed: 06/24/2015

Receipt is acknowledged of this non-provisional patent application. The application will be taken up for examination in due course. Applicant will be notified as to the results of the examination. Any correspondence concerning the application must include the following identification information: the U.S. APPLICATION NUMBER, FILING DATE, NAME OF APPLICANT, and TITLE OF INVENTION. Fees transmitted by check or draft are subject to collection. Please verify the accuracy of the data presented on this receipt. **If an error is noted on this Filing Receipt, please submit a written request for a Filing Receipt Correction. Please provide a copy of this Filing Receipt with the changes noted thereon. If you received a "Notice to File Missing Parts" for this application, please submit any corrections to this Filing Receipt with your reply to the Notice. When the USPTO processes the reply to the Notice, the USPTO will generate another Filing Receipt incorporating the requested corrections**

Inventor(s)

Carlos A. Pérez LaFuente, Madrid, SPAIN;

Applicant(s)

AFIRMA CONSULTING & TECHNOLOGIES, S.L., Madrid, SPAIN;

Assignment For Published Patent Application

AFIRMA CONSULTING & TECHNOLOGIES, S.L., Madrid, SPAIN

Power of Attorney: None

Domestic Priority data as claimed by applicant

This application is a CON of 14/561,426 12/05/2014
which is a CON of 14/315,703 06/26/2014 PAT 8934922
which is a CON of 14/250,517 04/11/2014 PAT 9042910
which is a CON of 12/294,641 04/12/2010 PAT 8738040

Foreign Applications for which priority is claimed (You may be eligible to benefit from the **Patent Prosecution Highway** program at the USPTO. Please see http://www.uspto.gov for more information.) - None.
Foreign application information must be provided in an Application Data Sheet in order to constitute a claim to foreign priority. See 37 CFR 1.55 and 1.76.

If Required, Foreign Filing License Granted: 06/23/2015
The country code and number of your priority application, to be used for filing abroad under the Paris Convention, is **US 14/738,350**
Projected Publication Date: 10/01/2015
Non-Publication Request: No
Early Publication Request: No

**** SMALL ENTITY ****

Title

METHOD AND SYSTEM FOR MONITORING A MOBILE STATION PRESENCE IN A SPECIAL AREA

Preliminary Class

455

Statement under 37 CFR 1.55 or 1.78 for AIA (First Inventor to File) Transition Applications: No

PROTECTING YOUR INVENTION OUTSIDE THE UNITED STATES

Since the rights granted by a U.S. patent extend only throughout the territory of the United States and have no effect in a foreign country, an inventor who wishes patent protection in another country must apply for a patent in a specific country or in regional patent offices. Applicants may wish to consider the filing of an international application under the Patent Cooperation Treaty (PCT). An international (PCT) application generally has the same effect as a regular national patent application in each PCT-member country. The PCT process **simplifies** the filing of patent applications on the same invention in member countries, but **does not result** in a grant of "an international patent" and does not eliminate the need of applicants to file additional documents and fees in countries where patent protection is desired.

Almost every country has its own patent law, and a person desiring a patent in a particular country must make an application for patent in that country in accordance with its particular laws. Since the laws of many countries differ in various respects from the patent law of the United States, applicants are advised to seek guidance from specific foreign countries to ensure that patent rights are not lost prematurely.

Applicants also are advised that in the case of inventions made in the United States, the Director of the USPTO must issue a license before applicants can apply for a patent in a foreign country. The filing of a U.S. patent application serves as a request for a foreign filing license. The application's filing receipt contains further information and guidance as to the status of applicant's license for foreign filing.

Applicants may wish to consult the USPTO booklet, "General Information Concerning Patents" (specifically, the section entitled "Treaties and Foreign Patents") for more information on timeframes and deadlines for filing foreign patent applications. The guide is available either by contacting the USPTO Contact Center at 800-786-9199, or it can be viewed on the USPTO website at http://www.uspto.gov/web/offices/pac/doc/general/index.html.

For information on preventing theft of your intellectual property (patents, trademarks and copyrights), you may wish to consult the U.S. Government website, http://www.stopfakes.gov. Part of a Department of Commerce initiative, this website includes self-help "toolkits" giving innovators guidance on how to protect intellectual property in specific countries such as China, Korea and Mexico. For questions regarding patent enforcement issues, applicants may call the U.S. Government hotline at 1-866-999-HALT (1-866-999-4258).

LICENSE FOR FOREIGN FILING UNDER

Title 35, United States Code, Section 184

Title 37, Code of Federal Regulations, 5.11 & 5.15

GRANTED

The applicant has been granted a license under 35 U.S.C. 184, if the phrase "IF REQUIRED, FOREIGN FILING LICENSE GRANTED" followed by a date appears on this form. Such licenses are issued in all applications where the conditions for issuance of a license have been met, regardless of whether or not a license may be required as set forth in 37 CFR 5.15. The scope and limitations of this license are set forth in 37 CFR 5.15(a) unless an earlier license has been issued under 37 CFR 5.15(b). The license is subject to revocation upon written notification. The date indicated is the effective date of the license, unless an earlier license of similar scope has been granted under 37 CFR 5.13 or 5.14.

This license is to be retained by the licensee and may be used at any time on or after the effective date thereof unless it is revoked. This license is automatically transferred to any related applications(s) filed under 37 CFR 1.53(d). This license is not retroactive.

The grant of a license does not in any way lessen the responsibility of a licensee for the security of the subject matter as imposed by any Government contract or the provisions of existing laws relating to espionage and the national security or the export of technical data. Licensees should apprise themselves of current regulations especially with respect to certain countries, of other agencies, particularly the Office of Defense Trade Controls, Department of State (with respect to Arms, Munitions and Implements of War (22 CFR 121-128)); the Bureau of Industry and Security, Department of Commerce (15 CFR parts 730-774); the Office of Foreign AssetsControl, Department of Treasury (31 CFR Parts 500+) and the Department of Energy.

NOT GRANTED

No license under 35 U.S.C. 184 has been granted at this time, if the phrase "IF REQUIRED, FOREIGN FILING LICENSE GRANTED" DOES NOT appear on this form. Applicant may still petition for a license under 37 CFR 5.12, if a license is desired before the expiration of 6 months from the filing date of the application. If 6 months has lapsed from the filing date of this application and the licensee has not received any indication of a secrecy order under 35 U.S.C. 181, the licensee may foreign file the application pursuant to 37 CFR 5.15(b).

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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

APPLICATION NUMBER	FILING OR 371(C) DATE	FIRST NAMED APPLICANT	ATTY. DOCKET NO./TITLE
14/738,350	06/12/2015	Carlos A. Pérez LaFuente	122358-387201

CONFIRMATION NO. 9146

26694
VENABLE LLP
P.O. BOX 34385
WASHINGTON, DC 20043-9998

IMPROPER CFR REQUEST



Date Mailed: 06/24/2015

RESPONSE TO REQUEST FOR CORRECTED FILING RECEIPT

Continuity, Priority Claims, Petitions, and Non-Publication Requests

In response to your request for a corrected Filing Receipt, the Office is unable to comply with your request because:

Improper Priority Claim(s) to Prior-Filed Foreign Application(s)

The instant application was not filed within twelve (12) months from the filing date of the prior-filed foreign application, and there is no benefit claim to an intermediate nonprovisional or international application designating the United States filed within 12 months of the filing date of the foreign application. Applicant should review each priority claim submitted and, if appropriate, provide the proper reference to any intermediate application filed within 12 months of the filing date of the foreign application in compliance with 37 CFR 1.78, or delete the priority claim. For applications filed on or after September 16, 2012, applicant must submit a corrected application data sheet (ADS) to include a specific reference.

Alternatively, if the instant application (or intermediate application) was filed within 14 months of the prior foreign application, applicant may file a petition (in the instant application) to restore the right of priority if the delay in filing the application within the 12 month time period was unintentional. See 37 CFR 1.55 for the requirements of a petition to restore the right of priority.

For applications filed on or after September 16, 2012, applicant must submit a corrected application data sheet (ADS) to include a foreign priority claim.

Timeliness: The required reference for the benefit claim to an intermediate nonprovisional or international application designating the United States must be filed during the pendency of the instant application and within the later of: (1) four months from the actual filing date of the instant application, or the national stage commencement date if the instant application is a national stage application under 35 U.S.C. 371; or (2) sixteen months from the filing date of the prior-filed application. Failure to timely file the required reference is considered a waiver of any benefit claim, unless a grantable petition to accept an unintentionally delayed claim under 37 CFR 1.78, the petition fee set forth in 37 CFR 1.17(m), and the required reference are filed.

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**.

/rsantos/

PTO/AIA/15 (03-13)
Approved for use through 01/31/2014. OMB 0651-0032
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

UTILITY PATENT APPLICATION TRANSMITTAL

(ONLY FOR NEW NONPROVISIONAL APPLICATIONS UNDER 37 CFR 1.53(B))

Attorney Docket No.	122358-387201
First Named Inventor	Carlos A. Pérez LaFuente
Title	METHOD AND SYSTEM FOR MONITORING A MOBILE STATION PRESENCE IN A SPECIAL AREA
Express Mail Label No.	

APPLICATION ELEMENTS

See MPEP chapter 600 concerning utility patent application contents.

1. [ ] **Fee Transmittal Form** (PTO/SB/17 or equivalent)
2. [X] **Applicant asserts small entity status.** See 37 CFR 1.27
3. [ ] **Applicant certifies micro entity status.** See 37 CFR 1.29. Applicant must attach form PTO/SB/15A or B or equivalent.
4. [X] **Specification** [*Total Pages* 37]
   Both the claims and abstract must start on a new page.
   (See MPEP § 608.01(a) for information on the preferred arrangement)
5. [X] **Drawing(s)** (35 U.S.C. 113) [*Total Sheets* 7]
6. **Inventor's Oath or Declaration** [*Total Pages* 1]
   (including substitute statements under 37 CFR 1.64 and assignments serving as an oath or declaration under 37 CFR 1.63(e))
   a. [ ] Newly executed (original or copy)
   b. [X] A copy from a prior application (37 CFR 1.63(d))
7. [X] **Application Data Sheet** ** See note below.*
   See 37 CFR 1.76 (PTO/AIA/14 or equivalent)
8. **CD-ROM or CD-R** in duplicate, large table, or Computer Program (*Appendix*)
   [ ] Landscape Table on CD
9. **Nucleotide and/or Amino Acid Sequence Submission** (*if applicable, items a. – c. are required*)
   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

ADDRESS TO: **Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450**

ACCOMPANYING APPLICATION PAPERS

10. [ ] **Assignment Papers** (cover sheet & document(s))
    Name of Assignee
11. [ ] **37 CFR 3.73(c) Statement** (*when there is an assignee*) [ ] **Power of Attorney**
12. [ ] **English Translation Document** (*if applicable*)
13. [X] **Information Disclosure Statement** (PTO/SB/08 or PTO-1449)
    [ ] Copies of citations attached
14. [ ] **Preliminary Amendment**
15. [ ] **Return Receipt Postcard** (*MPEP § 503*) (*Should be specifically itemized*)
16. [ ] **Certified Copy of Priority Document(s)** (*if foreign priority is claimed*)
17. [ ] **Nonpublication Request** Under 35 U.S.C. 122(b)(2)(B)(i). Applicant must attach form PTO/SB/35 or equivalent.
18. [ ] **Other:**

***Note:** (1) Benefit claims under 37 CFR 1.78 and foreign priority claims under 1.55 **must** be included in an Application Data Sheet (ADS).
(2) For applications filed under 35 U.S.C. 111, the application must contain an ADS specifying the applicant if the applicant is an assignee, person to whom the inventor is under an obligation to assign, or person who otherwise shows sufficient proprietary interest in the matter. See 37 CFR 1.46(b).

19. CORRESPONDENCE ADDRESS

[X] The address associated with Customer Number: 26694 **OR** [ ] Correspondence address below

Name					
Address					
City		State		Zip Code	
Country		Telephone		Email	

Signature	/Jeffri A. Kaminski/	Date	June 12, 2015
Name (Print/Type)	Jeffri A. Kaminski	Registration No. (Attorney/Agent)	42,709

Application Data Sheet

Inventor Information

Inventor Number::	1
Given Name::	Carlos
Middle Name::	A.
Family Name::	Pérez LaFuente
City of Residence::	Madrid
Country of Residence::	Spain
Street of mailing address::	C/ Julio Palacios, 13, Esc. Izq. 8 E
City of mailing address::	Madrid
Country of mailing address::	Spain
Postal or Zip Code of mailing address::	28029

Correspondence Information

Correspondence Customer Number::	26694
E-Mail address::	jakaminski@venable.com
	PTOMail@venable.com

Application Information

Application Type::	Continuation
Subject Matter::	Utility
CD-ROM or CD-R?::	None
Sequence submission?::	None

Computer Readable Form (CRF)?::	No
Title::	METHOD AND SYSTEM FOR MONITORING A MOBILE STATION PRESENCE IN A SPECIAL AREA
Attorney Docket Number::	122358-387201
Request for Early Publication?::	No
Request for Non-Publication?::	No
Total Drawing Sheets::	7
Small Entity?::	Yes
Petition included?::	No
Portions or all of the application associated with this Application Data Sheet may fall under a Secrecy Order pursuant to 37 CFR 5.2::	No
Authorization to Permit Access to the Instant Application by the Participating Offices::	No
This application (1) claims priority to or the benefit of an application filed before March 16, 2013 and (2) also contains, or contained at any time, a claim to a claimed invention that has an effective filing date on or after March 16, 2013::	No

Representative Information

Representative Customer Number::	26694

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Signature:

NOTE: This form must be signed in accordance with 37 CFR 1.33. See 37 CFR 1.4 for signature requirements and certifications.			
Signature	/Jeffri A. Kaminski/	Date	June 12, 2015
Name	Jeffri A. Kaminski	Registration Number	42,709

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DECLARATION (37 CFR 1.63) FOR UTILITY OR DESIGN APPLICATION USING AN APPLICATION DATA SHEET (37 CFR 1.76)

Title of Invention	METHOD AND SYSTEM FOR MONITORING A MOBILE STATION PRESENCE IN A SPECIAL AREA

As the below named inventor, I hereby declare that:

This declaration is directed to:
- [ ] The attached application, or
- [x] United States application or PCT international application number 14/250,517 filed on April 11, 2014.

The above-identified application was made or authorized to be made by me.

I believe that I am the original inventor or an original joint inventor of a claimed invention in the application.

I hereby acknowledge that any willful false statement made in this declaration is punishable under 18 U.S.C. 1001 by fine or imprisonment of not more than five (5) years, or both.

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LEGAL NAME OF INVENTOR

Inventor: Carlos A. Perez Lafuente Date (Optional): APRIL 14, 2014

Signature: Carlos A. Perez Lafuente

Note: An application data sheet (PTO/SB/14 or equivalent), including naming the entire inventive entity, must accompany this form or must have been previously filed. Use an additional PTO/AIA/01 form for each additional inventor.

Electronic Patent Application Fee Transmittal

Application Number:	
Filing Date:	
Title of Invention:	METHOD AND SYSTEM FOR MONITORING A MOBILE STATION PRESENCE IN A SPECIAL AREA
First Named Inventor/Applicant Name:	Carlos A. Pérez LaFuente
Filer:	Jeffri Kaminski/Shana Stiles
Attorney Docket Number:	122358-387201

Filed as Small Entity

Filing Fees for Utility under 35 USC 111(a)

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Utility filing Fee (Electronic filing)	4011	1	70	70
Utility Search Fee	2111	1	300	300
Utility Examination Fee	2311	1	360	360
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Independent Claims in Excess of 3	2201	1	210	210
Miscellaneous-Filing:				
Petition:				

Description	Fee Code	Quantity	Amount	Sub-Total in USD($)
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First Named Inventor/Applicant Name:	Carlos A. Pérez LaFuente
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1		387201Application.pdf	174549 2e7f0df83f0268f5c8be8c72f33e790730c1a36e	yes	37
	Multipart Description/PDF files in .zip description				
	Document Description		**Start**	**End**	
	Specification		1	34	
	Claims		35	36	
	Abstract		37	37	
Warnings:					
Information:					
2	Drawings-only black and white line drawings	figures.pdf	144735 757f28468c2f0bb89d40c0a04abdbb5690b00ee1	no	7
Warnings:					
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3	Transmittal of New Application	387201Transmittal.pdf	121590 abe397e4cb33ae86618497da67b72d3c3d3bbaa7	no	1
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5	Oath or Declaration filed	declaration.pdf	81207 f732bb431094c7f459d708b70d714f1399d5b1ec	no	1
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6	Fee Worksheet (SB06)	fee-info.pdf	37308 4ecea6a9a7b4c75179ae6c8e30ddc960114ad8f5	no	2
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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.

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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.

METHOD AND SYSTEM FOR MONITORING A MOBILE STATION PRESENCE IN A SPECIAL AREA

CROSS-REFERENCE TO RELATED APPLICATIONS

[0001] This application is a continuation of U.S. Application No. 14/561,426, filed December 5, 2014; which is a continuation of U.S. Application No. 14/315,703, filed June 26, 2014 and issued as U.S. Patent No. 8,934,922 on January 13, 2015; which is a continuation of U.S. Application No. 14/250,517, filed April 11, 2014 and issued as U.S. Patent No. 9,042,910 on May 26, 2015; which is a continuation of U.S. Patent Application No. 12/294,641, filed April 12, 2010 and issued as U.S. Patent No. 8,738,040 on May 27, 2014; which claims priority to International Application No. PCT/EP2007/052939, filed March 27, 2007; which claims benefit of the European Patent Application No. 06111804.8 filed March 28, 2006, the entire contents of all of which are hereby incorporated by reference in their entireties.

BACKGROUND ART

[0001] This invention relates to a method for monitoring a mobile station presence in a special area. This invention relates also to a mobile system, a server, a radio transmitting device, and a mobile station suitable for carrying out such a method.

[0002] Development of short range wireless communication solutions based on the use of Bluetooth, DECT and WIFI within a small area such as homes is strong competition for mobile operators owning wide mobile networks. A mobile telephone network (called also mobile network) includes a large number of base stations and all the data processing means required to provide the telecommunication service to each mobile station serviced by said mobile network.

[0003] These short range wireless communication solutions can provide direct connection to fixed networks whose operators offer cheaper rates than those offered by mobile networks. It can therefore be of interest for mobile network operators to offer different rates depending on the instantaneous location of a mobile station connected to its mobile network, in particular

in areas; called special areas, where it could face strong competition from some short range wireless communication solutions.

[0004] The published patent application No. US20020094801 describes a technical solution: a fixed station sends an encoded first signal and the coverage of said first signal defines a special area. The fixed station and a mobile station using the special area are linked one another via the signal code. But this document does not disclose anything about the content of said coded signal. In order to realize protection against the abuse of the system, in an embodiment, this document proposes to provide the fixed station with receiving and comparison means for an access code that is to be applied to the fixed station via the mobile station in order to put the fixed station into operation.

[0005] The international application WO 00/27152 offers another solution for locating a mobile station based on the use of a guide unit that broadcasts a short range radio signal which defines a home area. This document discloses that the short range radio signal contains the identity code of said mobile station that has to identify its own identity code in order to notice to a mobile switching centre that it is located in its home area. This mobile station transmits then a home message to the mobile network, this home message being possibly used notably for defining the price/service connected to telephone calls. In this last, technical solution, the guideunit has to know the identity of the mobile station and this last solution is thought to be used for a home special area.

[0006] However, this last technical solution does not allow the mobile network, to add for a mobile station one or more special areas wherein the presence of a mobile station is monitored without having to at least modify one or more guide units broadcasting in such areas. It lacks therefore of flexibility.

DISCLOSURE OF THE INVENTION

[0007] An object of the invention is therefore to provide a method for monitoring the presence of a mobile station in at least one special area, said method providing the flexibility to the mobile telephone network of associating new special areas for this mobile station in a secure way without modifying any radio transmitting device.

[0008] This object is achieved in accordance with claim 1 by providing a method for monitoring the presence of a mobile station in at least one special area associated to the mobile station, the method comprising the following steps:

a. at least one radio communication defining device transmits repeatedly in at least a channel one radio distinctive defining signal that defines the special area by its coverage
b. the mobile station observes the channel and process any signal
received in order to determine whether or not it is receiving any defining signal,
c. the mobile station processes any defining signal received in order to determine whether or not the defining signal received is a distinctive defining signal that defines the special area,
d. the mobile station sends an updating signal to a mobile telephone network about its presence in the special area,
e. the mobile telephone network routes the updating signal to special operating means that adapt the value of at least one operating parameter depending on the presence of the mobile station in the special area, the said method is characterized in that the special area is associated to the mobile station by transmitting to the mobile station a checking data, this checking data being used by the mobile station for determining whether or not the defining signal received is a distinctive defining signal that defines, alone or with other distinctive defining signals, the special area associated to the mobile station and the same checking data being sent to any mobile station whose presence in this special area is monitored.

[0009] Advantageously from the operator's point of view, the invention brings the flexibility needed to activate a special way of operating a mobile station in a special area by transmitting a checking data that will be stored in a mobile station database without having to modify, by way of introducing any new data (notably the identity code of said mobile station), at least one radio communication defining device likein the aforementioned international patent application WO 00/27152. Therefore, a radio communication defining device is not required to store all the mobile stations identity codes using the special area defined by at least the coverage of its defining signal(s).

[0010] According to the present invention, a special area associated to a mobile stationcan be defined by one or more defining signals. Therefore the checking data may preferably contain

information included in every defining signals defining completely a special area (each one defines it partially) and the mobile station try to find any of this information in any defining signal received with comparison means. The mobile station may receive defining signals that do not define any special area for it. In the case where the special area is defined by two or more defining signals, this special area may be the intersection of all or part of them or the global coverage of the defining signals.

[0011] In addition, a method according to the invention is specially suitable to be used in environments like for example airports, company's premises or business centres where the number of different mobile stations to be serviced by the mobile telephone network would be high. With the solution of the aforementioned international patent application WO 00/27152, it would be necessary to store and transmit in and from a single radio communication defining device all the mobile station identity codes of the potential mobile stations using a special area defined in such environment, operation which would difficult or even impossible considering that the radio spectrum is a limited resource. Therefore, the application WO 00/27152 has a narrower geographical scope of usability. It is also not required, thanks to the invention, to send any activation code to activate a radio communication defining device and it is not required to store all the mobile stations activation codes in the radio communication defining device, as in one embodiment of the published patent application n2US20020094801. Therefore, it is easier with this present invention to realize protection against abuse of the system.

[0012] The special operating means may be at least partly included in the data processing means of the mobile telephone network. All of them or part of them may be own or operate by an external provider of the mobile telephone network.

[0013] In a particular embodiment, the special area is deactivated for the mobile station by the mobile telephone network sending a deactivation signal to the mobile station to stop the mobile station from recognizing a defining signal that defines that special area as a distinctive one.

[0014] In a particular embodiment, the special operating means acknowledge the reception of the updating signal and transmit an acknowledgement signal to the mobile station. In this

embodiment, the mobile station knows advantageously if the mobile telephone network received the updating signal or not.

[0015] In a particular embodiment, at least one radio communication defining device is a wireless device whose radio defining signal that defines the special area is distinctive wireless signal transmitted by the wireless device in a frequency range outside the frequency range allocated for the mobile telephone network. Preferably, the said distinctive wireless signal contains wireless device identification data and reliable information confirming that the wireless device is effectively located into a predetermined environment. The operator of the mobile telephone network advantageously avoids fraud linked to a possible shifting of the wireless device. The checking data associated to this wireless device includes this wireless device identification data.

[0016] In another particular embodiment, at least one radio communication defining device is a base station whose radio distinctive defining signal that defines the special area is a distinctive signal comprising a special mobile telephone network identification code, the checking data associated to this base station includes this special mobile telephone network identification code.

[0017] In another particular embodiment, at least one radio communication defining device is a base station whose radio distinctive defining signal that defines the special area is a distinctive base station identity signal comprising an identification code of the base station, the checking data associated to this base station includes this base station identification code. The mobile telephone network operator controls and knows the location of all the base stations broadcasting identification codes contained into the mobile station database and therefore advantageously controls the location of the special area.

[0018] In an embodiment of this invention, the special operating means store a parameters database linking the special area to the mobile station and to a set of at least the operating parameter; and the special operating means adapt the value of at least an operational parameter of this set when they receive an updating signal signalling that the mobile station exits or enters the special area. Thanks tothis embodiment of the invention, the processing of these operating parameters is centralized in the special operating means and it is not done in each base station. In case the mobile station will be switch off, the mobile network operator

will decide whether or not the values of the operating parameters associated to the presence of the mobile station into special operating areas remain unchanged or are disabled into the database containing the set of operating parameters as consequence of the switching off process.

[0019] In a particular embodiment, the operating parameter is a tariff or a service flag that enables or disables a special tariff or a service for the mobile station. Advantageously, the operator's services offer can therefore being dependent on the location of the mobile station.

[0020] In a particular embodiment, the updating signal includes a request to access to a service or to a multimedia content and the mobile telephone network routes this request to a part of the special operating means that allow or forbid the provision of this service or multimedia content depending on whether or not the mobile station is into the special area. This part of the special operating means may be operated by the mobile telephone network operator or by a different provider.

[0021] In a particular embodiment, the transmission of the checking data to the mobile station is done via the mobile telephone network or via a signal of at least one radio device or via a person introducing the checking data in the mobile station.

[0022] According to the present invention, there is further provided a mobile system for monitoring the presence of a mobile station in a special area defined for this mobile station, said system comprising :

- checking means for detecting the presence of the mobile station in the special area associated to this mobile station, said checking means including

  - At least one radio communication defining device transmitting repeatedly in at least a channel a radio distinctive defining signal that defines the special area,

  - in the mobile station, observing means for observing the channel and processing means for processing any signal received in the channel in order to determine whether or not the signal received is a defining signal and, if the signal received is a defining signal, whether or not the signal received is a distinctive defining signal that defines the special area,

- transmission means for sending an updating signal regarding the presence of the mobile station in the special area from the processing means to special operating means included at least partly in data processing means of the mobile telephone network,

- the special operating means for adapting the value of at least one operating parameter depending on the presence of the mobile station in the special area, characterized in that the said mobile system comprises storing means for storing a checking data in the mobile station, the processing means include means for using this checking data for determining whether or not the defining signal received is a distinctive defining signal that defines, alone or with other distinctive defining signals, the special area and the same checking data is sent to any mobile station whose presence in this special area is monitored.

[0023] In a particular embodiment of the invention, the mobile system comprises special area location monitoring means for monitoring the correct location of at least a part of the special area. It is then harder to fraud by moving the radio communication defining device. In a particular embodiment of the invention, the mobile system carries out a method according to the present invention.

[0024] This invention also concerns a server. According to the invention, this server is characterized in that it contains at least some of the special operating means included in the mobile system according to the present invention. This server may contain the whole or part of the special operating means. In this last case, the special operating means may be spread in several servers or computers.

[0025] According to the present invention, there is further provided a radio communication defining device, characterized in that it carries out a method according to the present invention. In a particular embodiment, the said radio communication defining device of the invention is a wireless device and it contains means for transmitting the distinctive wireless signal that defines the special area and means for obtaining reliable information indicating whether or not the said wireless device is located into a predetermined environment.

[0026] This invention also concerns a mobile station, characterized in that this mobile station is suitable to carry out a method according to the present invention. This mobile station may be a mobile telephone or a Personal Digital Assistant for example.

BRIEF DESCRIPTION OF THE DRAWINGS

[0027] In the following detailed description of some possible embodiments, other features and advantages of the invention will appear, each description being made with reference to the following drawings:

[0028] Figure 1 is a schematic diagram illustrating an embodiment of a mobile system according to the invention;

[0029] Figure 2 is a schematic diagram illustrating another embodiment of a mobile system according to the invention;

[0030] Figure 3 is a schematic diagram illustrating another embodiment of a mobile system according to the invention;

[0031] Figure 4 is a flow chart illustrating partly an embodiment of a method according to the invention;

[0032] Figure 5 is a flow chart illustrating another part of an embodiment of a method according to the invention;

[0033] Figure 6 is a schematic diagram of a part of an operating parameters database in an embodiment of the invention;

[0034] Figure 7 is a schematic diagram of a part of another operating parameters database in an embodiment of the invention.

DETAILED DESCRIPTION

[0035] A mobile station serviced by the mobile telephone network. The mobile telephone network may be cellular or not.

[0036] In this description and in the claims, it is supposed, in the case that the mobile telephone network is cellular, that each base station of the cellular mobile telephone network is associated to a unique cell. Therefore, some base stations of the cellular mobile network can be located in the same location and share technical means. For example, a tower may incorporate three sets of antennas, each set being part of a different base station of the same mobile network.

[0037] Figure 1, figure 2 and figure 3 are three schematic figures describing three particular embodiments of mobile systems according to the invention.

[0038] Figure 1 is a schematic diagram illustrating an embodiment of the invention wherein:

- any base station 107 or 105 of a mobile telephone network of an operator is a radio communication defining device transmitting a radio defining signal in a channel used by the mobile telephone network,

- the distinctive radio defining signal that defines the special area is a distinctive signal transmitted by some selected base stations 105, said distinctive signal comprising a special mobile telephone network identification code. The sum of the coverage of these selected base stations 105 defines a special area (the shaded area of figure 1).

- the checking data includes this special mobile telephone network identification code.

[0039] More precisely, Figure 1 shows a geographical area 102 covered by the mobile telephone network. The radio coverage of the mobile telephone network in this geographical area 102 is the addition of the radio coverage 104 and 106 of several base stations 105 and 107. The mobile telephone network includes data-processing

means that comprise a server according to the invention including special operating means according to the invention.

[0040] Each base station is transmitting network data, including a mobile telephone network identification code, which allows a mobile station 100 in the geographical area 102 to select the appropriate mobile telephone network.

[0041] The operator of the mobile telephone network defines one special mobile telephone network identification code, called IC2, (in another embodiment, the operator may create more than one special mobile telephone network identification code) different from a normal mobile telephone network identification code, called IC1. Then the operator configures its mobile telephone network in such a way that some base stations 107 (in general the majority of them) transmit a radio defining signal comprising the normal mobile telephone network identification code and the selected base stations 105 (in general a minority of them) transmit a distinctive defining signal comprising a special mobile telephone network identification code.

[0042] The checking data (i.e. IC2) is stored into an internal mobile station database included in mobile station 100 storing means, this mobile station 100 being associated to this special area. The same checking data is sent to any mobile station whose presence in this special area is monitored.

[0043] The mobile station 100 contains observing means and processing means for determining that the distinctive defining signal transmitted by any base station 105 is received. These processing means include means for using the checking data that include, in this embodiment, comparing means:Thanks to these comparing means, the mobile telephone network identification codes received by the mobile station are compared to IC2 stored into the internal mobile station database: If the mobile station is in a position like the position (a) in figure 1, i.e. inside the special area, the mobile telephone network identification code received is equal to IC2 and therefore the mobile station 100 determines that it is into the special area. Otherwise, if the mobile station 100 is in position like the position (b) in figure 1, i.e. outside the special area, the mobile station 100 receives a defining signal containing 101 different from IC2

and determines that it is not receiving any distinctive defining signal and therefore that it is not into the special area.

[0044] For example, if the mobile station 100 is a GSM mobile station operating into a GSM mobile telephone network, the mobile station 100 has the capability to store the received mobile telephone networks identification codes into a mobile station 100 memory. In that case, the mobile station 100 may access to such internal memory to get data to determine, together with the checking data (i.e. IC2), whether or not it is receiving any distinctive defining signal.

[0045] With the exception of the processes concerning the invention, a special mobile telephone network identification code (IC2) is equivalent, from the perspective of both the mobile station and the mobile telephone network, to a normal mobile telephone network identification code (IC1). In this context, processes such as network selection, selection / reselection of base stations and handover will not be influenced because some base stations transmit IC1 and some other transmit IC2, such lack of influence meaning that all the mobile station and the mobile telephone network processes (except the processes concerning the invention) will be handle as if IC1 and IC2 would be the same code.

[0046] For example, a mobile telephone network operator can use this embodiment of the invention to offer one set of normal billing rates in-an urban environment of a country, and another set of special billing rates for a rural environment. Another example of the application of this embodiment of the invention is for a mobile telephone network operator to offer normal billing rates for the whole country except in industrial areas or business districts.

[0047] Figure 2 is a schematic diagram illustrating an example of another embodiment of a mobile system according to the invention wherein the radio communication defining device is a wireless device (212 or 212b), e.g. a WIFI, Bluetooth or DECT device, the radio distinctive defining signal that defines the special area is a distinctive wireless signal 214 or 214b (e.g. a WIFI, Bluetooth or DECT signal) transmitted by the wireless device (212 or 212b) in a frequency range outside the frequency range allocated for the mobile telephone network. A mobile station 200 whose presence in

the special area is monitored includes observing means and processing means for determining whether or not any defining signal is received inthe frequency range used by the wireless device.

[0048] Each distinctive wireless signal contains wireless device identification data and reliable information confirming that its transmitting wireless device (212 or 212b in figure 2) is effectively located into a predetermined environment. The checking data comprises a set of at least one wireless device identification data.

[0049] The predetermined environment may be one or more specific geographical locations (for example several fixed points into a restaurant) or a physicalenvironment that can be mobile (for example a car, a plane or a boat). The predetermined environment is defined by the operator of the mobile telephone network.

[0050] The distinctive wireless signals are preferably coded and the mobile station 15 processing means include decoding means to decode the wireless signals received.

[0051] The mobile system comprises special area location monitoring means for monitoring the correct location of any wireless device that may transmit a distinctive wireless signal into this predetermined environment and therefore for monitoring at least a part of the special area.

[0052] In a particular embodiment of the special area location monitoring means, the reliable information comprised into the wireless signal confirms that the wireless device is effectively located into a predetermined geographical environment defined by the operator of the mobile telephone network when:

the wireless device able to receive a RBU signal from at least one radio broadcasting unit (RBU)

RBU identification data is comprised into the RBU signal,

the wireless device receives, through the RBU signal from the RBU, the RBU identification data that are included into a RBU identification database of the wireless device..

[0053] The storage of the RBU identification data into the wireless device RBU identification data database may be done at the Wireless device configuration stage. In

the particular example of figure 2 and the wireless device 212, the RBU is a base station 205 of the mobile telephone network, the RBU identification data is a base station identification code. The wireless device 212 is authenticated into the mobile telephone network comprising the base station 205 and may receive the base station signal 220 when it is located within the range of coverage 204 of the base station 205.

[0054] In a second example of embodiment of the special area location monitoring means, the reliable information comprised into the wireless signal confirms that the wireless device is effectively located into a predetermined geographical environment defined by the operator of the mobile telephone network when it is physically connected to any fixed network connection points defined by the operator of the mobile telephone network for the special area and it is also authenticated into the said fixed network through any of the mentioned fixed network connection points. In this embodiment, the wireless device also comprises means for communicating with the fixed network. In a particular example of this embodiment, some parameters are stored into the wireless device during its configuration stage and such parameters are used by the wireless device to perform the said authentication process into the fixed network.

[0055] These connection points may be PSTN (`Public Switching Telephony Network') connectors for ADSL network services or electrical sockets for PLC (`Power Line Communication') home network services for example: In the particular example of figure 2 and the wireless device 212b, the wireless device 212b has to be connected to a connection point 230 of a fixed network and authenticated in this fixed network so that the reliable information comprised into the wireless signal 214b confirms that the wireless device is effectively located into a predetermined geographical environment.

[0056] In the third example of an embodiment of the special area location monitoring means (not illustrated in figure 2), the reliable information comprised into the wireless signal confirms that the wireless device is effectively located into a predetermined physical environment defined by the operator of the mobile telephone network when:

the wireless device is physically connected to a system registered and authorised by the mobile telephone network operator for the purposes of the invention and

the wireless device is authenticated into the mentioned system.

[0057] In a particular example of this embodiment some parameters are stored into the wireless device during its configuration stage and such parameters are used by the wireless device to perform the referred authentication process into the system. This system may be, in an example, embedded in a mobile device such as a car or a boat.

[0058] More precisely, Figure 2 shows a geographical area 202 covered by a mobile telephone network of an operator, the radio coverage of the mobile telephone network in this geographical area 202 being the addition of the radio coverage of several base stations 205 and 207. The mobile telephone network includes a server according to the invention comprising special operating means. In this embodiment, a wireless device 212 is located in a geographical environment agreed between the operator and the user, such as for example near to the user's house or near his/her work place. The wireless device 212b is located either into a geographical environment, such as for example the user's home, or into a physical environment, which may be mobile, such as for example the user's car, such environments being agreed between the operator and the user.

[0059] The checking data associated to a special area is stored into an internal mobile station database included in a memory (storing means) of a mobile station 200 associated to this special area.

[0060] Processing means comprised in the mobile station 200 compare any wireless device identification data received with the checking data stored in its internal mobile station database and determines that a wireless signal received is adistinctive wireless signal when:

such wireless signal is coded in a format predefined for a distinctive wireless signal and

the wireless device identification data comprised into the wireless signal is equal to at least one of the wireless device identification data stored into the internal mobile station database and

the reliable information comprised into the wireless signal confirms that the wireless device is effectively located into a predetermined environment.

[0061] Otherwise the mobile station 200 determines that the wireless signal received is not a distinctive wireless signal.

[0062] In the embodiment illustrated by the figure 2, the sum of the coverage (203,203b) of the wireless devices 212 and 212b transmitting distinctive wireless signals 214 and 214b defines a special area for the mobile station 200 according to the invention.

[0063] Transmission means for sending an updating signal regarding the presence of the mobile station 200 in the special area (203, 203b) from the processing means to the special operating means are partly comprised in the mobile station 200 and in the mobile telephone network. The updating signal may comprise the result of the last determination performed by the mobile station about its presence into the special area. In another embodiment, the reliable information related to whether or not the wireless device 212 or 212b is or not effectively located into its predetermined environment is also included into the updating signal.

[0064] In this embodiment, an operator of a mobile telephone network covering a geographical area 202 may offer cheaper rates, called special billing rates, to the user of a mobile station 200 if he uses his/her mobile station 200 within the range of coverage 203 of the wireless device 212 (position (a) of the mobile station 200) or within the range of coverage 203b of the wireless device 212b (position (b) of the mobile station 200).

[0065] As an example, a mobile telephone network operator can use this embodiment of the invention to offer one set of special billing rates in premises associated to the

user of the mobile station 200 as may be houses, cars or boats, and another set of normal billing rates for the rest of the environments where the user may use the mobile station 200. Another example of the application of this embodiment of the invention is for a mobile telephone network operator to offer normal billing rates for the whole country except in industrial areas, airports or restaurants.

[0066] Figure 3 is a schematic diagram illustrating an example of another embodiment of a mobile system according to the invention wherein the radio communication defining device is a base station, the radio defining signal that defines the special area is a distinctive base station identity signal comprising an identification code that identifies this base station, the checking data includes a set of at least one base station identification code.

[0067] Figure 3 shows a geographical area 302 covered by a mobile telephone network of an operator, the radio coverage of the mobile telephone network in this geographical area 302 being the addition of the radio coverage 304 and 306 of several base stations 305 and 307. The mobile telephone network includes a server according to the invention comprising special operating means.

[0068] Any mobile station 300 whose presence in the special area is monitored includes observing means and processing means for observing and processing the base station identity signal of the mobile telephone network base stations 305 and 307.

[0069] The checking data is stored into an internal mobile station database included in a memory (storing means) of a mobile station 300 associated to this special area.

[0070] Processing means of the mobile station 300 process the base stations identity signals received and compare their base station identification codes to the checking data and determine that at least one distinctive base station identification code signal is received (i.e. the mobile station 300 is in position (a)) when any of the base station identification codes received is equal to at least one of the base 17station identification codes stored into the internal mobile station database and otherwise determine that it is not receiving any distinctive base station identification code signal (i.e. the mobile station 300 is in position (b)).

[0071] For example, when a GSM mobile station is operating into a GSM mobile telephone network, the GSM mobile station 300 receives the identification code of the active base station and also the identification codes of some available neighbours base stations. The GSM mobile station 300 may consequently process the base station identification codes received to determine, together with the checking data, whether or not it is receiving any distinctive base station identification code signal.

[0072] The sum of the coverages 304 of the base stations 305 transmitting distinctive base station identification code signals defines a special area for the mobile station 300 according to the invention.

[0073] In this embodiment, an operator of a mobile telephone network covering a geographical area 302 may offer special services to the user of a mobile station 300 if he uses his/her mobile station 300 within the range of coverage of the base stations 305.

[0074] As an example a mobile telephone network operator can use this embodiment of the invention to offer one set of normal billing rates in an urban environment of a country, and another set of special billing rates for a rural environment. Another example of the application of this embodiment of the invention is for a mobile telephone network operator to offer normal billing rates for the whole country except in industrial areas or small towns.

[0075] Any combination of the embodiments of a mobile system according to the invention described herein is another embodiment here below of a mobile system according to the invention. That combination can be the result from 'N' different distinctive defining signals, each one comprising a different special mobile telephone network identification code or a different wireless device identification data or a different base station identification code..

[0076] For example, the mobile telephone network operator can then propose 'N' different sets of rates for 'N' different kinds of special areas for a given mobile station. In an example, an operator installs in the user's house a wireless device whose position is controlled by being or not in the range of coverage of a particular base station of the mobile network, another wireless device whose-• position is controlled by its

connection to a fix network in the user's holiday cottage and a third wireless device whose position is controlled by its connection to a system embedded in the user's car. The operator creates a special mobile telephone network identification code transmitted by the all the base stations of the user's city. Then the operator stores in the storing means of the user's mobile station the three wireless devices identification data, the user's city special mobile telephone network identification code and several sets of base stations identification codes, each set being the setof identification of base stations covering public places like airports and train stations. Then, the operator can adapt the tariffs charged and the services provided to the user depending notably whether his/her mobile station is in its city or outside, in its house, holiday cottage or car and / or in public places.

[0077] An embodiment of a method for monitoring the presence of a mobile station in atleast one special area according to the invention may include at least three parts:

a first part, illustrated in figure 4, that includes the steps needed to successfully transmit, store, erase and maintain checking data in a mobile station according to the invention,

a second part, illustrated in figure 5, that includes the steps needed for the mobile station to monitor its location in the special areas using the checking data that were transmitted to it and

a third part, illustrated in figure 6 and 7, that includes the adaptation of the operational parameters depending on the presence of the mobile station in any special area where this mobile station is monitoring its presence.

[0078] This embodiment of such method according to the invention may be carried out for example using any of the embodiments of mobile systems according to the invention described before.

[0079] Figure 4 is a flowchart of the first part 400 of a method according to one embodiment of the invention for successfully transmit, store, erase and maintain checking data in a mobile station according to the invention.

[0080] A mobile telephone network comprises in this embodiment data processing means that includes special operating means; the special operating means are included in a server and therefore are advantageously centralised and not distributed between each base station of the mobile telephone network.

[0081] An operator of a mobile telephone network (i.e. the company that operates this mobile telephone network) wishes to propose special billing rates and/or special services to users of its mobile telephone network, each user carrying a mobile station, when said users are within special areas of the invention.

[0082] The part 400 of this embodiment starts in step 402 when the operator wishes to monitor the presence of a mobile station in a special area.

[0083] In step 404, the operator defines a new special area if the operator wishes to create a new one. The special areas may be agreed between the operator and the user or simply defined by the operator.

[0084] The definition of the special area can be done by the coverage of one or several radio defining signals or by the intersection of the coverage of two or more radio defining signals.

[0085] In step 406, the operator updates a parameters database included in the special operating means. The parameters database associates each special area defined with the mobile stations whose presence in such special area is monitored. For the purposes of such association, each mobile station is identified into the parameters database by means of a mobile station identifier. In the parameters database, each mobile station identifier is associated with special tariffs and/or services which may be or not available for the mobile station depending on the presence of such mobile station into a given special area (and also depending on whether such tariffs and/or services are enabled or disabled into the parameters database for such mobile station).

[0086] The operating parameter(s) that may be adapted depending on the presence of the mobile station in one or more special areas at the same time may be notably related to activation or deactivation flags of tariffs and/or services provided to the mobile station by the mobile telephone network. Therefore, tariffs may be more or less

expensive for the said mobile station in predetermined special areas and / or the mobile station may be able or unable to use predetermined services offered by the operator of the mobile telephone network in predetermined special areas.

[0087] In step 408, the special operating means send a checking data to the mobile 15 station.

[0088] The checking data transmission can notably be done:

1) by sending the checking data stored in a server of the mobile telephone network to the mobile station through the mobile telephone network transmission channels. In a particular example, the mobile telephone network is a GSM network and the checking data from the server will be sent to the mobile station via encrypted short messages using an 'Over the Air' platform. The mobile station is able to decode the short messages and to store the checking data into an internal mobile station database,

2) through the use of a mobile station special software able to store into an internal mobile station database checking data obtained by the mobile station from at least one radio communication defining device. In a particular example, it may be necessary that an operator's representative introduces a password to allow the mobile station special software to operate. The mobile station special software may ask the operator's representative to validate the storage of the checking data through the mobile telephone keyboard,

3) or via a person (e.g. an operator's representative) who enters the checking data into the mobile station using the mobile station keyboard.

[0089] Regarding the second option, two examples are provided. In a first example, the mobile station is operating in a GSM network, the mobile station obtains from the active cell its cell identification code and from other neighbouring cells, if available, their cell identification codes. When the special software is run for example in the user's home, it is able to obtain such cells identification codes and store them in the internal mobile station database of checking data, associating them with the user's home special area.

[0090] In a second example, the mobile station can obtain, by using a WIFI device embedded into the mobile station, neighbouring WIFI devices identification data. When the special software is run for example in the user's home, it is able to obtain such WIFI device identification data and store them in the internal mobile station database of checking data, associating them with the user's home special area.

[0091] Once the checking data has been successfully stored into the internal mobile station database, a confirmation of new checking data is sent to the parameters database. In addition, notably regarding to the second and third options to transmit checking data to the mobile station, the stored checking data may be sent by the mobile station to the parameters database through the mobile telephone network for the mobile telephone network to know this checking data..

[0092] In step 410, the special operating means wait for the confirmation of new checking data from the mobile station. Once the information is received, it is stored into the parameters database and the special operating means transmit an acknowledgment to the mobile station. In case the mobile station does not receive the acknowledgment after a certain time, the mobile station sends the confirmation of new checking data again until it receives the acknowledgment or until it resents the information up to a maximum number of times.

[0093] It is advantagenous to store the checking data into themobile station, mainly in comparison to the prior art where it was necessary to store mobile station identity codes and/or activation signals into a fix unit.

[0094] If the confirmation of new checking data is not received (possibility 412) by the special operating means, the special operating means transmit again the checking data to the mobile station (step 408).

[0095] When the confirmation of new checking data from the mobile station is received (possibility 414) by the special operating means, the special operating means know in step 416 that the mobile station updated its internal mobile station database and the internal mobile station database is in accordance with the operator wishes.

[0096] After the first special area checking data or set of checking data is stored in the internal mobile station database, the operator can add more in the same way.

[0097] In another hand, in this embodiment of a method according to the invention, the operator can deactivate a special area following the steps 430 to 440.

[0098] In step 430, the operator chooses to deactivate a special area for a mobile station, with or without the agreement of the mobile station user. In step 432, the operator deactivates into the parameters database all the special tariffs and/or services associated to the presence of the mobile station into the special area. In step 434, the special operating means transmit a deactivation signal to the mobile station (using the mobile telephone network) asking the mobile station to erase, into itsinternal mobile station database, the checking data associated with the special area that the operator wishes to deactivate.

[0099] In another embodiment, the deactivation signal just blocks into the mobile station the use of the special area checking data but does not erase it. The result is the same: the deactivation signal avoids the mobile station recognising the special area(s) associated with this deactivation signal.

[00100] The transmission of the deactivation signal may be done notably as in the first and third options for transmitting the checking data (as seen in description of step 408).

[00101] Once the deactivation signal has been successfully received and processed by the mobile station, a confirmation of deactivation is sent to the parameters database. In step 436, the special operating means wait for the confirmation of deactivation from the mobile station. Once the confirmation of deactivation is received by the special operating means (possibility 440), this fact is stored into the parameters database and the special operating means transmit an acknowledgment to the mobile station. In case the mobile station does not receive the acknowledgment after a certain time, the mobile station sends the confirmation of deactivation again until it receives the acknowledgment or, in another embodiment, until it resents the confirmation of deactivation up to a maximum number of times.

[00102] If the confirmation of deactivation is not received (possibility 438) by the special operating means, the special operating means transmit again a deactivation signal to the mobile station (step 434).

[00103] When the confirmation from the mobile station regarding the successful reception and process of the deactivation signal is received (possibility 440) by the operating means, the operating means know in step 416 that the mobile station updated its internal checking data database and the internal mobile station database is in accordance with the operator wishes.

[00104] In another hand, in this embodiment of a method according to the invention, the operator can modify a special area following the steps 450 to 460 to adapt the

internal mobile station database to the operator's wishes. In step 450, the operator chooses to modify a special area for a given mobile station, with or without the agreement of the mobile station user, and defines such modified special area. For example, this can be done by including in the checking data associated to one special area, some additional checking data for the special area being not only the coverage of one distinctive defining signal but the intersection (or the sum) of the coverage of the former one and the coverage of a new one. This can be done too by erasing in a set of checking data associated to one special area, some checking data in order to, for example, transform a special area defined as the intersection (or the sum) of the coverage of two distinctive defining signals into a special area defined as the coverage of one only distinctive defining signal.

[00105] In case the operator wishes to add a new checking data (the steps for erasing one can be easily inferred by analogy), in step 452, the operator updates the parameters database in order to include, if known, the new checking data associated to the mobile station and the modified special area.

[00106] In step 454, the special operating means send, by using any of the three options for transmitting checking data described in step 408, the new checking data to the mobile station using the mobile telephone network.

[00107] Once the new checking data has been successfully stored into the part of the internal mobile station database that contains the checking data linked to the special area that has to be modified, a confirmation of modification of checking data is sent to the parameters database. In addition, typically regarding to the second and third options to transmit checking data to the mobile station described in step 408, the stored new checking data may be sent by the mobile station to the parameters database through the mobile telephone network. In step 456, the special operating means wait for the confirmation of modification of checking data from the mobile station. Once the confirmation of modification is received, this fact is stored into the parameters database and the special operating means transmit an acknowledgment to the mobile station. In case the mobile station does not receive the acknowledgment after a certain time, the mobile station sends the information again until it receives the acknowledgment or, in another embodiment, until it resents the information up to a maximum number of times.

[00108] If the confirmation of modification of checking data is not received (possibility 458) by the special operating means, the special operating means send again the new checking data to the mobile station (step 454).

[00109] When the confirmation of modification sent from the mobile station is received by the special operating means (possibility 460), the special operating means know that in step 416, the mobile station updated its internal checking data database and the internal mobile station database is in accordance with the operator wishes.

[00110] The second part of this embodiment of a method according to the invention is illustrated in figure 5 and includes the steps needed for the mobile station to monitor its location in the special areas using the checking data that were transmitted into it.

[00111] In step 500, a mobile station is switched on. In an embodiment, the mobile telephone network sets the values of the operating parameters managed in the parameters database to a set of initial values when the mobile station is switched off (as at that time it is not present in any special area) in order to start operating the mobile station when it is just switched on. In step 510, the mobile station observes, through the appropriate channel(s), any signal received and process it to determine

whether or not it is receiving any defining signal from . radio communication defining devices (e.g. from the base stations of a mobile telephone network or from wireless devices).

[00112] In one embodiment, the defining signal is coded (or part of the data contained in such a defining signal). In this embodiment, the mobile station is able to decode the information as part of the processing of the defining signals received.

[00113] A radio defining signal from a radio communication defining device may be transmitted on a continuous or periodical basis. The mobile station observation as to whether or not it is receiving any defining signal can be continuous or periodical. In step 512, the mobile station decide if it receives a defining signal (possibility 516) or not (possibility 514) after observing and processing any signal received.

[00114] When one or several defining signals are received, they are processed in step 518 by the mobile station notably in order to compare, in this embodiment, the appropriate part of their content with any checking data stored in the internal mobile station database.

[00115] When a defining signal received is from a wireless device (transmitted in a frequency range outside the frequency range allocated for the mobile telephone network), the mobile station preferably also search in step 518 whether or not the defining signal received contains reliable information confirming (or not) that the wireless device is effectively located into a predetermined environment defined by the operator of the mobile telephone network.

[00116] Then, in step 520, depending on the result of the internal process carried out in step 518, the mobile station decides whether (possibility 524) or not (possibility 522) the defining signal received is a distinctive defining signal that defines a special area for this mobile station, therefore validating or not the defining signal received as a distinctive defining signal.

[00117] If the special area is defined by the sum of the coverage of several distinctive defining signals, the mobile station has to recognize at least one of the three

distinctive defining signals at one time in order to determine that it is into this special area.

[00118] In another example, the mobile station knows that it is into a special area defined as the intersection of the coverage of several distinctive defining signals when it is observing and recognizing at one time all these distinctive defining signals.

[00119] The mobile station may be prepared to display a text or an icon (e.g. 'home' or airport' icon) when the mobile station determines that it is included in a particular special area for this mobile station.

[00120] In step 526, the mobile station sends and updating signal to the mobile telephone network about its presence in the special area.

[00121] In particular embodiment, the mobile station sends periodically (for example every 30 seconds) an updating signal about its presence into a special area, such updating signal comprising the result of the last determination performed by the mobile station about its presence into the special area.

[00122] In another particular embodiment the mobile station only sends to the mobile telephone network an updating signal about its presence into a special area when
it enters into or exit from such special area.

[00123] For a special area defined by the sum of the coverage of several distinctive defining signals:

If the mobile station processing of the defining signals received in a certain moment determines that at least one distinctive defining signal associated to this special area is received:

- If the previous processing of the defining signals received determined that no distinctive defining signal associated to this special area was received at that time then the mobile station interprets that it has recently entered into this special area.
- If the next processing of the defining signals received determines that at least one distinctive defining signal associated to this special area is still being

received then the mobile station interprets that it remains located into this special area;

- If the mobile station processing of the defining signals received in a certain moment determines that no distinctive defining signal associated to this special area is received:
- If the previous processing of the defining signals received determined that at least one distinctive defining signal associated to this special area was received at that time then the mobile station interprets that it has recently left this special area.
- If the next processing of the defining signals received determines that no distinctive defining signal associated to this special area is still being received then the mobile station interprets that it remains out of this special area.

[00124] For a special area defined by the intersection of the coverage of several distinctive defining signals a procedure equivalent to the one above can be easily inferred by analogy.

[00125] The updating signal may be sent through a diversity of channels provided by the mobile telephone network. For example, in a GSM mobile network, the updating signals can be sent using the USSD ('Unstructured Supplementary Service Data', GSM standards) channel. The data comprised into the updating signal will typically be coded by the mobile station and decoded by the special operating means of the server.

[00126] In this embodiment, the updating signals are sent from the mobile station to the special operating means of the mobile telephone network requesting an acknowledgement from the special operating means.

[00127] In step 530, the mobile station search for the acknowledgment from the special operating means.

[00128] If the acknowledgement is not received in the mobile station (possibility 532) because the updating signal does not reach the special operating means or the mobile station detects a failure in the transmission of the updating signal or there is a failure in the transmission of the acknowledgment, then the mobile station may send

the updating signal again up to a predetermined number of times according to a predefined retransmissions policy.

[00129] When the acknowledgment is received (possibility 531) into the mobile station, the mobile station knows in step 534 that the special operating means will make the appropriate adaptations in the operating parameters of the special areas database.

[00130] More generally, the special operating means area waiting for any updating signal from any mobile station whose identification code is into the parameters database. When the special operating means receive an updating signal from a mobile station, they then adapt the operational parameters of the special areas database that depend on the presence of this mobile station m a special area associated with this mobile station and send the acknowledgement.

[00131] In one embodiment, the updating signal contains a request to access to services and/or to download contents provided direct or indirectly by the mobile telephone network of the operator. Then, an access or downloading right is granted or denied by the mobile telephone network depending on the presence of the mobile station in a special area.

[00132] The acknowledgment signals of the updating signal from the special operating means are preferably coded. In that case, the mobile station processing means are able to decode the acknowledgments of the updating signals.

[00133] The operator of the mobile telephone network has therefore a guarantee that the mobile telephone network will know at least a change on the presence of the mobile station in one or more special areas even if the radio communication link between the mobile station and the mobile telephone network is temporarily unavailable.

[00134] In a particular embodiment the mobile telephone network may enable or disable to the mobile station to use predetermined services depending on the presence of the mobile station into a special area.

[00135] As an example, the mobile station may incorporate special checking software able to generate statistics about the use of the mobile telephone (phone calls, messages, etc.) into special areas. This software may be enabled for operation by the mobile telephone network when the mobile station enters into a predetermined special area and disabled when the mobile station exits such special area.

[00136] As another example, the mobile telephone network may broadcast certain messages associated to a special area (e.g. airport information). The mobile station can be enabled by the mobile telephone network to accept and display those broadcasted messages when it is located within this special area and disabled when it exits the special area.

[00137] The third part of this embodiment of a method according to the invention is illustrated in figures 6 and 7 and includes the adaptation of the operational parameters to the presence of the mobile station in any special area where this mobile station is monitoring its presence.

[00138] When the mobile telephone network receives an updating signal, the special operating means of the server adjust the value of at least one operating parameter of a parameters database linking the special area and the mobile station. The value of the operating parameter(s) depends on the information contained into the updating signal about the presence of the mobile station into the special area.

[00139] In a particular example, operating parameters related to a special tariff and some services are enabled or remains enabled into the referred parameters database when the information contained into the updating signal indicates that the mobile station has recently entered or remains located into the special area. In the same example, the special tariff and the services are disabled or remains disabled into the referred parameters database when the information contained into the updating signal indicates that the mobile station recently left or remains out of the special area.

[00140] More precisely, Figure 6 is a schematic illustration of an example of a part of the parameters database 600 of operating parameters included in the special operating means according to an embodiment of the invention. The illustrated part of the special operating means database 600 links two special areas SA1 606 and SA2

608 with 3 mobile stations identification codes MS(i-1), MS(i) and MS(I+1), each of which having an entry 603, 604 and 605.

[00141] The column 602 of the database comprises the mobile stations identification codes. A mobile station identification code refers to a code that is associated with the subscription of the mobile station user into the mobile telephone network. As an example, in a GSM network the referred mobile station identification code may be the MSISDN.

[00142] In this example, the set of checking data of mobile "station MS(i) for the special area SA1 606, defined in the column 610/606 of the entry 604 contains :

a checking data 650 comprised into the distinctive defining signal of a first base station BS1 (e.g. the identification code of BS1), such distinctive defining signal defines the special area SA1 606,

a checking data 652 comprised into the distinctive defining signal of a second base station BS2 (e.g. the identification code of BS1), such distinctive defining signal also defines the special area SA1 606, and a checking data 654 comprised into the distinctive defining signal of a wireless device WD1 (e.g. the identification data of WD1), such distinctive defining signal also defines the special area SA1 606,

for the special area SA1. The mobile station determines that it is located into the special area SA1 606 when it receives at least one of the three identifiers 650, 652, 654 comprised into the distinctive defining signals coming from BS1, BS2 and WD1, i.e. when it is located within the range of coverage of any of the three distinctive defining signals (according to one of the embodiments of the invention, in the case of the defining signal of WD1, in order to consider that such defining signal is a distinctive defining signal, it will additionally be necessary that the reliable information comprised into the defining signal confirms that WD1 is effectively located into a predetermined environment).

[00143] In this example, the value of column 611/606 for the mobile station MS(i) and for the special area 606 is enabled (`-i-') or disabled (`-') at a given time depending

on whether or not the mobile telephone network receives a confirmation of new checking data (see description of figure 4) from this mobile station confirming that all the checking data corresponding with the special area has been stored into this mobile station (based on the same principle, it would also be possible to add another column in the parameters database to monitor the reception of confirmations of deactivation of checking data and another one to monitor the reception of confirmations of modification of checking data for a given special area 32: see description of figure 4).

[00144] In this example, the value of columri 611/606 for MS(i) is enabled (+) for the special area SA1 606. In another example, the value of column 611/606 for themobile station MS (i) and for the special area 606 contains a set of values enabled (`+) or disabled ('-'), one for each checking data.

[00145] The column 612/606 corresponding to the operating parameter "Mobile Station Control Flag" is enabled ('+') or disabled (`-`) at a given time for the mobile station MS (i) and for the special area SA1 606 depending on the information comprised into the updating signals received about the presence of the mobile station into the special area 606. In this example, at a given time, the mobile station MS(i) is supposed to be in SA1 606 as the operating parameter "Mobile Station Control Flag" 612/606 is enabled (+1).

[00146] When the "Mobile Station Control Flag" is enabled (+) at a given time for the mobile station MS(i) and for the special area 606, certain tariffs or services related to such special area may be available for the user of the mobile station depending on the value (+) or (-) of the corresponding tariff or service flags for such mobilestation and special area into the operating parameters database. In this example, at a given time, in the column 'Tariff identifier' 614/606, the parameter is then set at 'XXX' and in the column 616/606, the 'Tariff Flag' is enabled (+). In the column 618/606, the 'Service identifier' parameter is then set at 'YYY' and in the column 620/606, the 'Service Flag' of said service 'YYY' is enabled ('+'). In the column 622/606, the 'Service identifier' parameter -is set at 2ZZ' and in the column 624/606, the 'Service Flag' of said service `ZZZ' is disabled ('-') because service ZZZ is disabled at that time for the mobile station MS(i) and the special area SA1 606.

[00147] The set of columns 610/608 to 624/608 provides the same kind of information for the special area SA2 608. The set of checking data of mobile station MS(i) (column 610/608) refers to wireless devices WD1 with the checking data 656, WD2 with the checking data 658 and WD3 with the checking data 660 for the special area SA2 608. In this special area, at that time, the value of column 611/608 for MS(i) is disabled (-), the operating parameter "Mobile Station Control Flag" (column 612/608) is disabled (`-`). Tariff 'PPP' (column 614/608) is enabled (`+' in column 616/608), service `QQQ' (column 6)8/608) is enabled ('+' in column 620/608) and service `RRR' (column 622/608) is enabled (`+' in column 624/608). The tariff PPP and the services QQQ and RRR are associated to mobile station MS(i) when it is in' the special area SA2 608.

[00148] In another embodiment of the invention, the special operating means are distributed into different servers of the mobile telephone network or of service providers associated with the mobile telephone network and an updating signal may be sent to any of those servers.

[00149] In a particular example of this embodiment, there will be a server containing a part of the special operating means that stores a pargmeters database (e.g. the database illustrated in figure 6) of operating parameters containing the special areas checking data. In this example part of the updating signals from the mobile stations may be sent to this server of the mobile telephone network and processed by the part of the special operating means that this server contains.

[00150] In this example there will be at least another server, called switch server, into the mobile telephone network or associated to it, server that is including another part of the special operating means that include another parameters database of operating parameters, called switch parameters database, that does not contain checking data. The part of special operating means included in this other server allows or forbids the provision of some multimedia contents and applications available to mobile stations (and may preferably provide them itself) depending on the presence, in any special area registered in this switch parameters database, of any mobile station associated with this special area in this switch parameters database.

[00151] Figure 7 illustrates an example of part of a switch parameters database 700 where 702, 703, 704, 705, 706, 708, 712/706 and 712/708 have the same meaning than respectively 602, 603, 604, 605, 606, 608, 612/606 and 612/608 of Figure 6. The contents and applications 'AAA' are available to the mobile station MS(i) when it is into the special area SA1 706. The contents and applications 'BBB' are available to the mobile station MS(i) when it is into the special area SA2 708.

[00152] In the example of figure 7, the part of the special operating means included into the switch server receives, embedded into an updating signal from MS(i), a request to download a content or an application 'AAA', and the downloading right is granted because such updating signal from MS(i) also indicates (value '+' in column 712/706) that it is located in the special area 706 at that time.

[00153] In the same manner, in the example of figure 7, the-part of the special operating means included into the switch server receives, embedded into an updating signal from MS(i), a request to download a content or an application 'BBB', but the downloading right is not granted because such updating signal from MS(i) also indicates (value in column 712/708) that it is not located in the special area 708 at that time.

[00154] In some cases the switch server is entirely property of the mobile telephone network operator while in some others there is an agreement in place with a third party.

[00155] Although the present invention has been described in detail for purpose of illustration, it is understood that such detail is solely for that purpose, and variations can be made therein by those skilled in the art without departing from the scope of the invention. Thus, while the preferred embodiments of the method and of the mobile system have been described in reference to the environment in which they were developed, they are merely illustrative of the principles of the invention. Other embodiments and configurations may be devised without departing from the scope of the appended claims.

[00156] Further, although the embodiments of the invention describe with reference to the drawings comprise computer apparatus and proceqses performed in computer

apparatus, the invention also extends to computer programs, particularly computer programs on or in a carrier, adapted for putting the invention into practice. The program may be in the form of source code, object code, a code intermediate source and object code such as in partially compiled form, or in any other form suitable for use in the implementation of the processes according to the invention. The carrier may be any entity or device capable of carrying the program. For example, the carrier may comprise storage medium, such as a ROM, for example a CD ROM or a semiconductor ROM, or a magnetic recording medium, for example a floppy disc or hard disk. Further, the carrier may be a transmissible carrier such as an electrical or optical signal which may be conveyed via electrical or optical cable or by radio or other means. When the program is embodied in a signal which may be conveyed directly by a cable or other device or means, the carrier may be constituted by such cable or other device or means. Alternatively, the carrier may be an integrated circuit in which the program is embedded, the integrated circuit being adapted for performing, or for use in the performance of, the relevant processes.

CLAIMS

1. A method associated with the use of a mobile station that stores in a memory checking data and uses the checking data to determine whether or not a defining signal received from a radio communication defining device is a distinctive defining signal, the distinctive defining signal at least partly defines a special area by its coverage, the method comprising:

one or more servers of a provider of presence related services receiving from the mobile station via a mobile telephone network an updating signal uncorrelated to any mobile station phone call establishment that identifies the mobile station´s presence in the special area; and

storing in the one or more servers a parameters database having an operating parameter whose value is determined at least in part by the updating signal received from the mobile station,

determining when the mobile station is switched off; and

upon determining that the mobile station is switched off setting the value of the operating parameter to an initial value.

2. The method according to claim 1, wherein the operating parameter is a tariff flag or a service flag that enables or disables a special tariff or a service for the mobile station.

3. A method associated with the use of a mobile station that stores and uses checking data to determine whether or not a defining signal received from a radio communication defining device is a distinctive defining signal, the distinctive defining signal at least partly defines a special area by its coverage, the method comprising:

sending from the mobile station to at least one server of a provider of presence related services a updating signal via a mobile telephone network uncorrelated to any mobile station phone call establishment that identifies the mobile station´s presence in the special area.

4. The method according to claim 3, further comprising the mobile station retransmitting the updating signal upon not receiving the acknowledgement from the at least one server.

5. A method associated with the use of a mobile station and at least one radio communication defining device that transmits a distinctive defining signal that at least partly defines a special area by its coverage, the distinctive defining signal including data, the method comprising:

receiving and processing a defining signal in the mobile station to determine, based on a previously obtained at least portion of the data, whether or not the defining signal is a distinctive defining signal and to determine whether or not the mobile station is present in the special area; and

generating in the mobile station statistics about the use of the mobile station in the special area.

6. A non-transitory computer readable medium storing computer readable program code for causing a processor of a mobile station to perform a method associated with the use of at least one radio communication defining device that transmits a distinctive defining signal that at least partly defines a special area by its coverage, the distinctive defining signal including data, the method comprising:

receiving and processing a defining signal in the mobile station to determine, based on a previously obtained at least portion of the data, whether or not the defining signal is a distinctive defining signal and to determine whether or not the mobile station is present in the special area; and

generating in the mobile station statistics about the use of the mobile station in the special area.

ABSTRACT

Method for monitoring the presence of a mobile station in at least one special area, wherein a radio communication defining device transmits one radio distinctive defining signal that define the special area by its coverage, the mobile station processes a signal received in order to determine whether or not it is defining signal and more precisly a distinctive one that defines the special area, the mobile station sends an updating signal to a mobile telephone network, the network routes the updating signal to special operating means that adapt the value of an operating parameter. According to the invention, the special area is associated to the mobile station by transmitting to the mobile station a checking data used by the mobile station for determining whether or not the defining signal received is distinctive defining signal.

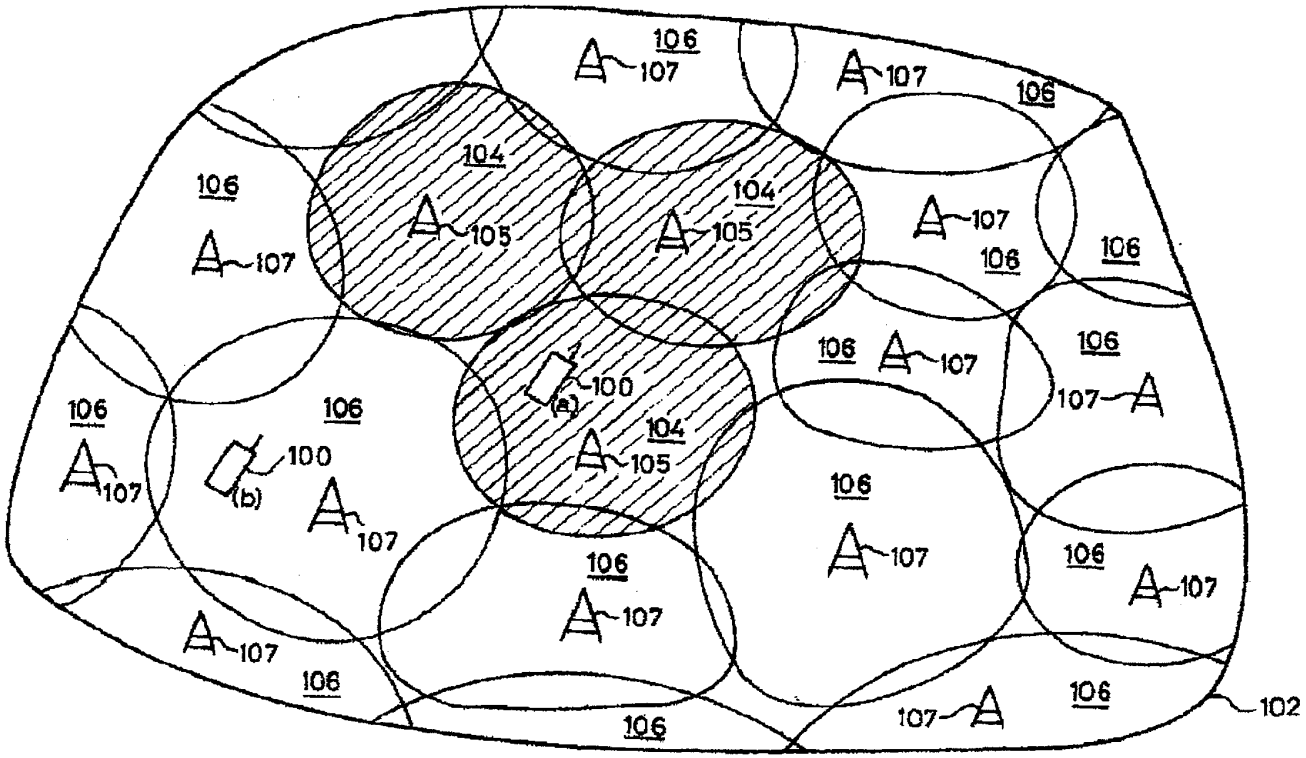
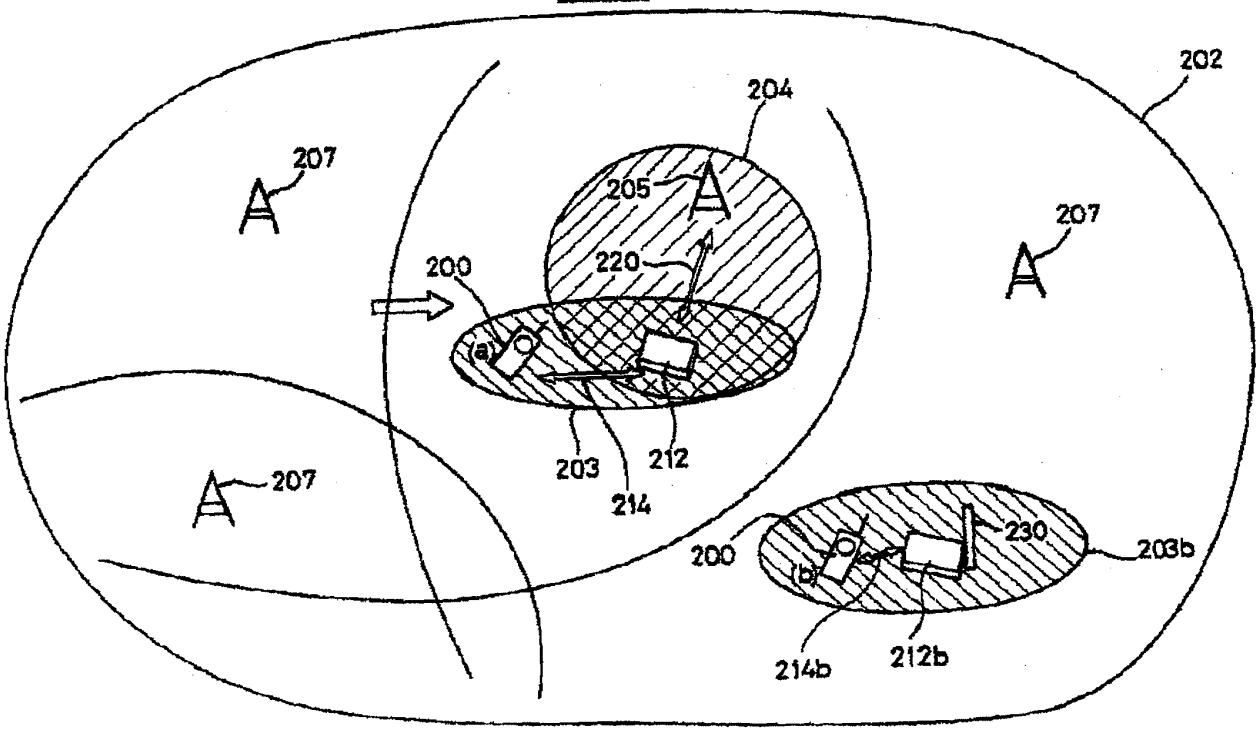


FIG_1

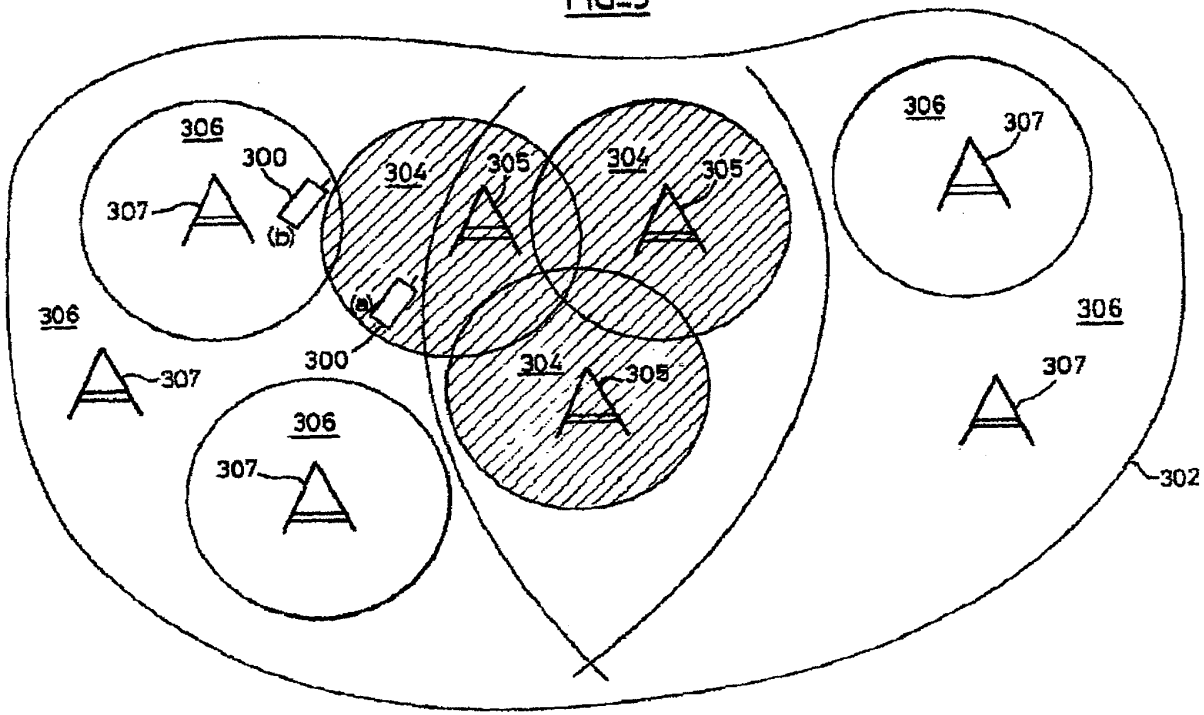
Ex.1002 / Page 268 of 280
APPLE INC.

FIG_2



Ex.1002 / Page 269 of 280
APPLE INC.

FIG_3



Ex.1002 / Page 270 of 280
APPLE INC.

FIG_4

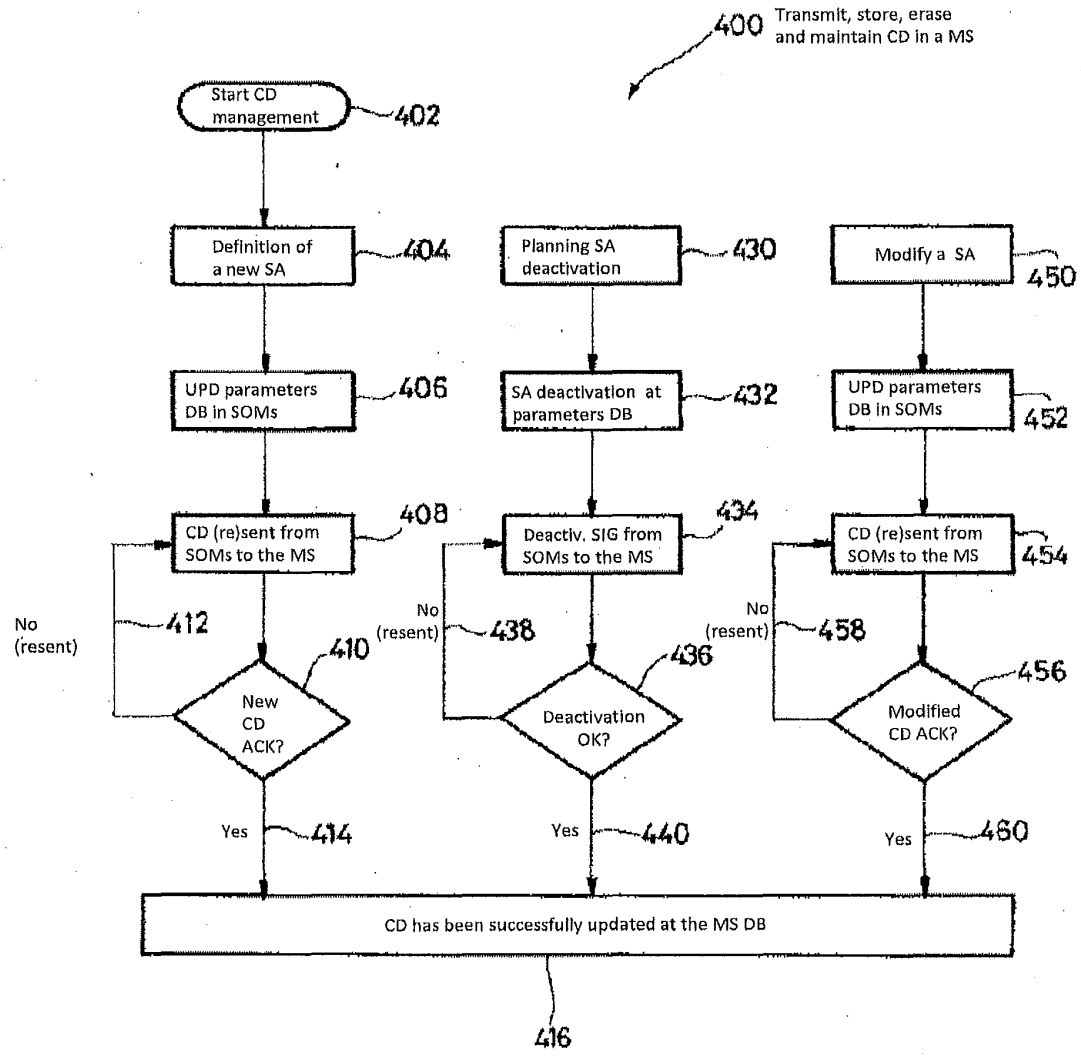

400
Transmit, store, erase and maintain CD in a MS
Start CD management
402
Definition of a new SA
404
UPD parameters DB in SOMs
406
CD (re)sent from SOMs to the MS
408
New CD ACK?
410
No (resent)
412
Yes
414
Planning SA deactivation
430
SA deactivation at parameters DB
432
Deactiv. SIG from SOMs to the MS
434
Deactivation OK?
436
No (resent)
438
Yes
440
Modify a SA
450
UPD parameters DB in SOMs
452
CD (re)sent from SOMs to the MS
454
Modified CD ACK?
456
No (resent)
458
Yes
460
CD has been successfully updated at the MS DB
416

FIG_5

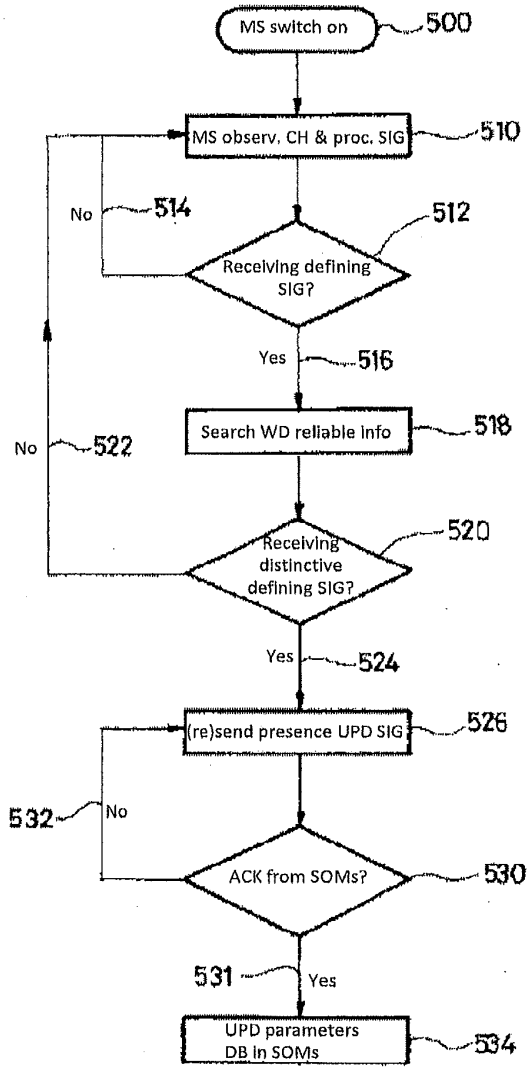

MS switch on
500
MS observ. CH & proc. SIG
510
No
514
512
Receiving defining SIG?
Yes
516
Search WD reliable info
518
No
522
Receiving distinctive defining SIG?
520
Yes
524
(re)send presence UPD SIG
526
532
No
ACK from SOMs?
530
531
Yes
UPD parameters DB in SOMs
534

FIG_6

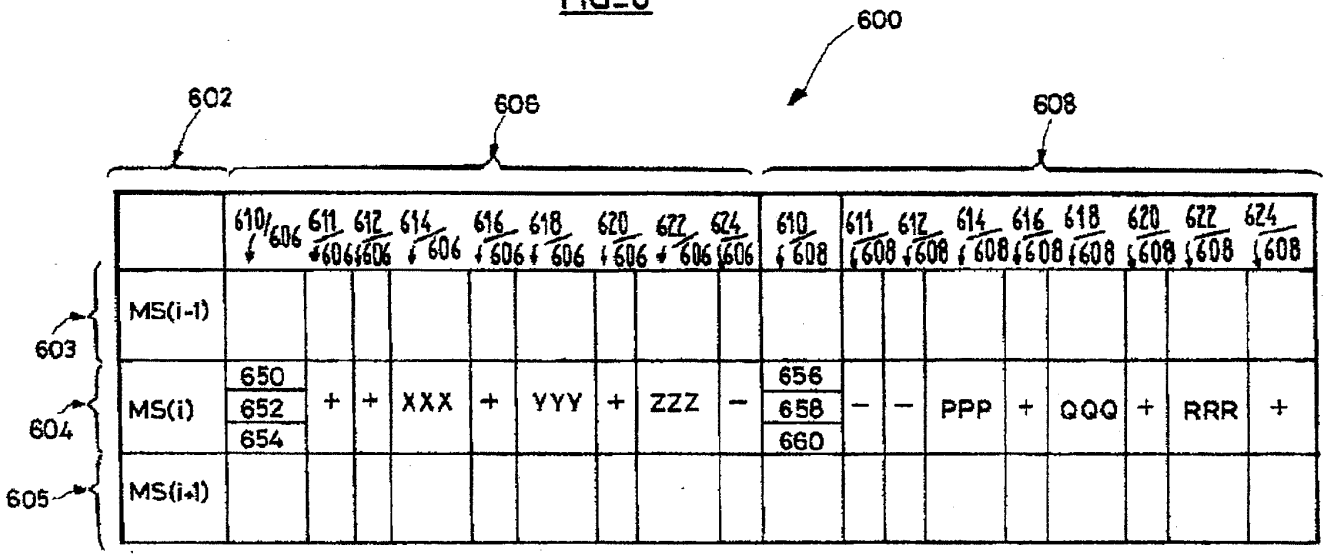
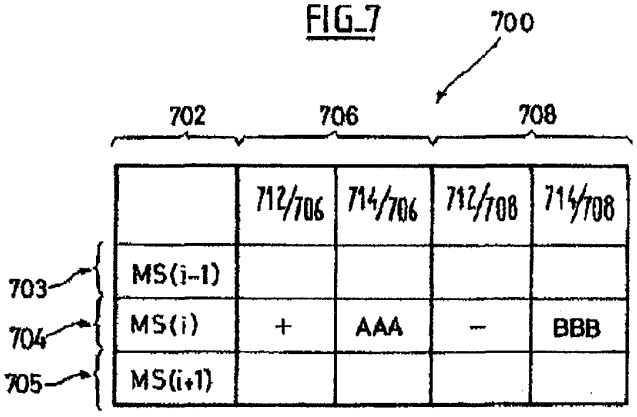

600
602
606
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620/608
622/608
624/608
603
MS(i-1)
604
MS(i)
650
652
654
+
+
XXX
+
YYY
+
ZZZ
−
656
658
660
−
−
PPP
+
QQQ
+
RRR
+
605
MS(i+1)

FIG_7


700
702
706
708
712/706
714/706
712/708
714/708
703
MS(i-1)
704
MS(i)
+
AAA
–
BBB
705
MS(i+1)

PTO/SB/08b (07-09)
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INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Use as many sheets as necessary)

Sheet 1 of 2

Complete if Known	
Application Number	14/738,350
Filing Date	June 12, 2015
First Named Inventor	Carlos A. Pérez LaFuente
Art Unit	Not Yet Assigned
Examiner Name	Not Yet Assigned
Attorney Docket Number	122358-387201

U. S. PATENT DOCUMENTS

Examiner Initials*	Cite No.[1]	Document Number Number-Kind Code[2] *(if known)*	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
	AA*	US-2002/0094801	07-18-2002	Atorf	
	AB*	US-6,516,190	02-04-2003	Linkola	
	AC*	US-6,516,193	02-04-2003	Salmela et al.	
	AD*	US-6,826,414	11-30-2004	Reynolds et al.	
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	AR*	US-7,171,189	01-30-2007	Bianconi et al.	
	AS*	US-7,266,366	09-04-2007	Kall	

FOREIGN PATENT DOCUMENTS

Examiner Initials*	Cite No.[1]	Foreign Patent Document Country Code[3]-Number[4]-Kind Code[5] *(if known)*	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages Or Relevant Figures Appear	T[6]
	BA**	WO-0103372-A1	01-11-2001	Samsung Electronics Co., Ltd		

Examiner Signature		Date Considered	

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Sheet 2 of 2

Complete if Known	
Application Number	14/738,350
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	AT*	US-20080004045	01-03-2008	Srey et al.	
	AU*	US-20080261604	10-23-2008	Ritter	
	AV*	US-7,634,255	12-15-2009	Ko et al.	
	AW*	US-20100167725	07-01-2010	Noldus et al.	
	AX*	US-7,778,652	08-17-2010	Srey et al.	
	AY*	US-5,642,303	06-24-1997	Small et al.	
	AZ*	US-6,122,520	09-19-2000	Want et al.	
	AA1*	US-7,848,765	12-07-2010	Phillips et al.	

NON PATENT LITERATURE DOCUMENTS

Examiner Initials*	Cite No.[1]	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T[2]
	CA**	International Search Report issued in PCT/EP2007/052939 dated June 21, 2007	

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Electronic Acknowledgement Receipt

EFS ID:	22622212
Application Number:	14738350
International Application Number:	
Confirmation Number:	9146
Title of Invention:	METHOD AND SYSTEM FOR MONITORING A MOBILE STATION PRESENCE IN A SPECIAL AREA
First Named Inventor/Applicant Name:	Carlos A. PÃ©rez LaFuente
Customer Number:	26694
Filer:	Jeffri Kaminski/Shana Stiles
Filer Authorized By:	Jeffri Kaminski
Attorney Docket Number:	122358-387201
Receipt Date:	12-JUN-2015
Filing Date:	
Time Stamp:	17:49:59
Application Type:	Utility under 35 USC 111(a)

Payment information:

Submitted with Payment	no

File Listing:

Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1	Transmittal Letter	387201IDS.pdf	85039 be300188dc614e66dfc902f794b5d9db889dd99f	no	2
Warnings:					
Information:					

2	Information Disclosure Statement (IDS) Form (SB08)	387201SB08.pdf	167061 e8731a6f430bacf8368bebe5523aa27d50440853	no	2

Warnings:	
Information:	
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If a new application is being filed and the application includes the necessary components for a 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.

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of: Carlos A. Pérez LaFuente	Art Unit: Not Yet Assigned
Application No: 14/738,350	Examiner: Not Yet Assigned
Confirmation No: 9146	
Filed: June 12, 2015	Atty. Docket No: 122358-387201
For: METHOD AND SYSTEM FOR MONITORING A MOBILE STATION PRESENCE IN A SPECIAL AREA	Customer No: 26694 PATENT & TRADEMARK OFFICE

INFORMATION DISCLOSURE STATEMENT (IDS)

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

Dear Madam:

Pursuant to 37 C.F.R. § 1.56, 1.97 and 1.98, the attention of the Patent and Trademark Office is hereby directed to the references listed on the attached PTO/SB/08. It is respectfully requested that the information be expressly considered during the prosecution of this application, and that the references be made of record therein and appear among the "References Cited" on any patent to issue therefrom.

This Information Disclosure Statement accompanies the new patent application submitted herewith. This application is related to U.S. Application Nos. 14/738,083, 14/738,176 and 14/738,256, all filed on the same date, June 12, 2015.

Copies of the references on the PTO/SB/08 are not provided because they were previously cited by or submitted to the Office in prior application numbers 14/561426 filed

December 5, 2014, 14/315703 filed June 26, 2014, 14/250517 filed April 11, 2014, 12/294641 filed March 27, 2007 and relied upon in this application for an earlier filing date under 35 U.S.C. § 120.

In accordance with 37 C.F.R. § 1.97(g), the filing of this Information Disclosure Statement shall not be construed to mean that a search has been made or that no other material information as defined in 37 C.F.R. § 1.56(a) exists. In accordance with 37 C.F.R. § 1.97(h), the filing of this Information Disclosure Statement shall not be construed to be an admission that any patent, publication or other information referred to therein is "prior art" for this invention unless specifically designated as such.

It is submitted that the Information Disclosure Statement is in compliance with 37 C.F.R. § 1.98 and the Examiner is respectfully requested to consider the listed references.

The Director is hereby authorized to charge any deficiency in the fees filed, asserted to be filed or which should have been filed herewith (or with any paper hereafter filed in this application by this firm) to our Deposit Account No. 22-0261, under Order No. 122358-385724.

Dated: June 12, 2015

Respectfully submitted,

9805083

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