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.
14/743,237	11/01/2016	9485621	0572.0001C4	4168

27896 7590 10/12/2016

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 08/16/2016
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.
14/743,237	06/18/2015	Carlos A. Pérez LaFuente	0572.0001C4	4168

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	~~UNDISCOUNTED~~	~~$960~~ $480	$0	$0	~~$960~~ $480	11/16/2016

EXAMINER	ART UNIT	CLASS-SUBCLASS
NEALON, WILLIAM	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 050460 (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 September 27, 2016

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:	14743237
Filing Date:	18-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/Janet Dorgan
Attorney Docket Number:	0572.0001C4

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:	27041158
Application Number:	14743237
International Application Number:	
Confirmation Number:	4168
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:	0572.0001C4
Receipt Date:	27-SEP-2016
Filing Date:	18-JUN-2015
Time Stamp:	13:13:37
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	092716INTEFSW13140400
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)	2016-09-27_IssueFeeTransmittal_Part-B-0001C4.pdf	233623 5f0071828ba3e3a0a84fe3aa2731436573d59775	no	2
Warnings:					
Information:					
2	Fee Worksheet (SB06)	fee-info.pdf	30593 73cfef22679cca88e6a10cd39970880e4841bebc	no	2
Warnings:					
Information:					
		Total Files Size (in bytes):	264216		

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 08/16/2016

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

EXAMINER	
NEALON, WILLIAM	
ART UNIT	PAPER NUMBER
2643	

DATE MAILED: 08/16/2016

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
14/743,237	06/18/2015	Carlos A. Pérez LaFuente	0572.0001C4	4168

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	UNDISCOUNTED	$960	$0	$0	$960	11/16/2016

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 08/16/2016
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.
14/743,237	06/18/2015	Carlos A. Pérez LaFuente	0572.0001C4	4168

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	UNDISCOUNTED	$960	$0	$0	$960	11/16/2016

EXAMINER	ART UNIT	CLASS-SUBCLASS
NEALON, WILLIAM	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
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.
14/743,237	06/18/2015	Carlos A. Pérez LaFuente	0572.0001C4	4168

27896 7590 08/16/2016

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

EXAMINER	
NEALON, WILLIAM	

ART UNIT	PAPER NUMBER
2643	

DATE MAILED: 08/16/2016

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)).
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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. 14/743,237	Applicant(s) PÉREZ LAFUENTE, CARLOS A.	
	Examiner WILLIAM NEALON	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 *RCE filed 03/23/2016*.
   ☐ 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 *1-4,6-14 and 16-20*. 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 05/25/2016
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 _____.

/WILLIAM NEALON/
Primary Examiner, Art Unit 2643

Allowability Notice

Statement of Reasons for Allowance

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

2. Pending claims 1-4, 6-14 and 16-20 are allowed.

3. Following are the examiner's reasons for allowance:

The prior art of Jokimies (6,526,267) with Atorf (2002/0094801) and with Salmela (6,616,193) was demonstrated to have taught/suggest several of the features found in independent claims 1 and 11 (see previous office action mailed 02/25/2016). However, the prior art doesn't teach or suggest that the provider of the presence related services found in the claims is a provider not related to the mobile telephone network and that the servers performing the steps of the claims are those belonging to only the provider. Examiner sees that the Applicant's arguments, received 03/23/2016, are correct in that none of the prior art contemplated the service provider being anything other than the mobile telephone network itself.

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."

Contact Information

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Bill Nealon whose telephone number is (571) 270-7795. The examiner can normally be reached on Mon.-Fri. from 9:00-5:30. 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 703-872-9306. 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).

/WILLIAM NEALON/

Primary Examiner, Art Unit 2643

Search Notes	Application/Control No.	Applicant(s)/Patent Under Reexamination
	14743237	PÉREZ LAFUENTE, CARLOS A.
	Examiner	**Art Unit**
	William Nealon	2643

CPC- SEARCHED		
Symbol	**Date**	**Examiner**

CPC COMBINATION SETS - SEARCHED		
Symbol	**Date**	**Examiner**

US CLASSIFICATION SEARCHED			
Class	**Subclass**	**Date**	**Examiner**
455	456.4, 555, 408, 432.2, 456.1, 414.1, 433, 406, 458	8/9/2015	jc
455	456.4, 555, 408, 432.2, 456.1, 414.1, 433, 406, 458	1/22/2016	jc

SEARCH NOTES		
Search Notes	**Date**	**Examiner**
inventor search and text search on East for receive mobile station signal data presence special service area	8/9/2015	jc
update inventor search and text search on East databases	1/22/2016	jc
US and CPC search using EAST databases US-PAT and US-PatPUB.	07/25/2016	W. Nealon
researched and reviewed prior art for amended subject matter.	07/25/2016	W. Nealon

INTERFERENCE SEARCH			
US Class/ CPC Symbol	**US Subclass / CPC Group**	**Date**	**Examiner**
455	456.$; 555; 408.	07/25/2016	W. Nealon
H04W	24/00; 48/08; 64/00; 28/18; 4/02; 48/16.	07/25/2016	W. Nealon

	/WILLIAM NEALON/ Primary Examiner.Art Unit 2643

Issue Classification	Application/Control No.	Applicant(s)/Patent Under Reexamination
	14743237	PÉREZ LAFUENTE, CARLOS A.
	Examiner	**Art Unit**
	WILLIAM NEALON	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)	18	
/WILLIAM NEALON/ Primary Examiner.Art Unit 2643	07/25/2016	O.G. Print Claim(s)	O.G. Print Figure
(Primary Examiner)	(Date)	1	5

Issue Classification	Application/Control No.	Applicant(s)/Patent Under Reexamination
	14743237	PÉREZ LAFUENTE, CARLOS A.
	Examiner	**Art Unit**
	WILLIAM NEALON	2643

US ORIGINAL CLASSIFICATION		INTERNATIONAL CLASSIFICATION										
CLASS	SUBCLASS	CLAIMED					NON-CLAIMED					
455	456.3	H	0	4	W	4 / 02 (2009.01.01)						
		H	0	4	W	4 / 00 (2009.01.01)						
CROSS REFERENCE(S)		H	0	4	W	8 / 00 (2009.01.01)						

CLASS	SUBCLASS (ONE SUBCLASS PER BLOCK)				
455	456.4	555	408	456.1	456.2

NONE		Total Claims Allowed:	
(Assistant Examiner)	(Date)	18	
/WILLIAM NEALON/ Primary Examiner.Art Unit 2643	07/25/2016	O.G. Print Claim(s)	O.G. Print Figure
(Primary Examiner)	(Date)	1	5

Issue Classification	Application/Control No.	Applicant(s)/Patent Under Reexamination
	14743237	PÉREZ LAFUENTE, CARLOS A.
	Examiner	**Art Unit**
	WILLIAM NEALON	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	15	17												
2	2	16	18												
3	3	17	19												
4	4	18	20												
	5		21												
5	6		22												
6	7		23												
7	8		24												
8	9		25												
9	10		26												
10	11														
11	12														
12	13														
13	14														
	15														
14	16														

NONE (Assistant Examiner)	(Date)	**Total Claims Allowed:** 18	
/WILLIAM NEALON/ Primary Examiner.Art Unit 2643 (Primary Examiner)	07/25/2016 (Date)	O.G. Print Claim(s) 1	O.G. Print Figure 5

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
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	14743237
Filing Date	2015-06-18
First Named Inventor	Carlos A. Perez Lafuente
Art Unit	2643
Examiner Name	Jean Chang
Attorney Docket Number	0572.0001C4

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
/W.N./	1	8019364		2011-09-13	Toeroe	

If you wish to add additional U.S. Patent citation information please click the Add button. Add

U.S.PATENT APPLICATION PUBLICATIONS Remove

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
/W.N./	1	20080242298		2008-10-02	Nylander	
/W.N./	2	20040166870		2004-08-26	Backes	

If you wish to add additional U.S. Published Application citation information please click the Add button. Add

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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							

If you wish to add additional Foreign Patent Document citation information please click the Add button Add

NON-PATENT LITERATURE DOCUMENTS Remove

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	14743237
	Filing Date	2015-06-18
	First Named Inventor	Carlos A. Perez Lafuente
	Art Unit	2643
	Examiner Name	Jean Chang
	Attorney Docket Number	0572.0001C4

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	/William Nealon/	Date Considered	06/17/2016

*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.

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /W.N./

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	14743237
	Filing Date	2015-06-18
	First Named Inventor	Carlos A. Perez Lafuente
	Art Unit	2643
	Examiner Name	Jean Chang
	Attorney Docket Number	0572.0001C4

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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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.

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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.

EAST Search History

EAST Search History (Interference)

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L8	8218	(455/456.$ OR 455/555 OR 455/408).ccls. and @ad<"20070327"	US-PGPUB; USPAT	ADJ	ON	2016/07/25 11:10
L9	17125	(H04W24/00 OR H04W28/18 OR H04W48/08 OR H04W4/02 OR H04W64/00 OR H04W48/16 OR H04W8/00).CPC. and @ad<"20070327"	US-PGPUB; USPAT	ADJ	ON	2016/07/25 11:11
L10	3449	l8 and l9	US-PGPUB; USPAT	ADJ	ON	2016/07/25 11:11
L11	21894	l8 OR l9	US-PGPUB; USPAT	ADJ	ON	2016/07/25 11:12
L12	21	L11 and (mobile or wireless or electronic or communication) (station or device or phone or terminal or equipment) near10 (presence or enterS4 or exitS4 or leav$4 or detectS4 or identify$4 or determin$4 or recogniz$4 or realiz$3 or checkS3) 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 (sendS4 or transmitS5 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	ADJ	ON	2016/07/25 11:12
L13	1	(updat$4 NEAR (signal OR message) WITH ((enabl$3 OR disabl$4) NEAR4 (access OR presence))).clm. and L11	US-PGPUB; USPAT	ADJ	ON	2016/07/25 11:18

7/25/2016 11:27:15 AM
C:\Users\wnealon\Documents\EAST\Workspaces\14743237.wsp

Index of Claims	Application/Control No.	Applicant(s)/Patent Under Reexamination
	14743237	PÉREZ LAFUENTE, CARLOS A.
	Examiner	**Art Unit**
	William Nealon	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	08/08/2015		01/22/2016	07/25/2016					
1	1	✓		✓	=					
2	2	✓		✓	=					
3	3	✓		✓	=					
4	4	✓		✓	=					
	5	✓		-	-					
5	6	✓		✓	=					
6	7	✓		✓	=					
7	8	✓		✓	=					
8	9	✓		✓	=					
9	10	✓		✓	=					
10	11	✓		✓	=					
11	12	✓		✓	=					
12	13	✓		✓	=					
13	14	✓		✓	=					
	15	✓		-	-					
14	16	✓		✓	=					
15	17	✓		✓	=					
16	18	✓		✓	=					
17	19	✓		✓	=					
18	20	✓		✓	=					
	21	✓		✓	-					
	22	✓		✓	-					
	23	✓		✓	-					
	24	✓		✓	-					
	25	✓		✓	-					
	26	✓		✓	-					

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
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	14743237
	Filing Date	2015-06-18
	First Named Inventor	Carlos A. Perez Lafuente
	Art Unit	2643
	Examiner Name	Jean Chang
	Attorney Docket Number	0572.0001C4

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	8019364		2011-09-13	Toeroe	

If you wish to add additional U.S. Patent citation information please click the Add button. Add

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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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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]
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INFORMATION DISCLOSURE STATEMENT BY APPLICANT (**Not for submission under 37 CFR 1.99)**		
	Application Number	14743237
	Filing Date	2015-06-18
	First Named Inventor	Carlos A. Perez Lafuente
	Art Unit	2643
	Examiner Name	Jean Chang
	Attorney Docket Number	0572.0001C4

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	14743237
	Filing Date	2015-06-18
	First Named Inventor	Carlos A. Perez Lafuente
	Art Unit	2643
	Examiner Name	Jean Chang
	Attorney Docket Number	0572.0001C4

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:	25883308
Application Number:	14743237
International Application Number:	
Confirmation Number:	4168
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:	0572.0001C4
Receipt Date:	25-MAY-2016
Filing Date:	18-JUN-2015
Time Stamp:	17:08:44
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	139311 886f3e7c6b059ed2646886d45dd2519e4d6e9c9f	no	2
Warnings:					
Information:					

2	Information Disclosure Statement (IDS) Form (SB08)	IDSSB08a.pdf	638096 cd24ed06beee56ef1df30bc01167468a0c16e0e0	no	4

Warnings:	
Information:	
Total Files Size (in bytes):	777407

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.	:	14/743,237
First Named Inventor	:	Carlos A. Perez Lafuente
Confirmation No.	:	4168
Filed	:	June 18, 2015
TC/A.U.	:	2643
Examiner	:	Jean Chang
Customer No.	:	27896
Docket No.	:	0572.0001C4
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

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	14/743,237	Filing Date	2015-06-18	Docket Number (if applicable)	0572.0001C4	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

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.

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.

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 the Freedom of Information Act requires disclosure of these records.

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.

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Application No.	:	14/743,237
First Named Inventor	:	Carlos A. Perez Lafuente
Confirmation No.	:	4168
Filed	:	June 18, 2015
TC/A.U.	:	2643
Examiner	:	Jean Chang
Customer No.	:	27896
Docket No.	:	0572.0001C4
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 February 25, 2016, 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 7 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 in connection with the use of a mobile station that is operable within a mobile telephone network, and at least a first radio communication defining device that transmits a first distinctive defining signal, the first distinctive defining signal at least partly defines a special area by its coverage, the provider of presence related services having one or more servers, the method comprising:

electronically storing in the one or more servers of the provider of presence related services data capable of linking the mobile station to the special area, the data including a checking data of the first radio communication defining device and an identifier related to the mobile station, the provider of presence related services being different than the mobile telephone network,

receiving in the one or more servers of the provider of presence related services 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 one or more servers of the provider of presence related services deriving from the updating signal by one or more processing devices having access to at least a portion of the data whether or not the mobile station is present in the special area; and

enabling or disabling by use of the one or more processing devices a presence related service based upon the mobile station´s presence or non-presence in the special area.

2. (Original) The method according to claim 1, wherein the one or more processing devices has access to at least a portion of the data and updates at least one operating parameter in a database

of the provider of presence related services depending on the presence of the mobile station in the special area.

3. (Original) The method according to claim 2, 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.

4. (Original) The method according to claim 1, wherein the enabling or disabling of the presence related service includes transmitting via the mobile telephone network a signal to the mobile station that is capable of being used to enable or disable one or more related functions in the mobile station.

5. (Previously Cancelled)

6. (Previously Presented) The method according to claim 1, wherein the storing of the checking data in the one or more servers of the provider of presence related services comprises electronically receiving from the mobile station the checking data.

7. (Original) The method according to claim 1, wherein the mobile telephone network is cellular.

8. (Original) The method according to claim 1, wherein the updating signal comprises the result of a previous determination performed by the mobile station about the mobile station´s presence in the special area.

9. (Previously Presented) The method according to claim 1, wherein the updating signal is received in the one or more servers of the provider of presence related services via the mobile telephone network from the mobile station at least one of (i) periodically, (ii) at times recent to when the mobile station enters into or exits from the special area, and (iii) when the mobile station remains in the special area.

10. (Currently Amended) The method according to claim 1, wherein the updating signal comprises a request to access ~~to a service or~~ to a multimedia content and the provider of presence related services enables or disables the provision of the ~~service or~~ multimedia content depending on the presence of the mobile station in the special area.

11. (Currently Amended) A method associated with a provider of presence related services in connection with the use of a mobile station that is operable within a mobile telephone network, and at least a first radio communication defining device that transmits a first distinctive defining signal, the first distinctive defining signal at least partly defines a special area by its coverage, the provider of presence related services having one or more servers, the method comprising:

electronically storing in the one or more servers of the provider of presence related services data capable of linking the mobile station to the special area, the data including a checking data of the first radio communication defining device and an identifier related to the mobile station, the provider of presence related services being different than the mobile telephone network,

transmitting to the mobile station from the one or more servers at least a portion of the checking data,

receiving in the one or more servers 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 updating signal including the identifier or other identifier related to the mobile station,

the one or more servers deriving from the updating signal by one or more processing devices having access to at least a portion of the data whether or not the mobile station is present in the special area; and

enabling or disabling by use of the one or more processing devices a presence related service based upon the mobile station´s presence or non-presence in the special area.

12. (Original) The method according to claim 11, wherein the one or more processing devices has access to at least a portion of the data and updates at least one operating parameter in a database of the provider of presence related services depending on the presence of the mobile station in the special area.

13. (Original) The method according to claim 12, 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.

14. (Original) The method according to claim 11, wherein the enabling or disabling of the presence related service includes transmitting via the mobile telephone network a signal to the mobile station that is capable of being used to enable or disable one or more related functions in the mobile station.

15. (Previously Cancelled)

16. (Previously Presented) The method according to claim 11, wherein the storing of the checking data in the one or more servers of the provider of presence related services comprises electronically receiving from the mobile station the checking data.

17. (Original) The method according to claim 11, wherein the mobile telephone network is cellular.

18. (Original) The method according to claim 11, wherein the updating signal comprises the result of a previous determination performed by the mobile station about the mobile station´s presence in the special area.

19. (Previously Presented) The method according to claim 11, wherein the updating signal is received in the one or more servers of the provider of presence related services via the mobile telephone network from the mobile station at least one of (i) periodically, (ii) at times recent to

when the mobile station enters into or exits from the special area, and (iii) when the mobile station remains in the special area.

20. (Currently Amended) The method according to claim 11, wherein the updating signal comprises a request to access ~~to a service or~~ to a multimedia content and the provider of presence related services enables or disables the provision of the ~~service or~~ multimedia content depending on the presence of the mobile station in the special area.

21. (Currently Cancelled)

22. (Currently Cancelled)

23. (Currently Cancelled)

24. (Currently Cancelled)

25. (Currently Cancelled)

26. (Currently Cancelled)

REMARKS

Claims 1, 10, 11 and 20 have been amended. Claims 21-26 have been cancelled. No claims have been added. Claims 1-4, 6-14 and 16-20 remain pending in the application.

Claim Objections

Claims 1 and 11 were objected to for failing to provide antecedent basis for the term "the one or more servers". Each of claims 1 and 11 have been amended to provide proper antecedent basis.

Claim Rejections – 35 USC §112

Claims 1-4, 6-14 and 16-20 were 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 and claim 11 recite the limitation of "… 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, 6-14 and 16-20 are conclusory and contrary to Federal Circuit jurisprudence and the MPEP.

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.

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

Claim Rejections – 35 USC §103

Claims 1-3, 6-10, 11-13, 16-22 and 24-26 were rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,526,267 (hereinafter "Jokimies") in view of U.S. Publication No. 2002/0094801 A1 (hereinafter "Atorf") further in view of U.S. Patent No. 6,516,193 (hereinafter "Salmela").

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."

MPEP 2142 requires a clear articulation of the reason(s) why the claimed invention would have been obvious. The Supreme Court in KSR International Co. v. Teleflex Inc.,82 USPQ2d, 1385,

1396 (2007) noted that the analysis supporting a rejection under 35 USC §103 should be made explicit. The Federal Circuit has stated that "rejections of obviousness cannot be sustained with mere conclusory statements; instead, there must be some articulated reasoning with some rationale underpinning to support the legal conclusion of obviousness." In re Kahn, 441 F.3d 977, 988 (Fed.Cir. 2006).

Jokimies discloses a method for detecting a home area in a mobile station. The home area is detected in the mobile station by comparing data received by the mobile station from the base stations of a cellular network with predetermined home area data stored in the mobile station. When it is determined that the mobile station is in the home area, the cellular network operator is informed of the result. Tariffs and services according to the home area are made available upon the cellular network operator being informed of the result.

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 short, in Atorf, like Jokimies, the mobile telephone network itself is the provider of presence related services. In amended claims 1 and 11 of the present application, the provider of presence related services is not the mobile telephone network.

Salmela discloses a method and arrangement for controlling the local operation of a mobile station characterized in that a mobile station specific group of special cells is formed from selected network cells. The information on a group of special cells is transmitted to the mobile station via a radio path and the operation of the mobile station is controlled on the basis of the group of special cells.

In claims 1 and 11 the mobile telephone network serves the role of providing a gateway to the one or more servers of the provider of presence related services, but is not itself the provider of

presence related services. The Office rightfully admits on page 9 of the Final Office Action that neither Jokimies, Atorf nor Salmela disclose:

> electronically storing in the one or more servers of the provider of presence related services data capable of linking the mobile station to the special area, the data including a checking data of the first radio communication defining device and an identifier related to the mobile station, the provider of presence related services being different than the mobile telephone network,
>
> receiving in the one or more servers of the provider of presence related services 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 one or more servers of the provider of presence related services deriving from the updating signal by one or more processing devices having access to at least a portion of the data whether or not the mobile station is present in the special area; and
>
> enabling or disabling by use of the one or more processing devices a presence related service based upon the mobile station´s presence or non-presence in the special area.

Unlike the present application, neither Jokimies, Atorf nor Salmela contemplated the service provider being anything other than the mobile telephone network itself.

In the 35 U.S.C. 103(a) rejection of each of claims 1 and 11, having found nowhere in the prior the provider of presence related services being different than the mobile telephone network, the Office decrees that "it would have been obvious to one of ordinary skill in the art at the time of the invention was made to apply the teaching to the provider of presence related services other than the mobile telephone network, without exercising an inventive step."

As is readily apparent, the 35 U.S.C. 103(a) rejection is improper. As noted above, a prima facie case of obviousness can only be established upon there being a comparison that includes all of the limitations of the subject claims in the prior art. The Office admits on page 9 of the Office Action that less than all of the limitations of claims 1 and 11 are found in the cited prior art. Furthermore, the Federal Circuit has made it abundantly clear that rejections of obviousness

cannot be sustained with mere conclusory statements; instead, there must be some articulated reasoning with some rationale underpinning to support the legal conclusion of obviousness. The basis for the 35 U.S.C. 103(a) rejection provided on page 9 of the Final Office Action constitutes nothing more than a mere conclusory statement in direct contradiction to Federal Circuit law. As a result of the Office failing to establish a prima facie case of obviousness, Applicant respectfully request that the rejection of each of claims 1 and 11 be withdrawn.

Each of claims 2-4 and 6-10 depends from claim 1 and is patentable over Jokimies in view of Atorf further in view of Salmela for at least the same reasons as claim 1. Each of claims 12-14 and 16-20 depends from claim 11 and is patentable over Jokimies in view of Atorf further in view of Salmela for at least the same reasons as claim 11.

In regard to claims 6 and 16, the Office generally asserts on page 10 of the Final Office Action, with no specificity, that Atorf discloses in paragraphs 0006, 0007, 0027 and 0030 the storing of checking data in one or more servers of a provider of presence related services by electronically receiving from the mobile station the checking data. For ease of reference, the text of paragraphs 0006, 0007, 0027 and 0030 of Atorf is reproduced below.

> *[0006] The fixed station advantageously transmits an encoded first signal; this means that the fixed station and the mobile telephone are linked to one another via the signal code. The fixed station signal can thus be received only by an associated mobile telephone that is capable of reading the encoded first signal. The first signal may be transmitted so as to be clocked at predetermined time intervals but also continuously.*
>
> *[0007] According to a further elaboration of the idea of the invention the second signal may be transmitted as soon as the mobile telephone that is ready for operation is within the range of the first signal, or the second signal is transmitted only when a speech connection is to be established or has already been established and the mobile telephone is within the range of the first signal. In the context of the first alternative version of the invention, therefore, the second signal is transmitted irrespective of the fact whether a speech connection is to be established or has already been established; this means that the base station in any case receives the information that the mobile telephone is near enough to the fixed station. In the*

context of the second alternative version the second signal is transmitted only if a speech connection is to be established or a call is already taking place and the mobile telephone is close enough to the fixed station.

[0027] The drawing shows a circuit diagram of the system in accordance with the invention and a fixed station in accordance with the invention. The fixed station 1 is arranged at the location of the user, that is, normally in a building. The fixed station includes a transmission means 2 via which a signal 3 of limited range is transmitted. The limited range is denoted by the large circle R. The signal is preferably a radio signal, notably a Bluetooth signal. The signal 3 may be transmitted in a clocked fashion at predetermined instants or continuously by the fixed station 1.

[0030] When the signal 3 is received via the receiving means 8, the mobile telephone transmits, via the transmission means 9, signals 10 to a base station 11 of the mobile radio network, the signals 10 indicating that the first signal 3 has been received and that hence the mobile telephone is within the range R of the fixed station 1. The base station 11 includes corresponding receiving means for receiving and processing the signal 10. When the signal 10 is received by the base station 11, switching over from a "rate 1" to a "rate 2" is performed therein by means of suitable switching means 12; this rate then serves as a basis for charging the calls for as long as the mobile telephone 7 is within the range R.

A careful reading of the reproduced text above reveals that absolutely nowhere therein is there disclosed a sending by the mobile telephone 7 to one or more servers of a provider of presence related services checking data of a radio communication defining device. Atorf only discloses that the when the signal 3 is received in the mobile telephone 7 via the receiving means 8, the mobile telephone transmits, via the transmission means 9, signals 10 to a base station 11 of the mobile radio network, the signals 10 indicating that the first signal 3 has been received and that hence the mobile telephone is within the range R of the fixed station 1.

In regard to claims 6 and 16, the Office further generally asserts on pages 3 and 10 of the Final Office Action, with no specificity, that Jokimies discloses in column 3, line 66 to column 4, line 4; column 4, lines 50-65 and column 2, lines 44-49 the storing of checking data in one or more servers of a provider of presence related services by electronically receiving from the mobile station the checking data.

The text of Jokimies at column 3, line 66 to column 4, line 4 states:

> *At power-up and at the beginning of each call the mobile station checks its current location by comparing the data it receives with the home area definition data. The mobile station also reports to the cellular network whether the mobile station is within its home area. This is also indicated to the user by a message on the mobile station's display, by a photodiode and/or by a tone.*

The text of Jokimies at column 4, lines 50-65 states:

> *The radio transmissions contain the coded home area data mentioned above, which are stored. At the same time the mobile station 19 determines the distances to the base stations 20a, 20b, 20c from the mobile station 19 on the basis of the received radio transmissions.*
>
> *In order to ensure a utilisation according to the contract a cellular network uses an administrative process which collects statistics about the home area settings made in the mobile station. The utilisation is according to the contract when the home area is always defined to be the same.*

The text of Jokimies at column 2, lines 44-49 states:

> *A service control point (SCP) in a cellular network controls call tariffs and services on the basis of the home location register (HLR). The database of the cellular network is situated in the home location register, which comprises permanent basic data of mobile subscribers registered in the network.*

A careful reading of the reproduced Jokimies text above reveals that absolutely nowhere therein is there disclosed a sending by the mobile station to one or more servers of a provider of presence related services checking data of a radio communication defining device.

With continued reference to claims 6 and 16, in response to Applicant's earlier arguments presented in the response to Office Action dated August 19, 2015, the Examiner states on pages 2 and 3 of the Final Office:

> *Regarding claims 6 and 16, Jokimies in combination with Atorf does disclose the storing of checking data in one or more memories comprises electronically receiving from the mobile station the checking data (Jokimies, col. 3, lines 66 to col. 4, line 3, col. 3, lines 50-65, col. 2, lines 44-49, the mobile station stores the*

> *home area data, that is the mobile country code, the mobile network code, the location area code and cell identity, signal strengths, the distances to the base stations, and the timing advance ...on the basis of which the mobile station later can identify its location; a confirmation message in the form of an SMS or USSD is transmitted to the operator when the home area data has been stored ... at power-up and at the beginning of each call the mobile station checks its current location by comparing the data it receives with the home area definition data... reports to the cellular network whether the mobile station is within its home area; Atorf, para. 0006 — 0007, 0027, 0030, the mobile telephone transmits signals 10 to a base station of the mobile radio network, the signals 10 indicating that the first signal 3 has been received and that the mobile telephone is within the range R of the fixed station 1).*

Notably, absolutely nowhere in the Examiner's Response to Arguments reproduced above is there identified a receiving in one or more servers of a provider of presence related services from a mobile station checking data.

Because less than all of the limitations of each of claims 6 and 16 are found in Jokimies, Atorf and Salmela, Applicant respectfully submits that the claims are patentable over the references.

In regard to claims 8 and 18, the Office generally asserts on page 10 of the Office Action, with no specificity, that Atorf discloses in paragraphs 0030 and 0031 the signal 10 comprises the result of a previous determination performed by the mobile telephone 7 about the mobile telephone´s presence in the range of signal 3 of the fixed station 1. For ease of reference, the text of paragraphs 0030 and 0031 of Atorf is reproduced below.

> *[0030] When the signal 3 is received via the receiving means 8, the mobile telephone transmits, via the transmission means 9, signals 10 to a base station 11 of the mobile radio network, the signals 10 indicating that the first signal 3 has been received and that hence the mobile telephone is within the range R of the fixed station 1. The base station 11 includes corresponding receiving means for receiving and processing the signal 10. When the signal 10 is received by the base station 11, switching over from a "rate 1" to a "rate 2" is performed therein by means of suitable switching means 12; this rate then serves as a basis for charging the calls for as long as the mobile telephone 7 is within the range R.*

> *[0031] When the mobile telephone 7 moves out of the range R, the base station 11, or the switching means 12, switches over again from the rate II to the rate I. The base station 11 derives the knowledge concerning the instantaneous location of the mobile telephone 7 from the fact that the signal 10 is no longer received. The signal 10 may be transmitted continuously during the stay within the range R or be successively clocked. When the signal 10 does not arrive, the base station 11 thus knows that the mobile telephone is no longer present within the range R so that the switching over of the rate can take place. Evidently, the signal 10 is no longer transmitted either when the mobile telephone 7 is switched off. In that case the rate preferably is also switched over to the mobile radio rate. When the mobile telephone 7 is put into operation again, it receives the signal 3 and can transmit the signal 10 so that the base station can again switch to the cheaper rate.*

A careful reading of the reproduced text above reveals that absolutely nowhere therein is there disclosed that the signal 10 comprises the result of a previous determination performed by the mobile telephone 7 about the mobile telephone´s presence in the range of signal 3 of the fixed station 1.

In regard to claims 8 and 18, the Office further generally asserts on page 10 of the Office Action, with no specificity, that Jokimies discloses in column 3, lines 27-44 and column 3, line 66 to column 4, line 3, an updating signal comprising the result of a previous determination performed by the mobile station about the mobile station´s presence in the special area.

The text of Jokimies at column 3, lines 27-44 states:

> *FIG. 2 shows a method according to the invention for detecting the home area by data comparison. New data received by the mobile station corresponding to the home area is stored in the first step 7. In the next step 8 all home area data is compared with the new data. A part of the data is in analogue form, such as the signal strength, so that their values are compared using certain tolerances. If the new data is within the tolerances, compared to the home area data, the operation continues at step 9, where it is determined that the mobile station is in the home area, and then at step 10 where the operator is informed of the result. The tariffs and services according to the home area are available when the operator has been informed of this. If the data was not within the tolerances in step 8 the operation continues at step 1, where it is determined that the mobile station is outside the home area. After the actual comparison step 8, and the following*

> *operations 9 and 10 or 11, the operation continues at step 12 where the result is indicated to the user.*

The text of Jokimies at column 3, line 66 to column 4, line 4 states:

> *At power-up and at the beginning of each call the mobile station checks its current location by comparing the data it receives with the home area definition data. The mobile station also reports to the cellular network whether the mobile station is within its home area. This is also indicated to the user by a message on the mobile station's display, by a photodiode and/or by a tone.*

A careful reading of the Jokimies text above readily reveals that absolutely nowhere therein is there disclosed an updating signal sent by a mobile station that comprises the result of a previous determination performed by the mobile station about the mobile station´s presence in the special area.

With continued reference to claims 8 and 18, in response to Applicant's earlier arguments presented in the response to Office Action dated August 19, 2015, the Examiner states on page 3 of the Final Office:

> *Regarding claims 8 and 18, Atorf does disclose that signal 10 comprises the result of a previous determination performed by the mobile telephone 7 about the mobile telephone's presence in the range of signal 3 of the fixed station 1 (Atorf, para. 0030 — 0031, the mobile telephone transmits signals 10 to a base station of the mobile radio network, the signals 10 indicating that the first signal 3 has been received and that the mobile telephone is within the range R of the fixed station 1; also see Jokimies, col. 3, lines 27 -44; col. 3, line 66 to col. 4, line 3).*

Notably, absolutely nowhere in the Examiner's Response to Arguments reproduced above is there identified an updating signal that comprises the results of a previous determination performed by the mobile station about the mobile station's presence in the special area. The text above simply states, as is the case with Atorf, that when the mobile telephone 7 receives the signal of limited range 3 from the fixed station 1, the mobile telephone in turn transmits a signal 10 to the base station 11 indicating that the signal 3 has been received by the mobile telephone.

As evidenced by the Examiner's own reasoning, absolutely nowhere in Atorf are the methods of claims 8 and 18 disclosed.

Because less than all of the limitations of each of claims 8 and 18 are collectively in Jokimies, Atorf and Salmela, Applicant respectfully submits that the claims are patentable over the references.

In regard to claims 10 and 20, the Office generally asserts on page 11 of the Final Office Action, with no specificity, that Atorf discloses in paragraphs 0030 and 0031 that signal 10 comprises a request to access to a service or to a multimedia content and the base station 11 enables or disables the provision of the service or multimedia content depending on the presence of the mobile telephone 7 within the range of signal 3 of fixed station 1. A careful reading of the reproduced text of paragraphs 0030 and 0031 above reveals that this is not true. Atorf teaches that when the signal 10 is received by the base station 11, switching over from a "rate 1" to a "rate 2" is performed therein by means of suitable switching means 12, this rate then serves as a basis for charging the calls for as long as the mobile telephone 7 is within the range R of signal 3. Nowhere in Atorf is there disclosed an updating signal that comprises a request to access to a service or to a multimedia content and the provider of presence related services enables or disables the provision of the service or multimedia content depending on the presence of the mobile station in the special area.

In regard to claims 10 and 20, the Office further generally asserts on page 11 of the Final Office Action, with no specificity, that Jokimies discloses at column 3, lines 27-44 and at column 3, line 64 to column 4, line 3 a method in which the mobile station sends an updating signal that comprises a request to access a service or to a multimedia content and the provider of presence related services enables or disables the provision of the service or multimedia content depending on the presence of the mobile station in the special area. The text at column 3, lines 27-44 and at column 3, line 64 to column 4, line 3 is reproduced above. A careful reading of the text reveals that nowhere therein are the recitations of claim 10 and 20 of the present application found.

Although the Applicant believes that the originally filed claims 10 and 20 are patentable over Jokimies in view of Atorf further in view of Salmela, claims 10 and 20 have been amended to further distinguish from the cited prior art references.

Because less than all of the limitations of each of claims 10 and 20 are found in Jokimies, Atorf and Salmela, Applicant respectfully submits that each of the claims is patentable over the references.

Claims 4, 14 and 23 were rejected under 35 U.S.C. 103(a) as being unpatentable over Jokimies in view of Atorf further in view of Salmela and further in view of U.S. Patent No. 6,920,317 (hereinafter "Muhonen"). Claims 4 and 14 depend from claims 1 and 11, respectively, and are patentable for at least the same reasons as claims 1 and 11.

Conclusion

In view of the foregoing, Applicant respectfully requests the Examiner to find the application in condition for allowance with claims 1-4, 6-14 and 16-20. 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:

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Electronic Patent Application Fee Transmittal

Application Number:	14743237
Filing Date:	18-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:	0572.0001C4

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($)
Miscellaneous:				
Request for Continued Examination	2801	1	600	600
		Total in USD ($)		**600**

Electronic Acknowledgement Receipt	
EFS ID:	25268350
Application Number:	14743237
International Application Number:	
Confirmation Number:	4168
Title of Invention:	METHOD AND SYSTEM FOR MONITORING A MOBILE STATION PRESENCE IN A SPECIAL AREA
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PATENT APPLICATION FEE DETERMINATION RECORD Substitute for Form PTO-875	Application or Docket Number 14/743,237	Filing Date 06/18/2015	☐ 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

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))	* 18	Minus	** 26	= 0	X $80 =	0
Independent (37 CFR 1.16(h))	* 2	Minus	***3	= 0	X $420 =	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".
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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
14/743,237	06/18/2015	Carlos A. Pérez LaFuente	0572.0001C4	4168

27896 7590 02/25/2016

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EXAMINER
CHANG, JEAN

ART UNIT	PAPER NUMBER
2643	

NOTIFICATION DATE	DELIVERY MODE
02/25/2016	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. 14/743,237	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) *1-4,6-14 and 16-26* 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) *1-4,6-14,16-26* 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 Arguments

2. Applicant's arguments with respect to the amended independent claim 1, 11, 21 and respective dependents have been considered but are not persuasive. Regarding claims 1 and 11, Jokimies does disclose electronically storing in one or more memories data capable of linking the mobile station to the special area, the data including a checking data of the first radio communication defining device and an identifier related to the mobile station (Jokimies, col. 3, lines 23-25, lines 50-65; col. 4, lines 47-65; col. 2, lines 44-59; the home area data is generated by deduction based on the cellular network structure … the network operator generates the data … the mobile station stores the data , that is the mobile country code, the mobile network code, the location area code and cell identity, signal strengths, the distances to the base stations, and the timing advance …the home area must be redefined when the operator of the mobile network changes the network structure … the definition is made automatically by data transmitted from the network to the mobile station; a service control point in a cellular network controls call tariffs and services on the basis of the home location register; the database of the cellular network is situated in the home location register, which comprises permanent basic data of mobile subscribers registered in the network … if required the operator will confirm the use of local call tariffs and services). Regarding claims 6 and 16, Jokimies in combination with Atorf does disclose the storing of checking data in one or more

memories comprises electronically receiving from the mobile station the checking data (Jokimies, col. 3, lines 66 to col. 4, line 3, col. 3, lines 50-65, col. 2, lines 44-49, the mobile station stores the home area data, that is the mobile country code, the mobile network code, the location area code and cell identity, signal strengths, the distances to the base stations, and the timing advance …on the basis of which the mobile station later can identify its location; a confirmation message in the form of an SMS or USSD is transmitted to the operator when the home area data has been stored … at power-up and at the beginning of each call the mobile station checks its current location by comparing the data it receives with the home area definition data... reports to the cellular network whether the mobile station is within its home area; Atorf, para. 0006 – 0007, 0027, 0030, the mobile telephone transmits signals 10 to a base station of the mobile radio network, the signals 10 indicating that the first signal 3 has been received and that the mobile telephone is within the range R of the fixed station 1). Regarding claims 8 and 18, Atorf does disclose that signal 10 comprises the result of a previous determination performed by the mobile telephone 7 about the mobile telephone's presence in the range of signal 3 of the fixed station 1 (Atorf, para. 0030 – 0031, the mobile telephone transmits signals 10 to a base station of the mobile radio network, the signals 10 indicating that the first signal 3 has been received and that the mobile telephone is within the range R of the fixed station 1; also see Jokimies, col. 3, lines 27 -44; col. 3, line 66 to col. 4, line 3). Regarding claims 10 and 20, Atorf does disclose that signal 10 comprises a request to access to a service or to a multimedia content and the base station 11 enables or disables the provision of the service or multimedia content depending on the presence of the

mobile telephone 7 within the range of signal 3 of fixed station 1 (Atorf , para. 0030 – 31, when the signal 10 is received by the base station 11, switching over from a "rate 1" to a "rate 2" is performed ... this rate then serves as a basis for charging the calls for as long as the mobile telephone 7 is within the range R ... when the mobile telephone 7 moves out of the range R, the base station 11, or the switching means switches over again from the rate 2 to the rate 1; also see Jokimies, col. 3, lines 27-44, col. 3, line 64 to col. 4, line 3). Regarding claim 21 and claim 22, applicant argued that Salmela fails to disclose the use of first and second servers that function in accordance with what is recited in claims. As analyzed in claim 21 and claim 22, the difference between claim 21 and claim 11 is whether the checking data is stored and processed in a server, or in one or more servers. As the implementation of a centralized or distributed environment is well known in the art, the presence related service as taught by Jokimies in combination with Atorf and Salmela would also apply equally well to a distributed database environment as claimed in claim 21 and claim 22, without exercising an inventive step.

Terminal Disclaimer

3. The terminal disclaimer filed on 10/21/2015 is acknowledged. The terminal disclaimer has been recorded.

Claim Objections

4. Claims 1 and 11 are objected to because of the following informalities:

- Claim 1 and claim 11 recite the limitation "… the one or more servers …" There is insufficient antecedent basis for this limitation in the claim.

Appropriate correction is required.

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.

5. Claims 1-4, 6-14 and 16-20 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 and claim 11 recite the limitation of " … 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.

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.

6. Claims 11-13, 16-20, 1-3, 6-10, 21-22 and 24-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jokimies et al. (US 6,526,267 B1) in view of Atorf (US 2002/0094801 A1) further in view of Salmela et al. (US 6,516,193).

Claim 11.

Jokimies et al. teach

A method associated with a provider of presence related services in connection with the use of a mobile station that is operable within a mobile telephone network, and at least a first radio communication defining device that transmits a first distinctive defining signal, the first distinctive defining signal at least partly defines a special area by its coverage (Abstract, col. 3, line 24 to col. 4, line 5; col. 4, lines 47 – 65), *the method comprising:*

electronically storing in one or more memories data capable of linking the mobile station to the special area, the data including a checking data of the first radio communication defining device and an identifier related to the mobile station (implied, col. 3, lines 23 – 25, 50 – 65; col. 4, lines 47 – 65; col. 2, lines 44 - 59),

transmitting to the mobile station from the one or more servers at least a portion of the checking data (col. 3, lines 23 – 25, 50 – 65; col. 4, lines 47 – 65, the

definition of the home area is made automatically by data transmitted from the network to the mobile station),

receiving in the one or more servers 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 updating signal including the identifier or other identifier related to the mobile station (col. 3, line 66 to col. 4, line 3; at power-up of the mobile station, the mobile station reports to the cellular network whether the mobile station is within its home area),

the one or more servers deriving from the updating signal by one or more processing devices having access to at least a portion of the data whether or not the mobile station is present in the special area (col. 3, lines 64 – 65; col. 2, lines 44 - 49); *and*

enabling or disabling by use of the one or more processing devices a presence related service based upon the mobile station's presence or non-presence in the special area (col. 3, lines 64 – 65; col. 2, lines 44 - 49).

To further elaborate on this, in an analogous art, Atorf also teaches

receiving *in the one or more servers* 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 updating signal including the identifier or other identifier related to the mobile station (para. 0030 – 0031, 0007);

the one or more servers deriving from the updating signal by one or more processing devices having access to at least a portion of the data whether or not the mobile station is present in the special area (para. 0030 – 0032)*; and*

enabling or disabling by use of the one or more processing devices a presence related service based upon the mobile station's presence or non-presence in the special area (implied, para. 0030 – 0032).

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 Atorf into the teaching of Jokimies et al. to elaborate on the processing devices enabling or disabling a presence related service based on the mobile stations' presence or non-presence in the special area per the updating signal received from the mobile station.

The motivation to combine is so that the service provider may control the presence related service based on mobile station's presence or non-presence in the special area.

Jokimies et al. in combination with Atorf does not elaborate on

electronically storing in one or more memories *servers of the provider of presence related services* data capable of linking the mobile station to the special area*, the provider of presence related services being different than the mobile telephone network.*

In an analogous art, Salmela et al. teach

electronically storing in one or more memories *servers of the provider of presence related services* data capable of linking the mobile station to the special area*,*(col. 3, lines 16-18; col. 4, lines 11-24).

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 Salmela et al. into the teaching of Jokimies et al. in combination with Atorf to include in the one or more servers of the provider of presence related services or mobile telephone network databases for storing and managing presence service related data.

The motivation to combine is so that the service provider may use the database to control and manage presence related services.

Although Jokimies et al. in combination with Atorf and Salmela et al. does not disclose *the provider of presence related services being different than the mobile telephone network,* it would have been obvious to one of ordinary skill in the art at the time the invention was made to apply the teaching to *the provider of presence related services other than the mobile telephone network,* without exercising an inventive step.

Claim 12.

Jokimies et al. in combination with Atorf and Salmela et al. teach

The method according to claim 11, wherein the one or more processing devices has access to at least a portion of the data and updates at least one operating parameter in a database of the provider of presence related services depending on the presence of the mobile station in the special area (implied, Atorf, para. 0030 – 0032; Jokimies et al., col. 3, lines 64 – 65, col. 2, lines 44 - 49).

Claim 13.

Jokimies et al. in combination with Atorf and Salmela et al. teach

The method according to claim 12, 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).

Claim 16.

Jokimies et al. in combination with Atorf and Salmela et al. teach

The method according to claim 11, wherein the storing of the checking data in the one or more memories servers of the provider of presence related services comprises electronically receiving from the mobile station the checking data (Atorf, para. 27, 30, 0006 – 0007; Jokimies et al., col. 3, line 66 to col. 4, line 3; col. 3, lines 64 – 65; col. 2, lines 44 - 49).

Claim 17.

Jokimies et al. in combination with Atorf and Salmela et al. teach

The method according to claim 11, wherein the mobile telephone network is cellular (Atorf, para. 0045 – 0046).

Claim 18.

Jokimies et al. in combination with Atorf and Salmela et al. teach

The method according to claim 11, wherein the updating signal comprises the result of a previous determination performed by the mobile station about the mobile station's presence in the special area (Jokimies et al., col. 3, lines 27-44; col. 3, line 66 to col. 4, line 3; Atorf, para. 0030 – 0031).

Claim 19.

Jokimies et al. in combination with Atorf and Salmela et al. teach

The method according to claim 11, wherein the updating signal is received in the one or more servers of the provider of presence related services via the mobile telephone network from the mobile station at least one of (i) periodically, (ii) at times recent to when the mobile station enters into or exists from the special area, and (iii) when the mobile station remains in the special area (Atorf, para. 30 – 0031).

Claim 20.

Jokimies et al. in combination with Atorf and Salmela et al. teach

The method according to claim 11, wherein the updating signal comprises a request to access to a service or to a multimedia content and the provider of presence related services enables or disables the provision of the service or multimedia content depending on the presence of the mobile station in the special area (implied, Atorf, para. 30 – 0031; Jokimies et al., col. 3, lines 27-44; col. 3, line 64 to col. 4, line 3).

Claim 1.

Claim 1, pertaining to *A method associated with a provider of presence related services in connection with the use of a mobile station and at least a first radio communication defining device that transmits a first distinctive defining signal, the first distinctive defining signal at least partly defines a special area by its coverage, the method comprising: electronically storing in one or more memories data capable of linking the mobile station to the special area, the data including a checking data of the first radio communication defining device and an identifier related to the mobile station, 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, deriving from the updating signal by one or more processing devices having access to at least a portion of the data whether or not the mobile station is present in the special area; and enabling or disabling by use of the one or more processing devices a presence related service based upon the mobile station's presence or non-presence in the special area,*

and corresponding to the subject matter and an obvious variation of claim 11, therefore, is rejected with the same rationale as analyzed in claim 1.

Claim 2-3.

Claim 2-3, pertaining to the method according to claim 1 and claim 2 respectively, and corresponding to the subject matter of claims 12-13, therefore, are rejected with the same rationale as analyzed in claims 12-13.

Claims 6 - 10.

Claims 6-10, pertaining to *The method according to claim 1,* and corresponding to the subject matter of claims 16-20 respectively, therefore, are rejected with the same rationale as analyzed in claims 16-20.

Claim 21.

Jokimies et al. teach

A method associated with providing presence related services in connection with the use of a mobile station and at least a first radio communication defining device that transmits a first distinctive defining signal, the first distinctive defining signal at least partly defines a special area by its coverage (Abstract, col. 3, line 24 to col. 4, line 5; col. 4, lines 47 – 65)*, the method comprising:*

electronically storing in a first server first data capable of linking the mobile station to the special area, the first data including a first checking data of the first radio communication defining device and an identifier related to the mobile station (implied, col. 3, lines 23 – 25, 50 – 65; col. 4, lines 47 – 65; col. 2, lines 44 – 49; the network operator determines and generate the home area data, that is the mobile country code, the mobile network code, the location area code and cell identity, signal strengths, the distances to the base stations, and the timing advance ... a service control point in a cellular network controls call tariffs and services on the basis of the HLR which comprises data of mobile subscribers registered in the network; the definition of the home area is made automatically by data transmitted from the network to the mobile station),

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, line 66 to col. 4, line 3; at power-up of the mobile station, the mobile station reports to the cellular network whether the mobile station is within its home area),

deriving from the updating signal by one or more processing devices of the server whether or not the mobile station is present in the special area (col. 3, lines 64 – 65; col. 2, lines 44 - 49)*; and enabling or disabling by use of the one or more processing devices a presence related service based upon the mobile station's presence or non-presence in the special area* (col. 3, lines 64 – 65; col. 2, lines 44 - 49).

To further elaborate on this, in an analogous art, Atorf also teaches

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 updating signal including the identifier or other identifier related to the mobile station (para. 0030 – 0031, 0007);

deriving from the updating signal by one or more processing devices having access to at least a portion of the data whether or not the mobile station is present in the special area (para. 0030 – 0032)*; and*

enabling or disabling by use of the one or more processing devices a presence related service based upon the mobile station's presence or non-presence in the special area (implied, para. 0030 – 0032).

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 Atorf into the teaching of Jokimies et al. to elaborate on the processing devices enabling or disabling a

presence related service based on the mobile stations' presence or non-presence in the special area per the updating signal received from the mobile station.

The motivation to combine is so that the service provider may control the presence related service based on mobile station's presence or non-presence in the special area.

To further elaborate on this, in an analogous art, Salmela et al. teach

electronically storing in one or more servers of the provider of presence related services data capable of linking the mobile station to the special area_(col. 3, lines 16-18; col. 4, lines 11-24, the list of special cells is stored for the mobile subscriber in a data base, preferably in the home location register or in the data base of the intelligent network).

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 Salmela et al. into the teaching of Jokimies et al. in combination with Atorf to include in the one or more servers of the provider of presence related services or mobile telephone network databases for storing the checking data for managing presence service related services.

The motivation to combine is so that the service provider may use the database to control and manage presence related services.

Jokimies et al. in combination with Atorf and Salmela et al. does not elaborate on receiving in a *second* server 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, deriving from the updating signal by one or more processing devices of the *second* server whether or not the mobile station is present in *the special area*.

The difference between the teaching of Jokimies et al. in combination with Atorf and Salmela et al. and the claimed invention is whether the checking data linking the mobile station to the special area is stored in one server or more servers. That is, whether the data store for the checking data is implemented in a centralized or distributed environment, and associated with one or more servers. As the implementation of a centralized or distributed environment is well known in the art, it would have been obvious to one of ordinary skill in the art to apply the presence related service as taught by Jokimies et al. in combination with Atorf and Salmela et al. in a distributed environment, where one or more servers may be associated with the processing of the presence related services, without exercising an inventive step, such that the method comprising receiving in a *second* server 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, deriving from the updating signal by one or more processing devices of the *second* server whether or not the mobile station is present *in the special area.*

Claim 22.

Jokimies et al. in combination with Atorf and Salmela et al. teach

The method according to claim 21, further comprising electronically storing in the second server second data capable of linking the mobile station to the special area, the second data including the first checking data or a second checking data of the first radio communication defining device and the identifier or other identifier related to the mobile station (Salmela et al., col. 3, lines 16-18; col. 4, lines 11-24, the list of special cells is stored for the mobile subscriber in a data base, preferably in the home location register or in the data base of the intelligent network; as analyzed in claim 21, the checking data may be implemented in a centralized or distributed environment and processed in one or more servers, the implementation of centralized or distributed environment is a known practice in the art).

Claim 24.

Claim 24, pertaining to *The method according to claim 21, wherein the mobile telephone network is cellular,*

and corresponding to the subject matter of claim 17, therefore, are rejected with the same rationale as analyzed in claim 17.

Claim 25.

Claim 25, pertaining to *The method according to claim 21, wherein the updating signal comprises the result of a previous determination performed by the mobile station about the mobile station's presence in the special area,*

and corresponding to the subject matter of claim 18, therefore, are rejected with the same rationale as analyzed in claim 18.

Claim 26.

Claim 26, pertaining to *The method according to claim 21, wherein the updating signal is received via the mobile telephone network from the mobile station at least one of (i) periodically, (ii) at times recent to when the mobile station enters into or exits from the special area, and (iii) when the mobile station remains in the special area,*

and corresponding to the subject matter of claim 19, therefore, are rejected with the same rationale as analyzed in claim 19.

7. **Claims 14, 4 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jokimies et al. (US 6,526,267 B1) in view of Atorf (US 2002/0094801 A1) further in view of Salmela et al. (US 6,516,193) further in view of Muhonen (US 6,920,317).**

Claim 14.

Jokimies et al. in combination with Atorf and Salmela et al. teach

The method according to claim 11, but does not elaborate on

wherein the enabling or disabling of the presence related service includes transmitting via the mobile telephone network a signal to the mobile station that is capable of being used to enable or disable one or more related functions in the mobile station.

In an analogous art, Muhonen teach

wherein the enabling or disabling of the presence related service includes transmitting via the mobile telephone network (col. 5, lines 58-59, lines 66-67) *a signal to the mobile station that is capable of being used to enable or disable one or more related functions in the mobile station* (col. 5, lines 37-46).

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 Muhonen into the teaching of Jokimies in combination with Atorf and Salmela et al. to send to the mobile station a deactivation signal to enable or disable the presence related service.

The motivation to combine is so that the service provider may control the enabling or disabling of presence related service based on mobile station's presence or non-presence in the special area.

Claim 4.

Claim 4, pertaining to *the method according to claim 1*, and corresponding to the subject matter of claim 14, therefore, are rejected with the same rationale as analyzed in claim 14.

Claim 23.

The analysis of claim 14 is incorporated herein.

Claim 23, pertaining to *The method according to claim 21, wherein the enabling or disabling of the presence related service includes transmitting via the mobile telephone network a signal to the mobile station that is capable of being used to enable or disable one or more related functions in the mobile station,*

and corresponding to the subject matter of claim 14, therefore, are rejected with the same rationale as analyzed in claim 14.

Conclusion

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **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
	14743237	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	08/08/2015		01/22/2016						
	1	✓		✓						
	2	✓		✓						
	3	✓		✓						
	4	✓		✓						
	5	✓		-						
	6	✓		✓						
	7	✓		✓						
	8	✓		✓						
	9	✓		✓						
	10	✓		✓						
	11	✓		✓						
	12	✓		✓						
	13	✓		✓						
	14	✓		✓						
	15	✓		-						
	16	✓		✓						
	17	✓		✓						
	18	✓		✓						
	19	✓		✓						
	20	✓		✓						
	21	✓		✓						
	22	✓		✓						
	23	✓		✓						
	24	✓		✓						
	25	✓		✓						
	26	✓		✓						

Search Notes	Application/Control No.	Applicant(s)/Patent Under Reexamination
	14743237	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	456.4, 555, 408, 432.2, 456.1, 414.1, 433, 406, 458	8/9/2015	jc
455	456.4, 555, 408, 432.2, 456.1, 414.1, 433, 406, 458	1/22/2016	jc

SEARCH NOTES		
Search Notes	Date	Examiner
inventor search and text search on East for receive mobile station signal data presence special service area	8/9/2015	jc
update inventor search and text search on East databases	1/22/2016	jc

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

EAST Search History

EAST Search History (Prior Art)

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L1	65	"lafuente, carlos".inv.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2016/01/22 22:32
L2	43414	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	2016/01/22 22:33
L3	25553	server same different same database and presence	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2016/01/22 22:33
L4	0	l3 and l1	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2016/01/22 22:33
L5	574	l3 and l2	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2016/01/22 22:33
L6	22106	server same distributed same database and presence	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2016/01/22 22:34
L7	11	server same distributed same database same presence service	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2016/01/22 22:34
L8	0	l7 and l1	US-PGPUB;	ADJ	ON	2016/01/22

			USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB			22:34
L9	0	l7 and l2	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2016/01/22 22:34
L10	4	l7 and @ad<"20060328"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2016/01/22 22:35
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;	ADJ	ON	2011/09/28 08:44

			IBM_TDB			
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 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	US-PGPUB; USPAT; USOCR;	ADJ	ON	2011/09/28 10:44

		zone) near20 (area or coverage) same (signal or code or identifier or identification or parameter or flag) same ((base station) or cell or AP)	FPRS; EPO; JPO; DERWENT; IBM_TDB			
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; 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;	ADJ	ON	2011/09/28

			USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB			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 ((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)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2012/06/21 11:36

		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)				
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; 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	US-PGPUB; USPAT;	ADJ	ON	2013/06/01 12:38

		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)	USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB			
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	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2013/06/01 19:20

		or flag or messag$3) same ((base station) or cell or AP or device)				
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 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 (presence or enter$4 or exit$4 or leav$4) near10 (special or limited or distint or different or preferred or discount or home) near10 ((service or tarrif or rate) near5 (area or coverage or location or zone))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2013/06/01 20:05
S51	89	S50 not S49	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2013/06/01 20:07
S52	3	"2008171531"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2013/06/01 22:55
S53	2	"20080171531"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2013/06/01 22:55
S54	29	(US-20020094801-$ 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;	ADJ	ON	2013/06/01 23:07

			DERWENT; IBM_TDB			
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	US-PGPUB;	ADJ	ON	2013/06/02

		(zone or (service area))	USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB			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	US-PGPUB; USPAT;	ADJ	ON	2014/01/20 19:27

		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)	USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB			
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 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;	ADJ	ON	2014/01/20 20:05

			IBM_TDB			
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 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;	ADJ	ON	2014/01/20 23:27

			USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB			
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; 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	4	"8723664"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2014/10/15 17:31
S96	0	wo0103372	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2014/10/15 17:36
S97	0	wo01003372	US-PGPUB; USPAT; USOCR;	ADJ	ON	2014/10/15 17:37

			FPRS; EPO; JPO; DERWENT; IBM_TDB			
S98	28	"200103372"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2014/10/15 17:37
S99	61	"0103372"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2014/10/15 17:37
S100	64	"6334052"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2014/10/15 17:40
S101	81	"6826414"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2014/10/15 17:59
S102	1	"14250517"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2014/10/15 18:22
S103	1	S102 and outside near10 special area	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2014/10/15 18:22
S104	1	S102 and send$4 near10 updat$3 signal	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2014/10/15 18:25
S105	0	S102 and updat$4 near5 signal same presence and periodically and (enter$4 or exit$4) and remain$4 near10 (in or outside) near5 area	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2014/10/15 18:29
S106	0	S102 and updat$4 near5 signal same	US-PGPUB;	ADJ	ON	2014/10/15

		presence and periodically and (enter$4 or exit$4) and remain$4 near10 (in or outside) area	USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB			18:30
S107	1	S102 and updat$4 near5 signal same presence and periodically and (enter$4 or exit$4) and (in or outside) near10 area	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2014/10/15 18:30
S108	1	S102 and updat$4 near5 signal same presence and periodically and (enter$4 or exit$4) and (outside) near10 area	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2014/10/15 18:56
S109	33	"lafuente, carlos".inv.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2014/10/15 23:16
S110	6	((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) near20 (periodically or enter$4 or exit$4 or leav$4 or presence or outside) 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	2014/10/15 23:29
S111	57220	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. or (H04W64/00).CPC.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2014/10/15 23:30
S112	27	((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	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2014/10/15 23:30

		((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) near20 (periodically or enter$4 or exit$4 or leav$4 or presence or outside) 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)))				
S113	3	S112 and S109	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2014/10/15 23:32
S114	9	S112 and S111	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2014/10/15 23:32
S122	2	"14250517"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2014/10/30 18:54
S123	0	S122 and update same outside same special area	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2014/10/30 18:55
S124	2	S122 and outside same special area	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2014/10/30 18:55
S125	2	S122 and updat$4 signal and outside same special area	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2014/10/30 19:11
S126	2	S122 and outside same special area	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2014/10/30 19:26
S127	2	S122 and outside and updat$4	US-PGPUB; USPAT;	ADJ	ON	2014/10/30 19:29

			USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB			
S128	2	S122 and (outside or out) and (send$4 or sent) near10 updat$4	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2014/10/30 19:42
S129	3	"14250517"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2015/01/28 15:50
S130	3	S129 and special area and distinctive signal	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2015/01/28 15:51
S131	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) near30 (detect$4 or identify$4 or determin$4 or recogniz$4 or presence) near20 (special or limited or distinct$5 or different or preferred or discount or home) near10 ((service or tarrif or rate) or (area or coverage or location or zone)) same (sum or intersect$) same (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	2015/02/27 11:36
S132	43	"lafuente, carlos".inv.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2015/02/27 11:36
S133	39304	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	2015/02/27 11:37
S138	4	"8934922"	US-PGPUB; USPAT;	ADJ	ON	2015/03/29 07:03

			USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB			
S139	45	"lafuente, carlos".inv.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2015/03/29 09:08
S140	9	((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) near20 (periodically or enter$4 or exit$4 or leav$4 or presence or outside) 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	2015/03/29 09:10
S141	32	((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) near20 (periodically or enter$4 or exit$4 or leav$4 or presence or outside) 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	2015/03/29 09:11
S142	40074	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	2015/03/29 09:17
S143	7	S141 and S139	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO;	ADJ	ON	2015/03/29 09:17

			DERWENT; IBM_TDB			
S144	13	S141 and S142	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2015/03/29 09:17
S145	57	("20020094801" | "20030092450" | "20040192267" | "20040224682" | "20050075124" | "20050148297" | "20080004045" | "20080261604" | "20100167725" | "6334052" | "6516190" | "6516193" | "6625442" | "6671506" | "6785536" | "6826414" | "6836653" | "6920317" | "7142869" | "7171189" | "7266366" | "7634255" | "7778652" | "8723664").PN.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2015/03/29 09:20
S146	0	S141 and S145	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2015/03/29 09:20
S148	13	"8723664"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2015/03/29 09:31
S149	61	"0103372"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2015/03/29 09:33
S150	1	"14561426"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2015/05/26 20:12
S153	34	((receiv$4) near15 (mobile or wireless or electronic or communication) (station or device or phone or terminal or equipment) near15 (signal or transmission or report or data) near20 (presence) near20 (special or limited or distinct$5 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	2015/05/26 21:50
S154	46	"lafuente, carlos".inv.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO;	ADJ	ON	2015/05/26 21:50

			DERWENT; IBM_TDB			
S155	41178	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	2015/05/26 21:51
S156	43	((receiv$4 or send$4 or transmit$4) near20 (mobile or wireless or electronic or communication) (station or device or phone or terminal or equipment) near20(signal or transmission or report or data) near20 (presence) near20 (special or limited or distinct$5 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	2015/05/26 21:52
S157	1	"14561426"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2015/05/26 21:52
S158	7	S156 and @ad<"20060328"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2015/05/26 21:53
S159	0	S158 and S154	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2015/05/26 21:53
S160	2	S158 and S155	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2015/05/26 21:53
S162	216	"5642303"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2015/07/24 10:58
S163	422	"6122520"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2015/07/24 10:58

S164	166	"7848765"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2015/07/24 10:58
S165	5950	(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	2015/07/24 11:01
S166	1	S165 and S162	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2015/07/24 11:01
S167	16	S165 and S163	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2015/07/24 11:02
S168	4	S165 and S164	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2015/07/24 11:02
S169	11	S167 and @ad<"20100501"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2015/07/24 11:04
S170	216	"5642303"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2015/07/24 11:53
S171	7	"8738040"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2015/08/08 18:33

S172	5	"9042910"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2015/08/08 22:13
S173	49	"lafuente, carlos".inv.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2015/08/09 15:01
S174	42130	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	2015/08/09 15:02
S175	10	((receiv$4) near15 (mobile or wireless or electronic or communication) (station or device or phone or terminal or equipment) near15 (signal or transmission or report or data) near20 (presence) near20 (special or limited or distinct$5 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	2015/08/09 15:02
S176	35	((receiv$4) near15 (mobile or wireless or electronic or communication) (station or device or phone or terminal or equipment) near15 (signal or transmission or report or data) near20 (presence) near20 (special or limited or distinct$5 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	2015/08/09 15:02
S177	1	S176 and "l1"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2015/08/09 15:03
S178	1	S176 and "l2"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2015/08/09 15:03
S179	16	"6526267"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2015/08/09 15:21
S180	5	"20020094801"	US-PGPUB;	ADJ	ON	2015/08/09

			USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB			15:23
S181	43	"6516193"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2015/08/09 15:24
S188	5	"20020094801"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2015/08/09 17:17
S189	1	S188 and cellular	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2015/08/09 17:18
S190	32	(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-$ or US-20020077144-$).did. or (US-6334052-$ 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-$ or US-7848765-$ or US-6526267-$).did. or (WO-2007009297-$).did. or (WO-0027152-$ or WO-9858505-$ or WO-2007014714-$ or JP-2000050335-$).did.	US-PGPUB; USPAT; EPO; DERWENT	ADJ	ON	2016/01/22 17:57
S191	3	S190 and home zone same database	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2016/01/22 17:57
S192	1	"14743237"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2016/01/22 18:01
S193	1	S192 and server same different	US-PGPUB; USPAT; USOCR;	ADJ	ON	2016/01/22 18:01

			FPRS; EPO; JPO; DERWENT; IBM_TDB			
S194	1	S192 and server and different	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2016/01/22 18:03
S195	1	S192 and server same updating signal and different	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2016/01/22 18:07
S196	0	S192 and server same different same database and updating signal	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2016/01/22 18:10
S197	1	S192 and server same different and database and updating signal	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2016/01/22 18:14
S198	1	S192 and server same different and database same updating signal	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2016/01/22 18:14

1/22/2016 10:39:08 PM
C:\Users\jchang7\Documents\EAST\Workspaces\14743237.wsp

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Application No.	:	14/743,237
First Named Inventor	:	Carlos A. Perez Lafuente
Confirmation No.	:	4168
Filed	:	June 18, 2015
TC/A.U.	:	2643
Examiner	:	Jean Chang
Customer No.	:	27896
Docket No.	:	0572.0001C4
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 19, 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 8 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 in connection with the use of a mobile station that is operable within a mobile telephone network, and at least a first radio communication defining device that transmits a first distinctive defining signal, the first distinctive defining signal at least partly defining ~~defines~~ a special area by its coverage, the method comprising:

electronically storing in one or more memories servers of the provider of presence related services data capable of linking the mobile station to the special area, the data including a checking data of the first radio communication defining device and an identifier related to the mobile station, the provider of presence related services being different than the mobile telephone network,

receiving in the one or more servers of the provider of presence related services 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 one or more servers of the provider of presence related services deriving from the updating signal by one or more processing devices having access to at least a portion of the data whether or not the mobile station is present in the special area; and

enabling or disabling by use of the one or more processing devices a presence related service based upon the mobile station's presence or non-presence in the special area.

2. (Original) The method according to claim 1, wherein the one or more processing devices has access to at least a portion of the data and updates at least one operating parameter in a database of the provider of presence related services depending on the presence of the mobile station in the special area.

3. (Original) The method according to claim 2, 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.

4. (Original) The method according to claim 1, wherein the enabling or disabling of the presence related service includes transmitting via the mobile telephone network a signal to the mobile station that is capable of being used to enable or disable one or more related functions in the mobile station.

5. (Canceled)

6. (Currently Amended) The method according to claim 1, wherein the storing of the checking data in the one or more memories servers of the provider of presence related services comprises electronically receiving from the mobile station the checking data.

7. (Original) The method according to claim 1, wherein the mobile telephone network is cellular.

8. (Original) The method according to claim 1, wherein the updating signal comprises the result of a previous determination performed by the mobile station about the mobile station's presence in the special area.

9. (Currently Amended) The method according to claim 1, wherein the updating signal is received in the one or more servers of the provider of presence related services via the mobile telephone network from the mobile station at least one of (i) periodically, (ii) at times recent to when the mobile station enters into or ~~exists~~ exits from the special area, and (iii) when the mobile station remains in the special area.

10. (Original) The method according to claim 1, wherein the updating signal comprises a request to access to a service or to a multimedia content and the provider of presence related services enables or disables the provision of the service or multimedia content depending on the presence of the mobile station in the special area.

11. (Currently Amended) A method associated with a provider of presence related services in connection with the use of a mobile station that is operable within a mobile telephone network, and at least a first radio communication defining device that transmits a first distinctive defining signal, the first distinctive defining signal at least partly defines a special area by its coverage, the method comprising:

electronically storing in one or more memories servers of the provider of presence related services data capable of linking the mobile station to the special area, the data including a checking data of the first radio communication defining device and an identifier related to the mobile station, the provider of presence related services being different than the mobile telephone network,

transmitting to the mobile station from the one or more servers at least a portion of the checking data,

receiving in the one or more servers 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 updating signal including the identifier or other identifier related to the mobile station,

the one or more servers deriving from the updating signal by one or more processing devices having access to at least a portion of the data whether or not the mobile station is present in the special area; and

enabling or disabling by use of the one or more processing devices a presence related service based upon the mobile station's presence or non-presence in the special area.

12. (Original) The method according to claim 11, wherein the one or more processing devices has access to at least a portion of the data and updates at least one operating parameter in

a database of the provider of presence related services depending on the presence of the mobile station in the special area.

13. (Original) The method according to claim 12, 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.

14. (Original) The method according to claim 11, wherein the enabling or disabling of the presence related service includes transmitting via the mobile telephone network a signal to the mobile station that is capable of being used to enable or disable one or more related functions in the mobile station.

15. (Canceled)

16. (Currently Amended) The method according to claim 11, wherein the storing of the checking data in the one or more memories servers of the provider of presence related services comprises electronically receiving from the mobile station the checking data.

17. (Original) The method according to claim 11, wherein the mobile telephone network is cellular.

18. (Original) The method according to claim 11, wherein the updating signal comprises the result of a previous determination performed by the mobile station about the mobile station's presence in the special area.

19. (Currently Amended) The method according to claim 11, wherein the updating signal is received in the one or more servers of the provider of presence related services via the mobile telephone network from the mobile station at least one of (i) periodically, (ii) at times

recent to when the mobile station enters into or ~~exists~~ exits from the special area, and (iii) when the mobile station remains in the special area.

20. (Original) The method according to claim 11, wherein the updating signal comprises a request to access to a service or to a multimedia content and the provider of presence related services enables or disables the provision of the service or multimedia content depending on the presence of the mobile station in the special area.

21. (Original) A method associated with providing presence related services in connection with the use of a mobile station and at least a first radio communication defining device that transmits a first distinctive defining signal, the first distinctive defining signal at least partly defines a special area by its coverage, the method comprising:

electronically storing in a first server first data capable of linking the mobile station to the special area, the first data including a first checking data of the first radio communication defining device and an identifier related to the mobile station.

receiving in a second server 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,

deriving from the updating signal by one or more processing devices of the second server whether or not the mobile station is present in the special area; and

enabling or disabling by use of the one or more processing devices a presence related service based upon the mobile station's presence or non-presence in the special area.

22. (Original) The method according to claim 21, further comprising electronically storing in the second server second data capable of linking the mobile station to the special area, the second data including the first checking data or a second checking data of the first radio communication defining device and the identifier or other identifier related to the mobile station.

23. (Currently Amended) The method according to claim 21, wherein the enabling or disabling of the presence related service includes transmitting from the first or second server via the mobile telephone network a signal to the mobile station that is capable of being used to enable or disable one or more related functions in the mobile station.

24. (Original) The method according to claim 21, wherein the mobile telephone network is cellular.

25. (Original) The method according to claim 21, wherein the updating signal comprises the result of a previous determination performed by the mobile station about the mobile station's presence in the special area.

26. (Currently Amended) The method according to claim 21, wherein the updating signal is received via the mobile telephone network from the mobile station at least one of (i) periodically, (ii) at times recent to when the mobile station enters into or ~~exists~~ exits from the special area, and (iii) when the mobile station remains in the special area.

REMARKS

Claims 1-26 have been examined and stand rejected. By the above amendments, claims 1, 6, 9, 11, 16, 19, and 23 have been amended, and claims 5 and 15 have been canceled. Accordingly, claims 1-4, 6-14, and 16-26 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.

Double Patenting

Claims 1-10 stand rejected on the ground of non-statutory double patenting as being unpatentable over claims 1-3 and 5-11 of U.S. Application No. 14/561,426 (now U.S. Patent No. 9,119,030). Claims 11-20 were also rejected on the ground of nonstatutory double patenting as being unpatentable over claims 1-3 and 5-11 of U.S. Application No. 14/561,426 (now U.S. Patent No. 9,119,030). A terminal disclaimer to obviate the non-statutory double patenting rejection is filed herewith in compliance with 37 CFR § 1.321.

Claims 1-10 stand rejected on the ground of non-statutory double patenting as being unpatentable over claims 1, 4, 5, and 10-16 of U.S. Patent No. 8,934,922. Claims 11-20 also stand rejected on the ground of non-statutory double patenting as being unpatentable over claims 1, 4, 5, and 10-16 of U.S. Patent No. 8,934,922. Claims 21-26 were rejected on the ground of non-statutory double patenting as being unpatentable over claims 1, 10, 11, and 13-15 of U.S. Patent No. 8,934,922. A terminal disclaimer to obviate the non-statutory double patenting rejection is filed herewith in compliance with 37 CFR § 1.321.

Obviousness Rejections

Claims 1-3, 6-10, 11-13 and 16-20 were rejected under pre-AIA 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 6,526,267 (hereinafter "Jokimies") in view of U.S. Publication No. 2002/0094801 (hereinafter "Atorf"). Applicant respectfully traverses this rejection insofar as it applies to the amended claims.

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."

Jokimies discloses a method for detecting a home area in a mobile station. The home area is detected in the mobile station by comparing data received by the mobile station from the base stations of a cellular network with predetermined home area data stored in the mobile station. When it is determined that the mobile station is in the home area, the cellular network operator is informed of the result. Tariffs and services according to the home area are made available upon the cellular network operator being informed of the result.

In regard to claims 1 and 11, Jokimies fails to disclose electronically storing in one or more servers of the provider of presence related services data capable of linking the mobile station to the special area, the data including a checking data of the first radio communication defining device and an identifier related to the mobile station. The Office asserts on page 15 of the Office Action that such is implied in column 3, lines 50-64 of Jokimies. For ease of reference, the text of column 3, lines 50-64 is reproduced below.

> *Alternatively the cellular network operator determines the central point of the home area by calling from the network to the mobile station and by using a particular signalling which is based on e.g. the short message service (SMS) or on the USSD signalling (Unstructured Supplementary Service Data). The mobile station stores at least the above mentioned data of the home area, that is the mobile country code, the mobile network code, the location area code and cell identity, signal strengths, the distances to the base stations, and the timing advance.*

The above presented data to be stored forms the home area data, on the basis of which the mobile station later can identify its location. A confirmation message in the form of an SMS or USSD is transmitted to the operator when the home area data has been stored. If required the operator will confirm the use of local call tariffs and services.

A careful reading of the reproduced text above reveals that it involves the storing of home area data in the mobile station and not to the storing of checking data and an identifier related to the mobile station in one or more servers of a provider of presence related services.

Amended claims 1 and 11 each further recite that the provider of presence related services is different than the mobile telephone network.

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 short, in Atorf, like Jokimies, the mobile telephone network itself is the provider of presence related services. In amended claims 1 and 11 of the present application, the provider of presence related services is not the mobile telephone network. In amended claims 1 and 11 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, but is not itself the provider of presence related services.

Because less than all of the limitations of each of claims 1 and 11 are collectively found in Jokimies and Atorf, Applicant respectfully submits that the claims, and all claims depending therefrom, are patentable over the references.

In regard to claims 6 and 16, the Office asserts on page 18 of the Office Action that Atorf discloses in paragraphs [0006], [0007], [0027], and [0030] the storing of checking data in one or more servers of a provider of presence related services by electronically receiving from the mobile station the checking data. For ease of reference, the text of paragraphs [0006], [0007], [0027], and [0030] of Atorf is reproduced below.

[0006] The fixed station advantageously transmits an encoded first signal; this means that the fixed station and the mobile telephone are linked to one another via the signal code. The fixed station signal can thus be received only by an associated mobile telephone that is capable of reading the encoded first signal. The first signal

may be transmitted so as to be clocked at predetermined time intervals but also continuously.

[0007] According to a further elaboration of the idea of the invention the second signal may be transmitted as soon as the mobile telephone that is ready for operation is within the range of the first signal, or the second signal is transmitted only when a speech connection is to be established or has already been established and the mobile telephone is within the range of the first signal. In the context of the first alternative version of the invention, therefore, the second signal is transmitted irrespective of the fact whether a speech connection is to be established or has already been established; this means that the base station in any case receives the information that the mobile telephone is near enough to the fixed station. In the context of the second alternative version the second signal is transmitted only if a speech connection is to be established or a call is already taking place and the mobile telephone is close enough to the fixed station.

[0027] The drawing shows a circuit diagram of the system in accordance with the invention and a fixed station in accordance with the invention. The fixed station 1 is arranged at the location of the user, that is, normally in a building. The fixed station includes a transmission means 2 via which a signal 3 of limited range is transmitted. The limited range is denoted by the large circle R. The signal is preferably a radio signal, notably a Bluetooth signal. The signal 3 may be transmitted in a clocked fashion at predetermined instants or continuously by the fixed station 1.

[0030] When the signal 3 is received via the receiving means 8, the mobile telephone transmits, via the transmission means 9, signals 10 to a base station 11 of the mobile radio network, the signals 10 indicating that the first signal 3 has been received and that hence the mobile telephone is within the range R of the fixed station 1. The base station 11 includes corresponding receiving means for receiving and processing the signal 10. When the signal 10 is received by the base station 11, switching over from a "rate 1" to a "rate 2" is performed therein by means of suitable switching means 12; this rate then serves as a basis for charging the calls for as long as the mobile telephone 7 is within the range R.

A careful reading of the reproduced text above reveals that nowhere therein is there disclosed a sending by the mobile telephone 7 to the base station 11 of checking data of a radio communication defining device. Atorf only discloses that when the signal 3 is received in the mobile telephone 7 via the receiving means 8, the mobile telephone transmits, via the transmission means 9, signals 10 to a base station 11 of the mobile radio network, the signals 10 indicating that the first signal 3 has been received and that hence the mobile telephone is within

the range R of the fixed station 1. Because less than all of the limitations of each of claims 6 and 16 are collectively found in Jokimies and Atorf, Applicant respectfully submits that the claims are patentable over the references.

In regard to claims 8 and 18, the Office asserts on page 18 of the Office Action that Atorf discloses in paragraphs [0030] and [0031] the signal 10 comprises the result of a previous determination performed by the mobile telephone 7 about the mobile telephone's presence in the range of signal 3 of the fixed station 1. For ease of reference, the text of paragraphs [0030] and [0031] of Atorf is reproduced below.

> *[0030] When the signal 3 is received via the receiving means 8, the mobile telephone transmits, via the transmission means 9, signals 10 to a base station 11 of the mobile radio network, the signals 10 indicating that the first signal 3 has been received and that hence the mobile telephone is within the range R of the fixed station 1. The base station 11 includes corresponding receiving means for receiving and processing the signal 10. When the signal 10 is received by the base station 11, switching over from a "rate 1" to a "rate 2" is performed therein by means of suitable switching means 12; this rate then serves as a basis for charging the calls for as long as the mobile telephone 7 is within the range R.*
>
> *[0031] When the mobile telephone 7 moves out of the range R, the base station 11, or the switching means 12, switches over again from the rate II to the rate I. The base station 11 derives the knowledge concerning the instantaneous location of the mobile telephone 7 from the fact that the signal 10 is no longer received. The signal 10 may be transmitted continuously during the stay within the range R or be successively clocked. When the signal 10 does not arrive, the base station 11 thus knows that the mobile telephone is no longer present within the range R so that the switching over of the rate can take place. Evidently, the signal 10 is no longer transmitted either when the mobile telephone 7 is switched off. In that case the rate preferably is also switched over to the mobile radio rate. When the mobile telephone 7 is put into operation again, it receives the signal 3 and can transmit the signal 10 so that the base station can again switch to the cheaper rate.*

A careful reading of the reproduced text above reveals that nowhere therein is there disclosed that the signal 10 comprises the result of a previous determination performed by the mobile telephone 7 about the mobile telephone's presence in the range of signal 3 of the fixed station 1. Because less than all of the limitations of each of claims 8 and 18 are collectively

found in Jokimies and Atorf, Applicant respectfully submits that the claims are patentable over the references.

In regard to claims 10 and 20, the Office asserts on page 19 of the Office Action that Atorf discloses in paragraphs [0030] and [0031] that signal 10 comprises a request to access to a service or to a multimedia content and the base station 11 enables or disables the provision of the service or multimedia content depending on the presence of the mobile telephone 7 within the range of signal 3 of fixed station 1. A careful reading of the reproduced text of paragraphs [0030] and [0031] above reveals that this is not true. Atorf teaches that when the signal 10 is received by the base station 11, switching over from a "rate 1" to a "rate 2" is performed therein by means of suitable switching means 12, this rate then serves as a basis for charging the calls for as long as the mobile telephone 7 is within the range R of signal 3. Nowhere in Atorf is there disclosed an updating signal that comprises a request to access to a service or to a multimedia content and the provider of presence related services enables or disables the provision of the service or multimedia content depending on the presence of the mobile station in the special area. Because less than all of the limitations of each of claims 10 and 20 are collectively found in Jokimies and Atorf, Applicant respectfully submits that each of the claims is patentable over the references.

Claims 4 and 14 stand rejected under pre-AIA 35 U.S.C. § 103(a) as being unpatentable over Jokimies in view of Atorf, and further in view of U.S. Patent No. 6,920,317 (hereinafter "Muhonen"). Claims 4 and 14 depend from claims 1 and 11, respectively, and are patentable for at least the same reasons as claims 1 and 11.

Claims 5, 15, 21-22, and 24-26 stand rejected under pre-AIA 35 U.S.C. § 103(a) as being unpatentable over Jokimies in view of Atorf, and further in view of U.S. Patent No. 6,516,193 (hereinafter "Salmela"). Claims 5 and 15 have been canceled, thereby rendering moot the rejections of these claims.

Among other limitations, claim 21 recites (1) electronically storing in a first server first data capable of linking the mobile station to the special area, (2) receiving in a second server 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 (3) deriving from the updating signal by one or more processing devices of the second server whether or not the mobile station is present in the special area.

The Office, on page 21 of the Office Action cites to the text of Salmela at column 3, lines 16-18 and column 4, lines 11-24 as disclosing the methods (1), (2), and (3) of claim 21 in the preceding paragraph. The text at column 3, lines 16-18 of Salmela states:

> *Localised service areas allow to provide some locally tailored special service, e.g. call charges below the normal tariff.*

The text at column 4, lines 11-24 of Salmela states:

> *The invention is based on the idea that a special service area is defined for a mobile subscriber by drawing up a list of certain network cells, i.e. special cells, for the subscriber. The list can be utilized in a mobile station or in a fixed network. In the present application such a special service area is referred to as LSA (Localised Service Area).*
>
> *In the method of the invention the list of special cells is stored for the mobile subscriber in a data base, preferably in the home location register or in the data base of the intelligent network. The list contains network cells defined e.g. as preferred cells, in which some special service, e.g. call charges below the normal tariff, is provided for the mobile station in question.*

A careful reading of the reproduced text of Salmela above clearly shows that nowhere therein is there disclosed the use of first and second servers that function in accordance with what is recited in claim 21. Because less than all of the limitations of claim 21 are collectively found in Jokimies, Atorf and Salmela, Applicant respectfully submits that claim 21, and each claim depending therefrom, is patentable over the cited references.

Claim 22 recites the method of electronically storing in the second server second data capable of linking the mobile station to the special area, the second data including the first checking data or a second checking data of the first radio communication defining device and the identifier or other identifier related to the mobile station. The Office, on page 21 of the Office Action cites to the text of Salmela at column 3, lines 16-18 and column 4, lines 11-24 as disclosing the afore-recited method. A careful reading of the reproduced text of Salmela above

clearly shows that no such method is disclosed therein. Because less than all of the limitations of claim 22 are collectively found in Jokimies, Atorf and Salmela, Applicant respectfully submits that claim 22 is patentable over the cited references.

In regard to claim 25, the Office asserts on page 18 of the Office Action that Atorf discloses in paragraphs [0030] and [0031] the signal 10 comprises the result of a previous determination performed by the mobile telephone 7 about the mobile telephone´s presence in the range of signal 3 of the fixed station 1. The text of paragraphs 0030 and 0031 of Atorf is reproduced above. A careful reading of the reproduced text above reveals that nowhere therein is there disclosed that the signal 10 comprises the result of a previous determination performed by the mobile telephone 7 about the mobile telephone's presence in the range of signal 3 of the fixed station 1. Because less than all of the limitations of claim 25 are collectively found in Jokimies. Atorf and Salmela, Applicant respectfully submits that the claim is patentable over the references.

Claim 23 stands rejected under pre-AIA 35 U.S.C. § 103(a) as being unpatentable over Jokimies in view of Atorf, further in view of Salmela, further in view of Muhonen. Claim 23 depends from claim 21 and is considered patentable for at least the same reasons as claim 21.

Conclusion

In view of the foregoing, Applicant respectfully requests the Examiner to find the application in condition for allowance with claims 1-4, 6-14, and 16-26. 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:	23846270
Application Number:	14743237
International Application Number:	
Confirmation Number:	4168
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:	122358-387289
Receipt Date:	21-OCT-2015
Filing Date:	18-JUN-2015
Time Stamp:	15:45:27
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-0001C4.pdf	174294 147469279dbd969527d4e6dbb148dc8e12a28aa7	yes	16

	Multipart Description/PDF files in .zip description		
	Document Description	**Start**	**End**
	Amendment/Req. Reconsideration-After Non-Final Reject	1	1
	Claims	2	7
	Applicant Arguments/Remarks Made in an Amendment	8	16
Warnings:			
Information:			
	Total Files Size (in bytes):	174294	

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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
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Doc Code: DIST.E.FILE **Document Description: Electronic Terminal Disclaimer - Filed**	PTO/SB/25 PTO/SB/26 U.S. Patent and Trademark Office Department of Commerce

Electronic Petition Request	**TERMINAL DISCLAIMER TO OBVIATE A PROVISIONAL DOUBLE PATENTING REJECTION OVER A PENDING "REFERENCE" APPLICATION AND TERMINAL DISCLAIMER TO OBVIATE A DOUBLE PATENTING REJECTION OVER A "PRIOR" PATENT**
Application Number	14743237
Filing Date	18-Jun-2015
First Named Inventor	Carlos Pérez LaFuente
Attorney Docket Number	122358-387289
Title of Invention	METHOD AND SYSTEM FOR MONITORING A MOBILE STATION PRESENCE IN A SPECIAL AREA

☒ Filing of terminal disclaimer does not obviate requirement for response under 37 CFR 1.111 to outstanding Office Action

☒ This electronic Terminal Disclaimer is not being used for a Joint Research Agreement.

Owner	Percent Interest
AFIRMA CONSULTING & TECHNOLOGIES, S.L.	100 %

The owner(s) of percent interest listed above in the instant application hereby disclaims, except as provided below, the terminal part of the statutory term of any patent granted on the instant application which would extend beyond the expiration date of the full statutory term of any patent granted on pending reference Application Number(s)

14561426 filed on 12/05/2014

as the term of any patent granted on said reference application may be shortened by any terminal disclaimer filed prior to the grant of any patent on the pending reference application. The owner hereby agrees that any patent so granted on the instant application shall be enforceable only for and during such period that it and any patent granted on the reference application are commonly owned. This agreement runs with any patent granted on the instant application and is binding upon the grantee, its successors or assigns.

In making the above disclaimer, the owner does not disclaim the terminal part of any patent granted on the instant application that would extend to the expiration date of the full statutory term of any patent granted on said reference application, "as the term of any patent granted on said reference application may be shortened by any terminal disclaimer filed prior to the grant of any patent on the pending reference application," in the event that any such patent granted on the pending reference application: expires for failure to pay a maintenance fee, is held unenforceable, is found invalid by a court of competent jurisdiction, is statutorily disclaimed in whole or terminally disclaimed under 37 CFR 1.321, has all claims canceled by a reexamination certificate, is reissued, or is in any manner terminated prior to the expiration of its full statutory term as shortened by any terminal disclaimer filed prior to its grant.

The owner(s) with percent interest listed above in the instant application hereby disclaims, except as provided below, the terminal part of the statutory term of any patent granted on the instant application which would extend beyond the expiration date of the full statutory term of prior patent number(s)

as the term of said prior patent is presently shortened by any terminal disclaimer. The owner hereby agrees that any patent so granted on the instant application shall be enforceable only for and during such period that it and the prior patent are commonly owned. This agreement runs with any patent granted on the instant application and is binding upon the grantee, its successors or assigns.

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- expires for failure to pay a maintenance fee;
- is held unenforceable;
- is found invalid by a court of competent jurisdiction;
- is statutorily disclaimed in whole or terminally disclaimed under 37 CFR 1.321;
- has all claims canceled by a reexamination certificate;
- is reissued; or
- is in any manner terminated prior to the expiration of its full statutory term as presently shortened by any terminal disclaimer.

(●) Terminal disclaimer fee under 37 CFR 1.20(d) is included with Electronic Terminal Disclaimer request.

( ) I certify, in accordance with 37 CFR 1.4(d)(4), that the terminal disclaimer fee under 37 CFR 1.20(d) required for this terminal disclaimer has already been paid in the above-identified application.

Applicants claims the following fee status:

( ) Small Entity

( ) Micro Entity

(●) Regular Undiscounted

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

THIS PORTION MUST BE COMPLETED BY THE SIGNATORY OR SIGNATORIES

I certify, in accordance with 37 CFR 1.4(d)(4) that I am:

(●) An attorney or agent registered to practice before the Patent and Trademark Office who is of record in this application

Registration Number 39189

( ) A sole inventor

( ) A joint inventor; I certify that I am authorized to sign this submission on behalf of all of the inventors as evidenced by the power of attorney in the application

( ) A joint inventor; all of whom are signing this request

Signature	/Patrick J. Finnan/
Name	Patrick J. Finnan

*Statement under 37 CFR 3.73(b) is required if terminal disclaimer is signed by the assignee (owner).
Form PTO/SB/96 may be used for making this certification. See MPEP § 324.

Electronic Patent Application Fee Transmittal

Application Number:	14743237
Filing Date:	18-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:	Patrick J. Finnan/Janet Dorgan
Attorney Docket Number:	122358-387289

Filed as Large Entity

Filing Fees for Utility under 35 USC 111(a)

Description	Fee Code	Quantity	Amount	Sub-Total in USD($)
Basic Filing:				
Statutory or Terminal Disclaimer	1814	1	160	160
Pages:				
Claims:				
Miscellaneous-Filing:				
Petition:				
Patent-Appeals-and-Interference:				
Post-Allowance-and-Post-Issuance:				

Description	Fee Code	Quantity	Amount	Sub-Total in USD($)
Extension-of-Time:				
Miscellaneous:				
		Total in USD ($)		**160**

Doc Code: DISQ.E.FILE
Document Description: Electronic Terminal Disclaimer – Approved

Application No.: 14743237

Filing Date: 18-Jun-2015

Applicant/Patent under Reexamination: Pérez LaFuente et al.

Electronic Terminal Disclaimer filed on October 21, 2015

☒ APPROVED

This patent is subject to a terminal disclaimer

☐ DISAPPROVED

Approved/Disapproved by: Electronic Terminal Disclaimer automatically approved by EFS-Web

U.S. Patent and Trademark Office

Electronic Acknowledgement Receipt	
EFS ID:	23846324
Application Number:	14743237
International Application Number:	
Confirmation Number:	4168
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:	122358-387289
Receipt Date:	21-OCT-2015
Filing Date:	18-JUN-2015
Time Stamp:	15:48:41
Application Type:	Utility under 35 USC 111(a)

Payment information:

Submitted with Payment	yes
Payment Type	Credit Card
Payment was successfully received in RAM	$160
RAM confirmation Number	2476
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	Electronic Terminal Disclaimer-Filed	eTerminal-Disclaimer.pdf	36153 144927caff008707803ca3f902b1f832ed7cd98a	no	3
Warnings:					
Information:					
2	Fee Worksheet (SB06)	fee-info.pdf	30629 2228f944d84b38e2660fdf8576c4c1054bd23223	no	2
Warnings:					
Information:					
		Total Files Size (in bytes):	66782		

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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
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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
14/743,237	06/18/2015	Carlos A. Pérez LaFuente	122358-387289

CONFIRMATION NO. 4168

27896
EDELL, SHAPIRO & FINNAN, LLC
9801 Washingtonian Blvd.
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POA ACCEPTANCE LETTER

OC000000078135506

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
14/743,237	06/18/2015	Carlos A. Pérez LaFuente	122358-387289

CONFIRMATION NO. 4168

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

POWER OF ATTORNEY NOTICE

OC000000078135479

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/

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United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
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APPLICATION NUMBER	FILING OR 371(C) DATE	FIRST NAMED APPLICANT	ATTY. DOCKET NO./TITLE
14/743,237	06/18/2015	Carlos A. Perez LaFuente	122358-387289

CONFIRMATION NO. 4168

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

PUBLICATION NOTICE

OC000000077944335

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

Publication No.US-2015-0289096-A1
Publication Date:10/08/2015

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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Office of Data Managment, Application Assistance Unit (571) 272-4000, or (571) 272-4200, or 1-888-786-0101

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:

☑ The address associated with the above-mentioned Customer Number.

OR

☐ The address associated with Customer Number:

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
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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:	23712777
Application Number:	14743237
International Application Number:	
Confirmation Number:	4168
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:	122358-387289
Receipt Date:	07-OCT-2015
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Time Stamp:	17:14:49
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

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.

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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
14/743,237	06/18/2015	Carlos A. Pérez LaFuente	122358-387289	4168

26694 7590 08/19/2015

VENABLE LLP
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EXAMINER
CHANG, JEAN

ART UNIT	PAPER NUMBER
2643	

NOTIFICATION DATE	DELIVERY MODE
08/19/2015	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. 14/743,237	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 *6/18/2015*.

☐ 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) *1-26* 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) *1-26* 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.

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory double patenting rejection is appropriate where the claims at issue are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the reference application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement. A terminal disclaimer must be signed in compliance with 37 CFR 1.321(b).

The USPTO internet Web site contains terminal disclaimer forms which may be used. Please visit http://www.uspto.gov/forms/. The filing date of the application will determine what form should be used. A web-based eTerminal Disclaimer may be filled out completely online using web-screens. An eTerminal Disclaimer that meets all requirements is auto-processed and approved immediately upon submission. For more information about eTerminal Disclaimers, refer to http://www.uspto.gov/patents/process/file/efs/guidance/eTD-info-I.jsp.

3. Claims 1-10 are rejected on the ground of nonstatutory double patenting as being unpatentable over claims 1-3 and 5-11 of U.S. Patent Application 14/561,426 respectively. Similarly, claims 11-20 are rejected on the ground of nonstatutory double patenting as being unpatentable over claims 1-3 and 5-11 of U.S. Patent Application 14/561,426 respectively. Although the claims at issue are not identical, as summarized in the Table below, the conflicting claims between the

instant application and the claims of Patent Application 14/561,426 are substantially identical. They are not patentably distinct from each other.

Application No. 14/561,426 Claims		Instant Application No. 14/743,237 Claims	
1.	A method associated with a provider of presence related services in connection with the use of a mobile station and at least a first radio communication defining device that transmits a first distinctive defining signal, the first distinctive defining signal at least partly defines a first special area by its coverage, the method comprising: electronically storing in one or more memories data capable of linking the mobile station to the first special area, the data including a checking data of the first radio communication defining device and a first identifier related to the mobile station, transmitting via a mobile telephone network to the mobile station at least a portion of the checking data, 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 at least the first special area, the updating signal including a second identifier related to the mobile station, deriving from the updating signal by one or more processing devices having access to at least a portion of the data whether or not the mobile station is present in the first special area; and enabling or disabling by use of the one or more processing devices a presence related service based upon the mobile station's presence or non-presence in the first special area.	1.	A method associated with a provider of presence related services in connection with the use of a mobile station and at least a first radio communication defining device that transmits a first distinctive defining signal, the first distinctive defining signal at least partly defines a special area by its coverage, the method comprising: electronically storing in one or more memories data capable of linking the mobile station to the special area, the data including a checking data of the first radio communication defining device and an identifier related to the mobile station, 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, deriving from the updating signal by one or more processing devices having access to at least a portion of the data whether or not the mobile station is present in the special area; and enabling or disabling by use of the one or more processing devices a presence related service based upon the mobile station's presence or non-presence in the special area.
2.	The method according to claim 1, wherein the one or more processing devices has access to at least a portion of the data and updates at least one operating parameter in a database of the provider of presence related services depending on the presence of the mobile station in the first special area.	2.	The method according to claim 1, wherein the one or more processing devices has access to at least a portion of the data and updates at least one operating parameter in a database of the provider of presence related services depending on the presence of the mobile station in the special area.
3.	The method according to claim 2, 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.	The method according to claim 2, 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.
4.	The method according to claim 1, wherein the first and second identifiers related to the mobile station are the same.		
5.	The method according to claim 1, wherein the enabling or disabling of the presence related service includes transmitting via the mobile telephone network a signal to the mobile station that is capable of being used	4.	The method according to claim 1, wherein the enabling or disabling of the presence related service includes transmitting via the mobile telephone network a signal to the mobile station that is capable of being used

	to enable or disable one or more related functions in the mobile station.		to enable or disable one or more related functions in the mobile station.
6.	The method according to claim 1, wherein the one or more memories and the one or more processing devices reside in one or more servers of the provider of presence related services and/or in one or more servers of the mobile telephone network.	5.	The method according to claim 1, wherein the one or more memories and the one or more processing devices reside in one or more servers of the provider of presence related services and/or in one or more servers of the mobile telephone network.
7.	The method according to claim 1, wherein the storing of the checking data in the one or more memories comprises electronically receiving from the mobile station the checking data.	6.	The method according to claim 1, wherein the storing of the checking data in the one or more memories comprises electronically receiving from the mobile station the checking data.
8.	The method according to claim 1, wherein the mobile telephone network is cellular.	7.	The method according to claim 1, wherein the mobile telephone network is cellular.
9.	The method according to claim 1, wherein the updating signal comprises the result of a previous determination performed by the mobile station about the mobile station's presence in the first special area.	8.	The method according to claim 1, wherein the updating signal comprises the result of a previous determination performed by the mobile station about the mobile station's presence in the special area.
10.	The method according to claim 1, wherein the updating signal is received via the mobile telephone network from the mobile station at least one of (i) periodically, (ii) at times recent to when the mobile station enters into or exists from the first special area, (iii) when the mobile station remains in the first special area, and (iv) when the mobile station remains outside the first special area.	9.	The method according to claim 1, wherein the updating signal is received via the mobile telephone network from the mobile station at least one of (i) periodically, (ii) at times recent to when the mobile station enters into or exists from the special area, (iii) when the mobile station remains in the special area. .
11.	The method according to claim 1, wherein the updating signal comprises a request to access to a service or to a multimedia content and the provider of presence related services enables or disables the provision of the service or multimedia content depending on the presence of the mobile station in the first special area.	10.	The method according to claim 1, wherein the updating signal comprises a request to access to a service or to a multimedia content and the provider of presence related services enables or disables the provision of the service or multimedia content depending on the presence of the mobile station in the special area.
1	A method associated with a provider of presence related services in connection with the use of a mobile station and at least a first radio communication defining device that transmits a first distinctive defining signal, the first distinctive defining signal at least partly defines a first special area by its coverage, the method comprising: electronically storing in one or more memories data capable of linking the mobile station to the first special area, the data including a checking data of the first radio communication defining device and a first identifier related to the mobile station, transmitting via a mobile telephone network to the mobile station at least a portion of the checking data, 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 at least the first special area, the updating signal including a second identifier related to the mobile station, deriving from the updating signal by one or more processing devices having access to at least a portion of	11	A method associated with a provider of presence related services in connection with the use of a mobile station and at least a first radio communication defining device that transmits a first distinctive defining signal, the first distinctive defining signal at least partly defines a special area by its coverage, the method comprising: electronically storing in one or more memories data capable of linking the mobile station to the special area, the data including a checking data of the first radio communication defining device and an identifier related to the mobile station, transmitting to the mobile station at least a portion of the checking data, 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 updating signal including the identifier or other identifier related to the mobile station, deriving from the updating signal by one or more processing devices having access to at least a portion of

	the data whether or not the mobile station is present in the first special area; and enabling or disabling by use of the one or more processing devices a presence related service based upon the mobile station's presence or non-presence in the first special area.		the data whether or not the mobile station is present in the special area; and enabling or disabling by use of the one or more processing devices a presence related service based upon the mobile station's presence or non-presence in the special area.
2.	The method according to claim 1, wherein the one or more processing devices has access to at least a portion of the data and updates at least one operating parameter in a database of the provider of presence related services depending on the presence of the mobile station in the first special area.	12	The method according to claim 11, wherein the one or more processing devices has access to at least a portion of the data and updates at least one operating parameter in a database of the provider of presence related services depending on the presence of the mobile station in the special area.
3.	The method according to claim 2, 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.	13.	The method according to claim 12, 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.
5.	The method according to claim 1, wherein the enabling or disabling of the presence related service includes transmitting via the mobile telephone network a signal to the mobile station that is capable of being used to enable or disable one or more related functions in the mobile station.	14.	The method according to claim 11, wherein the enabling or disabling of the presence related service includes transmitting via the mobile telephone network a signal to the mobile station that is capable of being used to enable or disable one or more related functions in the mobile station.
6.	The method according to claim 1, wherein the one or more memories and the one or more processing devices reside in one or more servers of the provider of presence related services and/or in one or more servers of the mobile telephone network.	15.	The method according to claim 11, wherein the one or more memories and the one or more processing devices reside in one or more servers of the provider of presence related services and/or in one or more servers of the mobile telephone network.
7.	The method according to claim 1, wherein the storing of the checking data in the one or more memories comprises electronically receiving from the mobile station the checking data.	16.	The method according to claim 11, wherein the storing of the checking data in the one or more memories comprises electronically receiving from the mobile station the checking data.
8.	The method according to claim 1, wherein the mobile telephone network is cellular.	17.	The method according to claim 11, wherein the mobile telephone network is cellular.
9.	The method according to claim 1, wherein the updating signal comprises the result of a previous determination performed by the mobile station about the mobile station's presence in the first special area.	18.	The method according to claim 11, wherein the updating signal comprises the result of a previous determination performed by the mobile station about the mobile station's presence in the special area.
10.	The method according to claim 1, wherein the updating signal is received via the mobile telephone network from the mobile station at least one of (i) periodically, (ii) at times recent to when the mobile station enters into or exists from the first special area, (iii) when the mobile station remains in the first special area, and (iv) when the mobile station remains outside the first special area.	19.	The method according to claim 11, wherein the updating signal is received via the mobile telephone network from the mobile station at least one of (i) periodically, (ii) at times recent to when the mobile station enters into or exists from the special area, (iii) when the mobile station remains in the special area.
11.	The method according to claim 1, wherein the updating signal comprises a request to access to a service or to a multimedia content and	20.	The method according to claim 11, wherein the updating signal comprises a request to access to a service or to a multimedia content and

	the provider of presence related services enables or disables the provision of the service or multimedia content depending on the presence of the mobile station in the first special area.		the provider of presence related services enables or disables the provision of the service or multimedia content depending on the presence of the mobile station in the special area.

4. Claims 1-10 are rejected on the ground of nonstatutory double patenting as being unpatentable over claims 1, 4, 5 and 10-16 of U.S. Patent No. 8,934,922 respectively. Similarly, claims 11-20 are rejected on the ground of nonstatutory double patenting as being unpatentable over claims 1, 4, 5 and 10-16 of U.S. Patent No. 8,934,922 respectively. Claims 21-26 are rejected on the ground of nonstatutory double patenting as being unpatentable over claims 1, 10-11 and 13-15 of U.S. Patent No. 8,934,922. Although the claims at issue are not identical, as summarized in the Table below, the claims of the instant application are anticipated by the claims of Patent No. 8,934,922.

   Claim limitations recited in the claims 1 and 11 of the instant application are drawn to the subject matter as recited in the claim 1 and are anticipated by the claim 1 of prior U.S. Patent No. 8,934,922.

   Claim limitations recited in the claims 2 and 12 of the instant application are drawn to the subject matter as recited in the claim 4 and are anticipated by the claim 4 of prior U.S. Patent No. 8,934,922.

   Claim limitations recited in the claims 3 and 13 of the instant application are drawn to the subject matter as recited in the claim 5 and are anticipated by the claim 5 of prior U.S. Patent No. 8,934,922.

Claim limitations recited in the claims 4-10 and 14-20 of the instant application are drawn to the subject matter as recited in the claims 10-16 and are anticipated by the claims 10-16 of prior U.S. Patent No. 8,934,922 respectively.

Claim limitations recited in the claims 21-22 of the instant application are drawn to the subject matter as recited in the claims 1 and 11 and are anticipated by the claims 1 and 11 of prior U.S. Patent No. 8,934,922.

Claim limitations recited in the claim 23 of the instant application is drawn to the subject matter as recited in the claim 10 and is anticipated by the claims 1 and 11 of prior U.S. Patent No. 8,934,922.

Claim limitations recited in the claim 24-26 of the instant application are drawn to the subject matter as recited in the claims 13-15 and are anticipated by the claims 13-15 of prior U.S. Patent No. 8,934,922.

Instant Application No. 14/743,237 Claims		**Patent No. 8,934,922 Claims**	
1.	A method associated with a provider of Presence related services in connection with the use of a mobile station and at least a first radio communication defining device that transmits a first distinctive defining signal, the first distinctive defining signal at least partly defines a special area by its coverage, the method comprising: electronically storing in one or more memories data	1.	A method associated with one or more providers of presence related services in connection with the use of a mobile station and at least a first radio communication defining device that transmits a first distinctive defining signal and a second radio communication defining device that transmits a second distinctive defining signal, the first distinctive defining signal at least partly defines a first special area by its coverage, the second distinctive defining signal at least partly defining a second special area by its coverage, the method comprising: electronically storing in one or more memories data

	capable of linking the mobile station to the first special area, the data including a checking data of the first radio communication defining device and an identifier related to the mobile station, 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, deriving from the updating signal by one or more processing devices having access to at least a portion of the data whether or not the mobile station is present in the special area; and enabling or disabling by use of the one or more processing devices a presence related service based upon the mobile station's presence or non-presence in the special area.		capable of linking the mobile station to the first and second special areas, the data including a first checking data of the first radio communication defining device, a second checking data of the second radio communication defining device, and a first identifier related to the mobile station, transmitting via a mobile telephone network to the mobile station at least a portion of the first checking data, and transmitting via the mobile telephone network to the mobile station at least a portion of the second checking data, receiving from the mobile station via the mobile telephone network a first updating signal uncorrelated to any mobile station phone call establishment that identifies the mobile station's presence in at least the first special area, and receiving from the mobile station via the mobile telephone network a second updating signal uncorrelated to any mobile station phone call establishment that identifies the mobile station's presence in at least the second special area, the first updating signal including a second identifier related to the mobile station, the second updating signal including a third identifier related to the mobile station, deriving from the first updating signal by one or more processing devices having access to at least a portion of the data whether or not the mobile station is present in the first special area, and deriving from the second updating signal by the one or more processing devices whether or not the mobile station is present in the second special area; and enabling or disabling by use of the one or more processing devices a presence related service based upon the mobile station's presence or non-presence in the first special area, and enabling or disabling by use of the one or more processing devices a presence related service based upon the mobile station's presence or non-presence in the second special area.
		2.	The method according to claim 1, wherein the data stored in the one or more memories related to the first special area is stored in a first memory or set of memories of a first provider of presence related services and the data stored in the one or more memories related to the second special area is stored in a second memory or set of memories of a second provider of presence related services.
		3.	The method according to claim 1, wherein the mobile telephone network transmits to the mobile station the at least portion of the first checking data and the at least portion of the second checking data at different times.
2.	The method according to claim 1, wherein the one or more processing devices has access to at least a portion of the data and updates at least one operating parameter in a database of the provider of	4.	The method according to claim 1, wherein the one or more processing devices has access to at least a portion of the data and updates at least one operating parameter in a database of the one or more providers of

	presence related services depending on the presence of the mobile station in the special area.		presence related services depending on the presence of the mobile station in the first special area and/or second special area.
3.	The method according to claim 2, 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.	5.	The method according to claim 4, 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.
		6.	The method according to claim 1, wherein the one or more processing devices include a first processing device associated with a first provider of presence related services and a second processing device associated with a second provider of presence related services.
		7.	The method according to claim 6, wherein the first processing device has access to at least a portion of the data and updates at least one operating parameter in a database of the first provider of presence related services depending on the presence of the mobile station in the first special area, and the second processing device has access to at least a portion of the data and updates at least one operating parameter in a database of the second provider of presence related services depending on the presence of the mobile station in the second special area.
		8.	The method according to claim 7, 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.
		9.	The method according to claim 1, wherein the first, second and third identifiers related to the mobile station are the same.
4.	The method according to claim 1, wherein the enabling or disabling of the presence related Service includes transmitting via the mobile telephone network a signal to the mobile station that is capable of being used to enable or disable one or more related functions in the mobile station.	10.	The method according to claim 1, wherein the enabling or disabling of the first and/or second presence related service includes transmitting via the mobile telephone network a signal to the mobile station that is capable of being used to enable or disable one or more related functions in the mobile station.
5.	The method according to claim 1, wherein the one or more memories and the one or more processing devices reside in one or more servers of the provider of presence related services and/or in one or more servers of the mobile telephone network.	11.	The method according to claim 1, wherein the one or more memories and the one or more processing devices reside in one or more servers of the one or more providers of presence related services and/or in one or more servers of the mobile telephone network.
6.	The method according to claim 1, wherein the storing of the checking data in the one or more memories comprises electronically receiving from the mobile station the checking data.	12.	The method according to claim 1, wherein the storing of the first and second checking data in the one or more memories comprises electronically receiving from the mobile station the first and second checking data.
7.	The method according to claim 1, wherein the mobile telephone network is cellular.	13.	The method according to claim 1, wherein the mobile telephone network is cellular.
8.	The method according to claim 1, wherein the updating signal comprises the result of a previous determination performed by the mobile station about the mobile station's presence in the special area.	14.	The method according to claim 1, wherein at least one of the first and second updating signals comprises the result of a previous determination performed by the mobile station about the mobile station's presence in the first and second special areas, respectively.
9.	The method according to claim 1, wherein the updating signal is received via the mobile telephone network from the mobile station at least one of (i) periodically, (ii) at times recent to when the mobile station enters into or exists from the special area, (iii) when the mobile station remains in the first special area.	15.	The method according to claim 1, wherein at least one of the first and second updating signals is received via the mobile telephone network from the mobile station at least one of (i) periodically, (ii) at times recent to when the mobile station respectively enters into or exists from the first special area and/or second special area, (iii) when the mobile station respectively remains in the

			first special area and/or the second special area, and (iv) when the mobile station respectively remains outside the first special area and/or second special area.
10.	The method according to claim 1, wherein the updating signal comprises a request to access to a service or to a multimedia content and the provider of presence related services enables or disables the provision of the service or multimedia content depending on the presence of the mobile station in the special area.	16.	The method according to claim 1, wherein at least one of the first and second updating signals comprises a request to access to a service or to a multimedia content and the one or more providers of presence related services enable or disable the provision of the service or multimedia content depending on the presence of the mobile station into the first and second special area, respectively.
11.	A method associated with a provider of presence related services in connection with the use of a mobile station and at least a first radio communication defining device that transmits a first distinctive defining signal, the first distinctive defining signal at least partly defines a special area by its coverage, the method comprising: electronically storing in one or more memories data capable of linking the mobile station to the special area, the data including a checking data of the first radio communication defining device and an identifier related to the mobile station, transmitting to the mobile station at least a portion of the checking data, 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 updating signal including the identifier or other identifier related to the mobile station, deriving from the updating signal by one or more processing devices having access to at least a portion of the data whether or not the mobile station is present in the special area; and	1.	A method associated with one or more providers of presence related services in connection with the use of a mobile station and at least a first radio communication defining device that transmits a first distinctive defining signal and a second radio communication defining device that transmits a second distinctive defining signal, the first distinctive defining signal at least partly defines a first special area by its coverage, the second distinctive defining signal at least partly defining a second special area by its coverage, the method comprising: electronically storing in one or more memories data capable of linking the mobile station to the first and second special areas, the data including a first checking data of the first radio communication defining device, a second checking data of the second radio communication defining device, and a first identifier related to the mobile station, transmitting via a mobile telephone network to the mobile station at least a portion of the first checking data, and transmitting via the mobile telephone network to the mobile station at least a portion of the second checking data, receiving from the mobile station via the mobile telephone network a first updating signal uncorrelated to any mobile station phone call establishment that identifies the mobile station's presence in at least the first special area, and receiving from the mobile station via the mobile telephone network a second updating signal uncorrelated to any mobile station phone call establishment that identifies the mobile station's presence in at least the second special area, the first updating signal including a second identifier related to the mobile station, the second updating signal including a third identifier related to the mobile station, deriving from the first updating signal by one or more processing devices having access to at least a portion of the data whether or not the mobile station is present in the first special area, and deriving from the second updating signal by the one or

	enabling or disabling by use of the one or more processing devices a presence related service based upon the mobile station's presence or non-presence in the special area.		more processing devices whether or not the mobile station is present in the second special area; and enabling or disabling by use of the one or more processing devices a presence related service based upon the mobile station's presence or non-presence in the first special area, and enabling or disabling by use of the one or more processing devices a presence related service based upon the mobile station's presence or non-presence in the second special area.
12.	The method according to claim 11, wherein the one or more processing devices has access to at least a portion of the data and updates at least one operating parameter in a database of the provider of presence related services depending on the presence of the mobile station in the special area.	4.	The method according to claim 1, wherein the one or more processing devices has access to at least a portion of the data and updates at least one operating parameter in a database of the one or more providers of presence related services depending on the presence of the mobile station in the first special area and/or second special area.
13.	The method according to claim 12, 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.	5.	The method according to claim 4, 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.
14.	The method according to claim 11, wherein the enabling or disabling of the presence related service includes transmitting via the mobile telephone network a signal to the mobile station that is capable of being used to enable or disable one or more related functions in the mobile station.	10.	The method according to claim 1, wherein the enabling or disabling of the first and/or second presence related service includes transmitting via the mobile telephone network a signal to the mobile station that is capable of being used to enable or disable one or more related functions in the mobile station.
15.	The method according to claim 11, wherein the one or more memories and the one or more processing devices reside in one or more servers of the provider of presence related services and/or in one or more servers of the mobile telephone network.	11.	The method according to claim 1, wherein the one or more memories and the one or more processing devices reside in one or more servers of the one or more providers of presence related services and/or in one or more servers of the mobile telephone network.
16.	The method according to claim 11, wherein the storing of the checking data in the one or more memories comprises electronically receiving from the mobile station the checking data.	12.	The method according to claim 1, wherein the storing of the first and second checking data in the one or more memories comprises electronically receiving from the mobile station the first and second checking data.
17.	The method according to claim 11, wherein the mobile telephone network is cellular.	13.	The method according to claim 1, wherein the mobile telephone network is cellular.
18.	The method according to claim 11, wherein the updating signal comprises the result of a previous determination performed by the mobile station about the mobile station's presence in the special area.	14.	The method according to claim 1, wherein at least one of the first and second updating signals comprises the result of a previous determination performed by the mobile station about the mobile station's presence in the first and second special areas, respectively.
19.	The method according to claim 11, wherein the updating signal is received via the mobile telephone network from the mobile station at least one of (i) periodically, (ii) at times recent to when the mobile station enters into or exists from the special area, (iii) when the mobile station remains in the special area.	15.	The method according to claim 1, wherein at least one of the first and second updating signals is received via the mobile telephone network from the mobile station at least one of (i) periodically, (ii) at times recent to when the mobile station respectively enters into or exists from the first special area and/or second special area, (iii) when the mobile station respectively remains in the first special area and/or the second special area, and (iv) when the mobile station respectively remains outside the first special area and/or second special area.
20.	The method according to claim 11, wherein the updating signal comprises a	16.	The method according to claim 1, wherein at least one of the first and second updating signals comprises a

	request to access to a service or to a multimedia content and the provider of presence related services enables or disables the provision of the service or multimedia content depending on the presence of the mobile station in the special area.		request to access to a service or to a multimedia content and the one or more providers of presence related services enable or disable the provision of the service or multimedia content depending on the presence of the mobile station into the first and second special area, respectively.
21.	A method associated with providing presence related services in connection with the use of a mobile station and at least a first radio communication defining device that transmits a first distinctive defining signal, the first distinctive defining signal at least partly defines a special area by its coverage, the method comprising: electronically storing in a first server first data capable of linking the mobile station to the special area, the first data including a first checking data of the first radio communication defining device and an identifier related to the mobile station, receiving in a second server 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, deriving from the updating signal by one or more processing devices of the second server whether or not the mobile station is present in the special area; and enabling or disabling by use of the one or more	1.	A method associated with one or more providers of presence related services in connection with the use of a mobile station and at least a first radio communication defining device that transmits a first distinctive defining signal and a second radio communication defining device that transmits a second distinctive defining signal, the first distinctive defining signal at least partly defines a first special area by its coverage, the second distinctive defining signal at least partly defining a second special area by its coverage, the method comprising: electronically storing in one or more memories data capable of linking the mobile station to the first and second special areas, the data including a first checking data of the first radio communication defining device, a second checking data of the second radio communication defining device, and a first identifier related to the mobile station, transmitting via a mobile telephone network to the mobile station at least a portion of the first checking data, and transmitting via the mobile telephone network to the mobile station at least a portion of the second checking data, receiving from the mobile station via the mobile telephone network a first updating signal uncorrelated to any mobile station phone call establishment that identifies the mobile station's presence in at least the first special area, and receiving from the mobile station via the mobile telephone network a second updating signal uncorrelated to any mobile station phone call establishment that identifies the mobile station's presence in at least the second special area, the first updating signal including a second identifier related to the mobile station, the second updating signal including a third identifier related to the mobile station, deriving from the first updating signal by one or more processing devices having access to at least a portion of the data whether or not the mobile station is present in the first special area, and deriving from the second updating signal by the one or more processing devices whether or not the mobile station is present in the second special area; and enabling or disabling by use of the one or more

	processing devices a presence related service based upon the mobile station's presence or non-presence in the special area.		processing devices a presence related service based upon the mobile station's presence or non-presence in the first special area, and enabling or disabling by use of the one or more processing devices a presence related service based upon the mobile station's presence or non-presence in the second special area.
22.	The method according to claim 21, further comprising electronically storing in the second server second data capable of linking the mobile station to the special area, the second data including the first checking data or a second checking data of the first radio communication defining device	11.	The method according to claim 1, wherein the one or more memories and the one or more processing devices reside in one or more servers of the one or more providers of presence related services and/or in one or more servers of the mobile telephone network.
23.	The method according to claim 21, wherein the enabling or disabling of the presence related service includes transmitting via the mobile telephone network a signal to the mobile station that is capable of being used to enable or disable one or more related functions in the mobile station.	10.	The method according to claim 1, wherein the enabling or disabling of the first and/or second presence related service includes transmitting via the mobile telephone network a signal to the mobile station that is capable of being used to enable or disable one or more related functions in the mobile station.
24.	The method according to claim 21, wherein the mobile telephone network is cellular.	13.	The method according to claim 1, wherein the mobile telephone network is cellular.
25.	The method according to claim 21, wherein the updating signal comprises the result of a previous determination performed by the mobile station about the mobile station's presence in the special area.	14.	The method according to claim 1, wherein at least one of the first and second updating signals comprises the result of a previous determination performed by the mobile station about the mobile station's presence in the first and second special areas, respectively.
26.	The method according to claim 21, wherein the updating signal is received via the mobile telephone network from the mobile station at least one of (i) periodically, (ii) at times recent to when the mobile station enters into or exists from the special area, (iii) when the mobile station remains in the special area.	15.	The method according to claim 1, wherein at least one of the first and second updating signals is received via the mobile telephone network from the mobile station at least one of (i) periodically, (ii) at times recent to when the mobile station respectively enters into or exists from the first special area and/or second special area, (iii) when the mobile station respectively remains in the first special area and/or the second special area, and (iv) when the mobile station respectively remains outside the first special area and/or second special area.

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.

5. **Claims 11-13, 16-20, 1-3 and 6-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jokimies et al. (US 6,526,267 B1) in view of Atorf (US 2002/0094801 A1).**

Claim 11.

Jokimies et al. teach

A method associated with a provider of presence related services in connection with the use

of a mobile station and at least a first radio communication defining device that transmits a first

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

electronically storing in one or more memories data capable of linking the mobile station to the special area, the data including a checking data of the first radio communication defining device and an identifier related to the mobile station

(implied, col. 3, lines 50 – 64),

transmitting to the mobile station at least a portion of the checking data (col. 3, lines 50 – 64),

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 updating signal including the identifier or other identifier related to the mobile station (col. 3, line 66 to col. 4, line 3; at power-up of the mobile station).

Jokimies et al. does not elaborate on

deriving from the updating signal by one or more processing devices having access to at least a portion of the data whether or not the mobile station is present in the special area; *and*

enabling or disabling by use of the one or more processing devices a presence related service based upon the mobile station's presence or non-presence in the special area.

In an analogous art, Atorf teaches

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 updating signal including the identifier or other identifier related to the mobile station (para. 0030 – 0031, 0007);

deriving from the updating signal by one or more processing devices having access to at least a portion of the data whether or not the mobile station is present in the special area (para. 0030 – 0032)*; and*

enabling or disabling by use of the one or more processing devices a presence related service based upon the mobile station's presence or non-presence in the special area (implied, para. 0030 – 0032).

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 Atorf into the teaching of Jokimies et al. to elaborate on the processing devices enabling or disabling a presence related service based on the mobile stations' presence or non-presence in the special area per the updating signal received from the mobile station.

The motivation to combine is so that the service provider may control the presence related service based on mobile station's presence or non-presence in the special area.

Claim 12.

Jokimies et al. in combination with Atorf teach

The method according to claim 11, wherein the one or more processing devices has access to at least a portion of the data and updates at least one operating parameter in a database of the provider of presence related services depending on the presence of the mobile station in the special area (implied, Atorf, para. 0030 – 0032).

Claim 13.

Jokimies et al. in combination with Atorf teach

The method according to claim 12, 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).

Claim 16.

Jokimies et al. in combination with Atorf teach

The method according to claim 11, wherein the storing of the checking data in the one or more memories comprises electronically receiving from the mobile station the checking data (Atorf, para. 27, 30, 0006 – 0007).

Claim 17.

Jokimies et al. in combination with Atorf teach

The method according to claim 11, wherein the mobile telephone network is cellular (Atorf, para. 0045 – 0046).

Claim 18.

Jokimies et al. in combination with Atorf teach

The method according to claim 11, wherein the updating signal comprises the result of a previous determination performed by the mobile station about the mobile station's presence in the special area (Jokimies et al., col. 3, lines 27-44; Atorf, para. 0030 – 0031).

Claim 19.

Jokimies et al. in combination with Atorf teach

The method according to claim 11, wherein the updating signal is received via the mobile telephone network from the mobile station at least one of (i) periodically, (ii) at times recent to when the mobile station enters into or exists from the special area, and (iii) when the mobile station remains in the special area (Atorf, para. 30 – 0031).

Claim 20.

Jokimies et al. in combination with Atorf teach

The method according to claim 11, wherein the updating signal comprises a request to access to a service or to a multimedia content and the provider of presence related services enables or disables the provision of the service or multimedia content depending on the presence of the mobile station in the special area (implied, Atorf, para. 30 – 0031).

Claim 1.

Claim 1, pertaining to *A method associated with a provider of presence related services in connection with the use of a mobile station and at least a first radio communication defining device that transmits a first distinctive defining signal, the first distinctive defining signal at least partly defines a special area by its coverage, the method comprising: electronically storing in one or more memories data capable of linking the mobile station to the special area, the data including a checking data of the first radio communication defining device and an identifier related to the mobile station, 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, deriving from the updating signal by one or more processing devices having access to at least a portion of the data whether or not the mobile station is present in the special area; and enabling or disabling by use of the one or more processing devices a presence related service based upon the mobile station's presence or non-presence in the special area,*

and corresponding to the subject matter and an obvious variation of claim 11, therefore, is rejected with the same rationale as analyzed in claim 1.

Claim 2-3.

Claim 2-3, pertaining to the method according to claim 1 and claim 2 respectively, and corresponding to the subject matter of claims 12-13, therefore, are rejected with the same rationale as analyzed in claims 12-13**.**

Claims 6 - 10.

Claims 6-10, pertaining to *The method according to claim 1,* and corresponding to the subject matter of claims 16-20 respectively, therefore, are rejected with the same rationale as analyzed in claims 16-20.

6. **Claims 14 and 4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jokimies et al. (US 6,526,267 B1) in view of Atorf (US 2002/0094801 A1) further in view of Muhonen (US 6,920,317).**

Claim 14.

Jokimies et al. in combination with Atorf teach

The method according to claim 11, but does not elaborate on

wherein the enabling or disabling of the presence related service includes transmitting via the mobile telephone network a signal to the mobile station that is capable of being used to enable or disable one or more related functions in the mobile station.

In an analogous art, Muhonen teach

wherein the enabling or disabling of the presence related service includes transmitting via the mobile telephone network (col. 5, lines 58-59, lines 66-67) *a signal to the mobile station that is capable of being used to enable or disable one or more related functions in the mobile station* (col. 5, lines 37-46).

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 Muhonen into the teaching of Jokimies in combination with Atorf to send to the mobile station a deactivation signal to enable or disable the presence related service.

The motivation to combine is so that the service provider may control the enabling or disabling of presence related service based on mobile station's presence or non-presence in the special area.

Claim 4.

Claim 4, pertaining to *the method according to claim 1*, and corresponding to the subject matter of claim 14, therefore, are rejected with the same rationale as analyzed in claim 14**.**

7. **Claims 15, 5, 21-22 and 24-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jokimies et al. (US 6,526,267 B1) in view of Atorf (US 2002/0094801 A1) further in view of Salmela et al. (US 6,516,193).**

Claim 15.

Jokimies et al. in combination with Atorf teach *The method according to claim 11,* but does not elaborate on

wherein the one or more memories and the one or more processing devices reside in one or more servers of the provider of presence related services and/or in one or more servers of the mobile telephone network.

In an analogous art, Salmela et al. teach

wherein the one or more memories and the one or more processing devices reside in one or more servers of the provider of presence related services and/or in one or more servers of the mobile telephone network (col. 3, lines 16-18; col. 4, lines 11-24).

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 Salmela et al. into the

teaching of Jokimies et al. in combination with Atorf to include in the one or more servers of the provider of presence related services or mobile telephone network databases for storing and managing presence service related data.

The motivation to combine is so that the service provider may use the database to control and manage presence related services.

Claim 5.

Claim 5, pertaining to *The method according to claim 1,* and corresponding to the subject matter of claim 15, therefore, are rejected with the same rationale as analyzed in claim 15**.**

Claim 21.

Claim 21, pertaining to *A method associated with providing presence related services in connection with the use of a mobile station and at least a first radio communication defining device that transmits a first distinctive defining signal, the first distinctive defining signal at least partly defines a special area by its coverage, the method comprising: electronically storing in a first server first data capable of linking the mobile station to the special area, the first data including a first checking data of the first radio communication defining device and an identifier related to the mobile station, receiving in a second server 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, deriving from the updating signal by one or more processing devices of the second server whether or not the mobile station is present in the special area; and enabling or disabling by use of the one or more processing devices a presence related service based upon the mobile station's presence or non-presence in the special area,*

and corresponding to the subject matter of claim 11 and claim 15, therefore, are rejected with the same rationale as analyzed in claims 11 and 15.

Claim 22.

Claim 22, pertaining to *The method according to claim 21, further comprising electronically storing in the second server second data capable of linking the mobile station to the special area, the second data including the first checking data or a second checking data of the first radio communication defining device and the identifier or other identifier related to the mobile station,*

and corresponding to the subject matter of claim 11 and claim 15, therefore, are rejected with the same rationale as analyzed in claims 11 and 15.

Claim 24.

Claim 24, pertaining to *The method according to claim 21, wherein the mobile telephone network is cellular,*

and corresponding to the subject matter of claim 17, therefore, are rejected with the same rationale as analyzed in claim 17.

Claim 25.

Claim 25, pertaining to *The method according to claim 21, wherein the updating signal comprises the result of a previous determination performed by the mobile station about the mobile station's presence in the special area,*

and corresponding to the subject matter of claim 18, therefore, are rejected with the same rationale as analyzed in claim 18.

Claim 26.

Claim 26, pertaining to *The method according to claim 21, wherein the updating signal is received via the mobile telephone network from the mobile station at least one of (i) periodically, (ii) at times recent to when the mobile station enters into or exists from the special area, and (iii) when the mobile station remains in the special area,*

and corresponding to the subject matter of claim 19, therefore, are rejected with the same rationale as analyzed in claim 19.

8. **Claim 23 is rejected under 35 U.S.C. 103(a) as being unpatentable over Jokimies et al. (US 6,526,267 B1) in view of Atorf (US 2002/0094801 A1) further in view of Salmela et al. (US 6,516,193) further in view of Muhonen (US 6,920,317).**

Claim 23.

The analysis of claim 14 is incorporated herein.

Claim 23, pertaining to *The method according to claim 21, wherein the enabling or disabling of the presence related service includes transmitting via the mobile telephone network a signal to the mobile station that is capable of being used to enable or disable one or more related functions in the mobile station,*

and corresponding to the subject matter of claim 14, therefore, are rejected with the same rationale as analyzed in claim 14.

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. 14/743,237	Applicant(s)/Patent Under Reexamination PÉREZ LAFUENTE, CARLOS A	
	Examiner JEAN CHANG	Art Unit 2643	Page 1 of 1

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	F	US-			
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	H	US-			
	I	US-			
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	K	US-			
	L	US-			
	M	US-			

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

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Dates in MM-YYYY format are publication dates. Classifications may be US or foreign.

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(Use as many sheets as necessary)

Sheet 1 of 2

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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
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	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	08/08/2015

*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	14/743,237
Filing Date	June 18, 2015
First Named Inventor	Carlos A. Pérez LaFuente
Art Unit	Not Yet Assigned 2643
Examiner Name	Not Yet Assigned Jean Chang
Attorney Docket Number	122358-387289

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	08/08/2015

*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
L7	49	"lafuente, carlos".inv.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2015/08/09 15:01
L8	42130	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	2015/08/09 15:02
L9	10	((receiv$4) near15 (mobile or wireless or electronic or communication) (station or device or phone or terminal or equipment) near15 (signal or transmission or report or data) near20 (presence) near20 (special or limited or distinct$5 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	2015/08/09 15:02
L10	35	((receiv$4) near15 (mobile or wireless or electronic or communication) (station or device or phone or terminal or equipment) near15 (signal or transmission or report or data) near20 (presence) near20 (special or limited or distinct$5 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	2015/08/09 15:02
L11	1	l10 and "l1"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2015/08/09 15:03
L12	1	l10 and "l2"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2015/08/09 15:03
S1	29	"6334052"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO;	ADJ	ON	2011/09/26 17:50

			DERWENT; IBM_TDB			
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; 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	US-PGPUB; USPAT; USOCR;	ADJ	ON	2011/09/28 09:29

		coverage) same (signal or code or identifier or identification or parameter or flag)	FPRS; EPO; JPO; DERWENT; IBM_TDB			
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; 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; 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; 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	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO;	ADJ	ON	2012/06/21 10:39

		identification or parameter or flag) same ((base station) or cell or AP or device) same (wireless or mobile) and (monitor or presence)	DERWENT; IBM_TDB			
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) 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;	ADJ	ON	2012/06/25

			USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB			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	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	OFF	2013/06/01 12:49

		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)				
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 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	US-PGPUB; USPAT; USOCR;	ADJ	ON	2013/06/01 19:30

		(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)	FPRS; EPO; JPO; DERWENT; IBM_TDB			
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 (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;	ADJ	ON	2013/06/01 20:07

			DERWENT; IBM_TDB			
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 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	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2013/06/01 23:14

		zone)) same (send$4 or transmit$5 or transmi$6 or report$5 or notify$5) and (zone or (service area) or LSA)				
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;	ADJ	ON	2014/01/06 23:30

			DERWENT			
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 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	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2014/01/20 19:32

		signal$4) same (memory or stor$4) near10 (data or check$4 or identifier or identification)				
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 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	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2014/01/20 23:05

		discount or home) near10 ((service or tarrif or rate) (area or coverage or location or zone))				
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 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	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2014/01/20 23:30

		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.				
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	4	"8723664"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2014/10/15 17:31
S96	0	wo0103372	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2014/10/15 17:36
S97	0	wo01003372	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2014/10/15 17:37
S98	28	"200103372"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2014/10/15 17:37
S99	61	"0103372"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2014/10/15 17:37
S100	64	"6334052"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO;	ADJ	ON	2014/10/15 17:40

			DERWENT; IBM_TDB			
S101	81	"6826414"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2014/10/15 17:59
S102	1	"14250517"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2014/10/15 18:22
S103	1	S102 and outside near10 special area	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2014/10/15 18:22
S104	1	S102 and send$4 near10 updat$3 signal	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2014/10/15 18:25
S105	0	S102 and updat$4 near5 signal same presence and periodically and (enter$4 or exit$4) and remain$4 near10 (in or outside) near5 area	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2014/10/15 18:29
S106	0	S102 and updat$4 near5 signal same presence and periodically and (enter$4 or exit$4) and remain$4 near10 (in or outside) area	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2014/10/15 18:30
S107	1	S102 and updat$4 near5 signal same presence and periodically and (enter$4 or exit$4) and (in or outside) near10 area	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2014/10/15 18:30
S108	1	S102 and updat$4 near5 signal same presence and periodically and (enter$4 or exit$4) and (outside) near10 area	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2014/10/15 18:56
S109	33	"lafuente, carlos".inv.	US-PGPUB; USPAT; USOCR;	ADJ	ON	2014/10/15 23:16

			FPRS; EPO; JPO; DERWENT; IBM_TDB			
S110	6	((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) near20 (periodically or enter$4 or exit$4 or leav$4 or presence or outside) 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	2014/10/15 23:29
S111	57220	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. or (H04W64/00).CPC.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2014/10/15 23:30
S112	27	((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) near20 (periodically or enter$4 or exit$4 or leav$4 or presence or outside) 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	2014/10/15 23:30
S113	3	S112 and S109	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2014/10/15 23:32
S114	9	S112 and S111	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT;	ADJ	ON	2014/10/15 23:32

			IBM_TDB			
S122	2	"14250517"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2014/10/30 18:54
S123	0	S122 and update same outside same special area	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2014/10/30 18:55
S124	2	S122 and outside same special area	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2014/10/30 18:55
S125	2	S122 and updat$4 signal and outside same special area	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2014/10/30 19:11
S126	2	S122 and outside same special area	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2014/10/30 19:26
S127	2	S122 and outside and updat$4	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2014/10/30 19:29
S128	2	S122 and (outside or out) and (send$4 or sent) near10 updat$4	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2014/10/30 19:42
S129	3	"14250517"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2015/01/28 15:50
S130	3	S129 and special area and distinctive signal	US-PGPUB; USPAT; USOCR; FPRS;	ADJ	ON	2015/01/28 15:51

			EPO; JPO; DERWENT; IBM_TDB			
S131	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) near30 (detect$4 or identify$4 or determin$4 or recogniz$4 or presence) near20 (special or limited or distinct$5 or different or preferred or discount or home) near10 ((service or tarrif or rate) or (area or coverage or location or zone)) same (sum or intersect$) same (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	2015/02/27 11:36
S132	43	"lafuente, carlos".inv.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2015/02/27 11:36
S133	39304	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	2015/02/27 11:37
S138	4	"8934922"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2015/03/29 07:03
S139	45	"lafuente, carlos".inv.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2015/03/29 09:08
S140	9	((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	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2015/03/29 09:10

		(send$4 or transmit$5 or transmi$6 or report$5 or notify$5 or signal$4) near20 (periodically or enter$4 or exit$4 or leav$4 or presence or outside) 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.				
S141	32	((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) near20 (periodically or enter$4 or exit$4 or leav$4 or presence or outside) 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	2015/03/29 09:11
S142	40074	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	2015/03/29 09:17
S143	7	S141 and S139	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2015/03/29 09:17
S144	13	S141 and S142	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2015/03/29 09:17
S145	57	("20020094801" | "20030092450" | "20040192267" | "20040224682" | "20050075124" | "20050148297" | "20080004045" | "20080261604" | "20100167725" | "6334052" | "6516190" | "6516193" | "6625442" | "6671506" | "6785536" | "6826414" | "6836653" | "6920317" | "7142869" | "7171189" | "7266366" | "7634255" | "7778652" | "8723664").PN.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2015/03/29 09:20
S146	0	S141 and S145	US-PGPUB; USPAT; USOCR; FPRS;	ADJ	ON	2015/03/29 09:20

			EPO; JPO; DERWENT; IBM_TDB			
S148	13	"8723664"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2015/03/29 09:31
S149	61	"0103372"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2015/03/29 09:33
S150	1	"14561426"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2015/05/26 20:12
S153	34	((receiv$4) near15 (mobile or wireless or electronic or communication) (station or device or phone or terminal or equipment) near15 (signal or transmission or report or data) near20 (presence) near20 (special or limited or distinct$5 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	2015/05/26 21:50
S154	46	"lafuente, carlos".inv.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2015/05/26 21:50
S155	41178	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	2015/05/26 21:51
S156	43	((receiv$4 or send$4 or transmit$4) near20 (mobile or wireless or electronic or communication) (station or device or phone or terminal or equipment) near20(signal or transmission or report or data) near20 (presence) near20 (special or limited or distinct$5 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	2015/05/26 21:52
S157	1	"14561426"	US-PGPUB; USPAT; USOCR; FPRS;	ADJ	ON	2015/05/26 21:52

			EPO; JPO; DERWENT; IBM_TDB			
S158	7	S156 and @ad<"20060328"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2015/05/26 21:53
S159	0	S158 and S154	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2015/05/26 21:53
S160	2	S158 and S155	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2015/05/26 21:53
S162	216	"5642303"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2015/07/24 10:58
S163	422	"6122520"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2015/07/24 10:58
S164	166	"7848765"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2015/07/24 10:58
S165	5950	(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	2015/07/24 11:01
S166	1	S165 and S162	US-PGPUB; USPAT; USOCR; FPRS;	ADJ	ON	2015/07/24 11:01

			EPO; JPO; DERWENT; IBM_TDB			
S167	16	S165 and S163	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2015/07/24 11:02
S168	4	S165 and S164	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2015/07/24 11:02
S169	11	S167 and @ad<"20100501"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2015/07/24 11:04
S170	216	"5642303"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2015/07/24 11:53
S171	7	"8738040"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2015/08/08 18:33
S172	5	"9042910"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2015/08/08 22:13

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14/743,237	06/18/2015 RULE	455	2643	122358-387289

APPLICANTS
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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
which is a 371 of PCT/EP2007/052939 03/27/2007

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EUROPEAN PATENT OFFICE (EPO) 06111804.4 03/28/2006

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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	26	3

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VENABLE LLP
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UNITED STATES

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

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Index of Claims	Application/Control No.	Applicant(s)/Patent Under Reexamination
	14743237	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	08/08/2015								
	1	✓								
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	Examiner	Art Unit
	JEAN CHANG	2643

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Symbol	Date	Examiner

US CLASSIFICATION SEARCHED			
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455	456.4, 555, 408, 432.2, 456.1, 414.1, 433, 406, 458	8/9/2015	jc

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inventor search and text search on East for receive mobile station signal data presence special service area	8/9/2015	jc

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

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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**.

/nhassani/

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Bescheinigung	Certificate	Attestation
Die angehefteten Unterlagen stimmen mit der als ursprünglich eingereicht geltenden Fassung der auf dem nächsten Blatt bezeichneten europäischen Patentanmeldung überein.	The attached documents are exact copies of the text in which the European patent application described on the following page is deemed to have been filed.	Les documents joints à la présente attestation sont conformes au texte, considéré comme initialement déposé, de la demande de brevet européen qui est spécifiée à la page suivante.

Patentanmeldung Nr.	**Patent application No.**	**Demande de brevet n°**
	06111804.8 / EP06111804	

The organization code and number of your priority application, to be used for filing abroad under the Paris Convention, is EP06111804.

Der Präsident des Europäischen Patentamts;
Im Auftrag

For the President of the European Patent Office

Le President de l'Office européen des brevets
p.o.

V. Joseph

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Application no.: 06111804.8
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Pérez Lafuente, Carlos Alberto
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esc B. 6° 3a
28029 Madrid/ES

Bezeichnung der Erfindung / Title of the invention / Titre de l'invention:
(Falls die Bezeichnung der Erfindung nicht angegeben ist, oder falls die Anmeldung in einer Nicht-Amtssprache des EPA eingereicht wurde, siehe Beschreibung bezüglich ursprünglicher Bezeichnung.
If no title is shown, or if the application has been filed in a non-EPO language, please refer to the description for the original title.
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Method and system for monitoring a mobile station presence in a special area

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Method and system for monitoring a mobile station presence in a special area.

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.

BACKGROUND ART

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.

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.

The published patent application nºUS20020094801 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.

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 guide unit has to know the identity of the mobile station and this last solution is thought to be used for a home special area.

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

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.

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.

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 like in 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).

According to the present invention, a special area associated to a mobile station can 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.

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 nºUS20020094801. Therefore, it is easier with this present invention to realize protection against abuse of the system.

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.

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.

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.

In a particular embodiment, at least one radio communication defining device is a wireless device whose radio distinctive defining signal that defines the special area

is a 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.

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.

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.

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 to this 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.

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.

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.

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.

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.

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.

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.

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.

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

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:

Figure 1 is a schematic diagram illustrating an embodiment of a mobile system according to the invention;

Figure 2 is a schematic diagram illustrating another embodiment of a mobile system according to the invention;

Figure 3 is a schematic diagram illustrating another embodiment of a mobile system according to the invention;

Figure 4 is a flow chart illustrating partly an embodiment of a method according to the invention;

Figure 5 is a flow chart illustrating another part of an embodiment of a method according to the invention;

Figure 6 is a schematic diagram of a part of an operating parameters database in an embodiment of the invention;

Figure 7 is a schematic diagram of a part of another operating parameters database in an embodiment of the invention.

DETAILED DESCRIPTION

A mobile telephone 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 the mobile telephone network. The mobile telephone network may be cellular or not.

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.

Figure 1, figure 2 and figure 3 are three schematic figures describing three particular embodiments of mobile systems according to the invention.

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.

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.

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.

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.

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.

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 IC1 different from IC2 and determines that it is not receiving any distinctive defining signal and therefore that it is not into the special area.

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.

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.

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.

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 in

the frequency range used by the wireless device.

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.

The predetermined environment may be one or more specific geographical locations (for example several fixed points into a restaurant) or a physical environment 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.

The distinctive wireless signals are preferably coded and the mobile station processing means include decoding means to decode the wireless signals received.

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.

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..

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.

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.

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.

In a 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.

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.

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.

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.

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 a

distinctive 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.

Otherwise the mobile station 200 determines that the wireless signal received is not a distinctive wireless signal.

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.

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.

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).

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.

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.

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.

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.

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.

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

station 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)).

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.

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.

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.

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.

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 ,.

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 set of 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.

An embodiment of a method for monitoring the presence of a mobile station in at least 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.

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.

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.

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.

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.

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.

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.

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.

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).

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.

In step 408, the special operating means send a checking data to the mobile station.

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.

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.

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.

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..

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.

It is advantageous to store the checking data into the mobile 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.

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).

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.

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.

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.

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 its internal mobile station database, the checking data associated with the special area that the operator wishes to deactivate.

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.

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).

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.

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).

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.

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.

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.

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.

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.

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).

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.

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.

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).

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.

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.

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.

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.

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.

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.

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.

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.

In step 526, the mobile station sends and updating signal to the mobile telephone network about its presence in the special area.

In a 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.

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.

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.

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.

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.

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.

In step 530, the mobile station search for the acknowledgment from the special operating means.

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.

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.

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 in a special area associated with this mobile station and send the acknowledgement.

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.

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.

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.

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.

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.

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.

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.

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.

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.

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.

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.

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).

In this example, the value of column 611/606 for the mobile station MS(i) and for the special area 606 is enabled ('+') 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

: see description of figure 4).

In this example, the value of column 611/606 for MS(i) is enabled (+) for the special area SA1 606. In another example, the value of column 611/606 for the mobile station MS (i) and for the special area 606 contains a set of values enabled ('+') or disabled ('-'), one for each checking data.

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 ('+').

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 mobile station 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 'ZZZ' 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.

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 618/608) 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.

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.

In a particular example of this embodiment, there will be a server containing a part of the special operating means that stores a parameters 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.

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.

Figure 7 illustrates an example of a 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.

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.

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.

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.

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.

Further, although the embodiments of the invention described with reference to the

drawings comprise computer apparatus and processes 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 a 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 for monitoring the presence of a mobile station (100,200,300) in at least one special area (104,203,203b,304) associated to the mobile station, the method comprising the following steps :

(a) at least one radio communication defining device (105, 212, 212b, 305) transmits repeatedly in at least a channel one radio distinctive defining signal (214, 214b) that defines the special area by its coverage,

(b) (512) 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) (526) 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 (600,700) that adapt the value of at least one operating parameter (612/606,612/608,712/706,712/708) 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 (408,454), this checking data being used (518) by the mobile station for determining whether (524) or not (522) 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.

2. A method according to claim 1, characterized in that the special area (104,203,203b,304) is deactivated (440) for the mobile station by the mobile telephone network sending a deactivation signal to the mobile station (100,200,300) to stop the mobile station from recognizing a defining signal that defines that special area as a distinctive one.

3. A method according to claim 1 or 2, characterized in that the special operating means acknowledge (531) the reception of the updating signal and transmit an acknowledgement signal to the mobile station.

4. A method according to claim 1, 2 or 3, characterized in that at least one radio communication defining device is a wireless device (212,212b) whose radio distinctive defining signal that defines the special area is a distinctive wireless signal (214,214b) transmitted by the wireless device in a frequency range outside the frequency range allocated for the mobile telephone network, 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 (204,230), the checking data associated to this wireless device (212,212b) includes this wireless device identification data.

5. A method according to any of claims 1 to 4, characterized in that at least one radio communication defining device is a base station (105) whose radio distinctive defining signal that defines the special area (104) is a distinctive signal comprising a special mobile telephone network identification code, the checking data associated to this base station (105) includes this special mobile telephone network identification code.

6. A method according to any of claims 1 to 5, characterized in that at least one radio communication defining device is a base station (305) whose radio distinctive defining signal that defines the special area (304) 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.

7. A method according to any preceding claim, characterized in that the special operating means store a parameters database (600,700) linking the special area (104,203,203b,304) to the mobile station (100,200,300) and to a set of at least the operating parameter (612/606,612/608,712/706,712/708); 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.

8. A method according to any preceding claim, characterized in that the operating parameter is a tariff (616/606, 616/608) flag or a service flag (620/606,624/606,620/608,624/608) that enables or disables a special tariff ('XXX','PPP') or a service ('YYY','ZZZ','QQQ','RRR') for the mobile station (100,200,300).

9. A method according to any preceding claim, characterized in that the updating signal includes a request to access to a service ('AAA','BBB') or to a multimedia content ('AAA','BBB') and the mobile telephone network routes this request to a part of the special operating means (700) that allow or forbid the provision of this service or multimedia content depending on whether or not the mobile station (100,200,300) is into the special area (104,203,203b,304).

10. A method according to any preceding claim, characterized in that the transmission of the checking data to the mobile station (100,200,300) is done via the mobile telephone network or via a signal of a at least one radio device or via a person introducing the checking data in the mobile station.

11. A mobile system for monitoring the presence of a mobile station (100,200,300) in a special area (104,203,203b,304) 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 (105, 212, 212b, 305) transmitting repeatedly in at least a channel a radio distinctive defining signal (214, 214b) 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 (612/606,612/608,712/706,712/708) 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.

12. A mobile system according to claim 11, characterized in that the mobile system comprises special area location monitoring means (205,212) for monitoring the correct location of at least a part of the special area (212).

13. A mobile system according to claim 11 or 12, characterized in that the mobile system carries out a method according to any one of claims 1 to 10.

14. A server, characterized in that it contains at least some of the special operating means included in the mobile system according to any one of claims 11 to 13.

15. A radio communication defining device (105,212,212b,305), characterized in that it carries out a method according to any one of the claims 1 to 10.

16. A radio communication defining device according to claim 15, characterized in that the said radio communication defining device is a wireless device (212,212b) and it contains means for transmitting a distinctive wireless signal (214,214b) that defines the special area (203,203b) and means for obtaining reliable information

indicating whether or not the said wireless device is located into a predetermined environment (204,230).

17. A mobile station, characterized in that this mobile station is suitable to carry out a method according to any one of the claims 1 to 10.

Method and system for monitoring a mobile station presence in a special area.

Method for monitoring the presence of a mobile station (200) in at least one special area (203,203b), wherein a radio communication defining device (212,212b) transmits one radio distinctive defining signal (214,214b) that defines the special area by its coverage, the mobile station processes a signal received in order to determine whether or not it is a defining signal and more precisely 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 a distinctive defining signal.

Figure 2

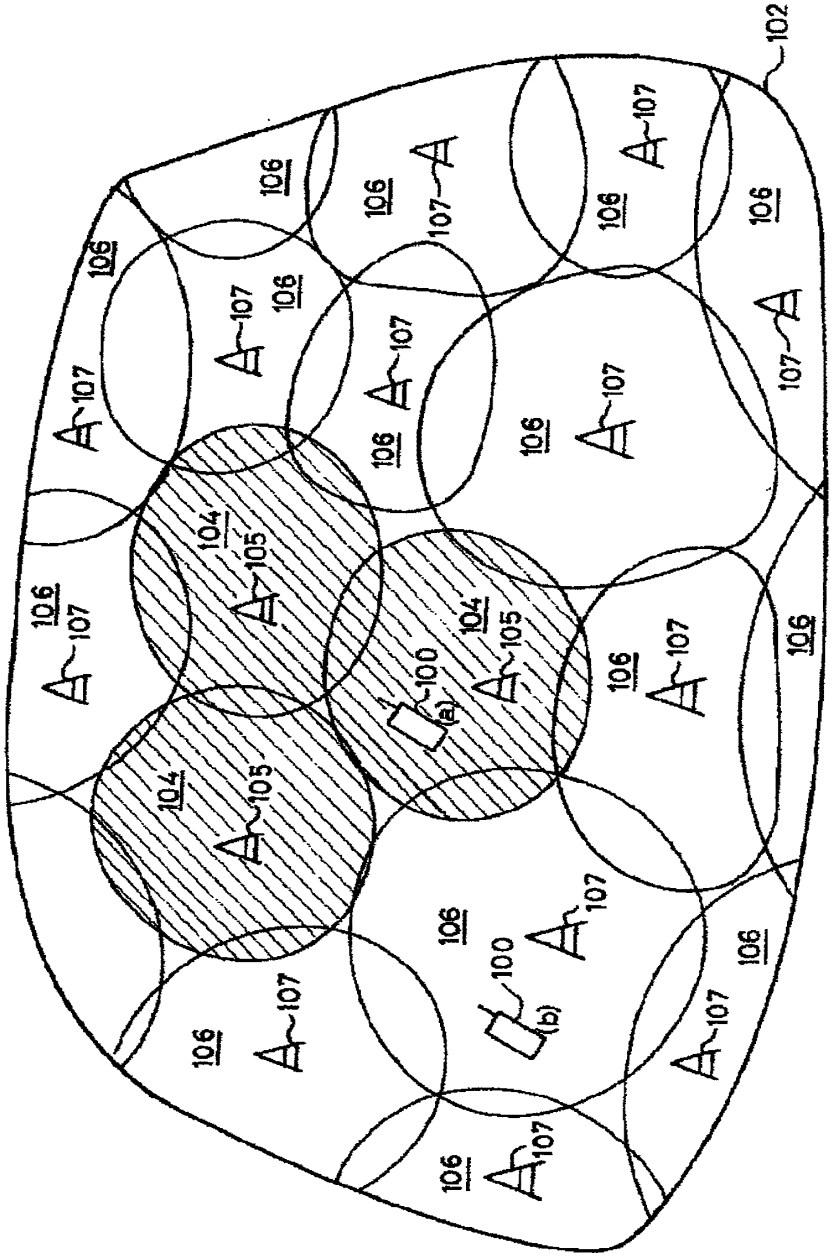
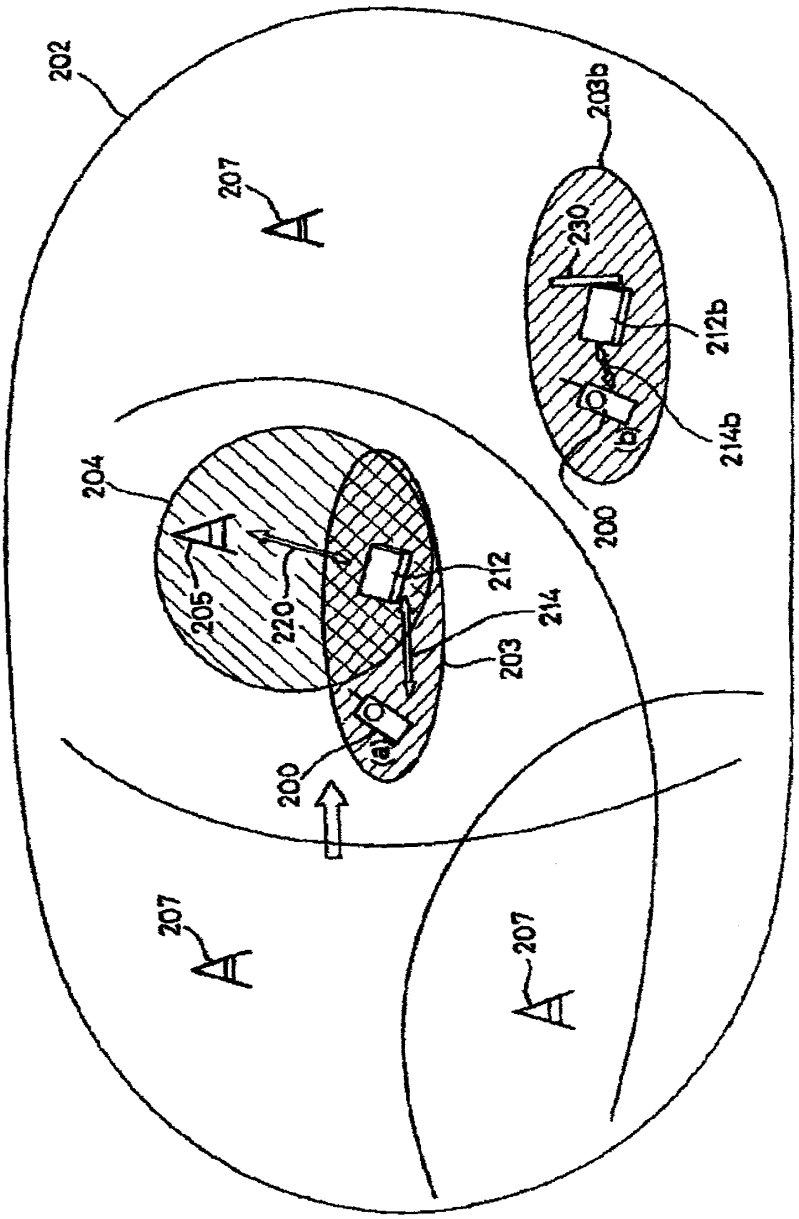


FIG_1

FIG_2



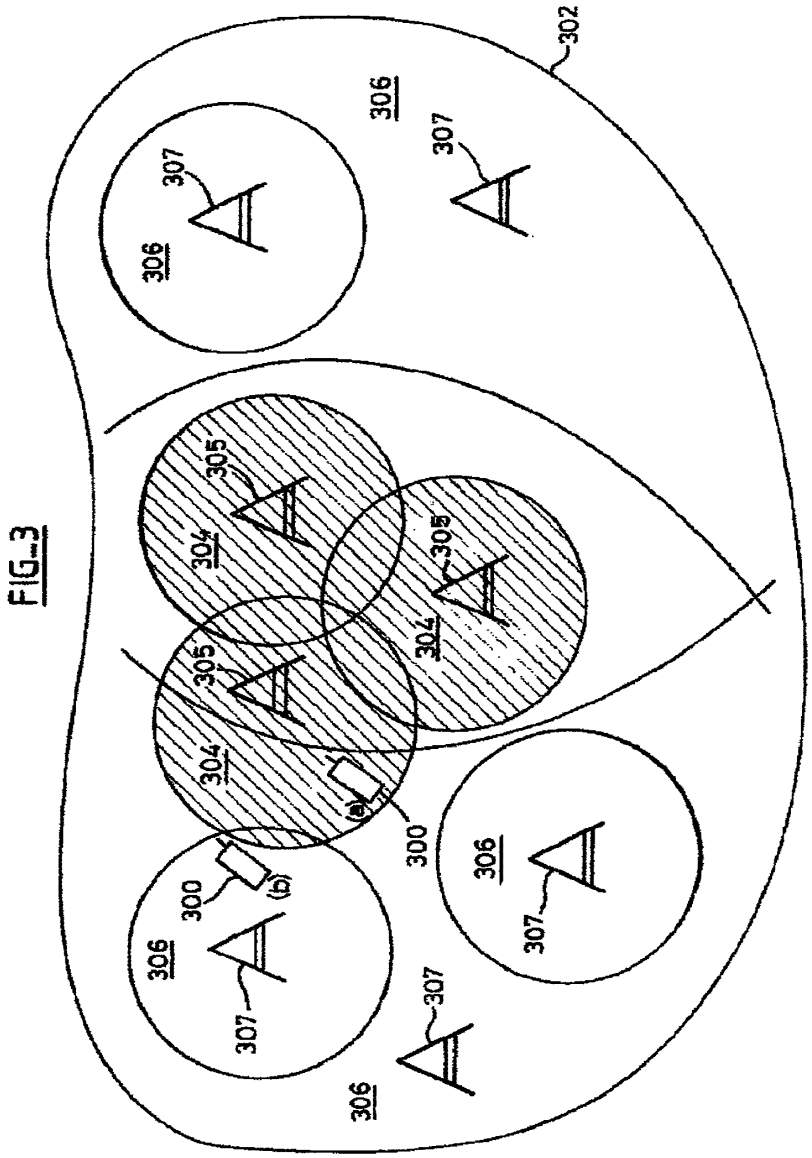
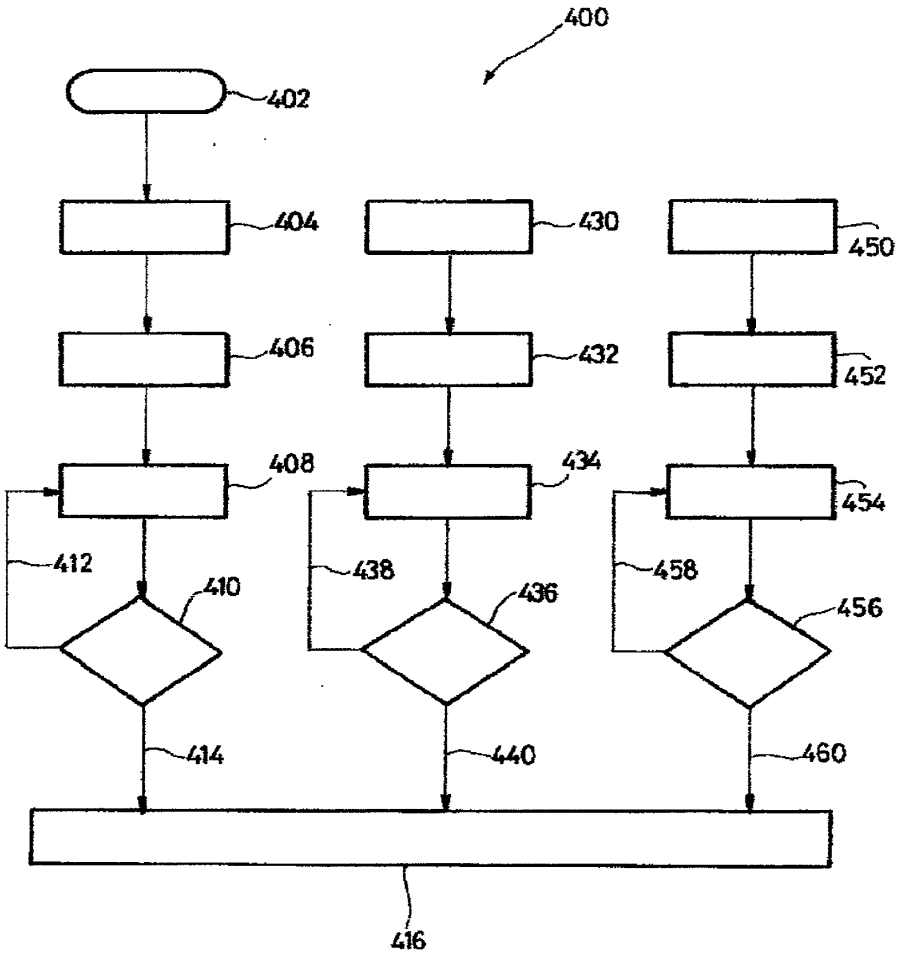


FIG.3

FIG_4


400
402
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414
440
460
416

FIG_5

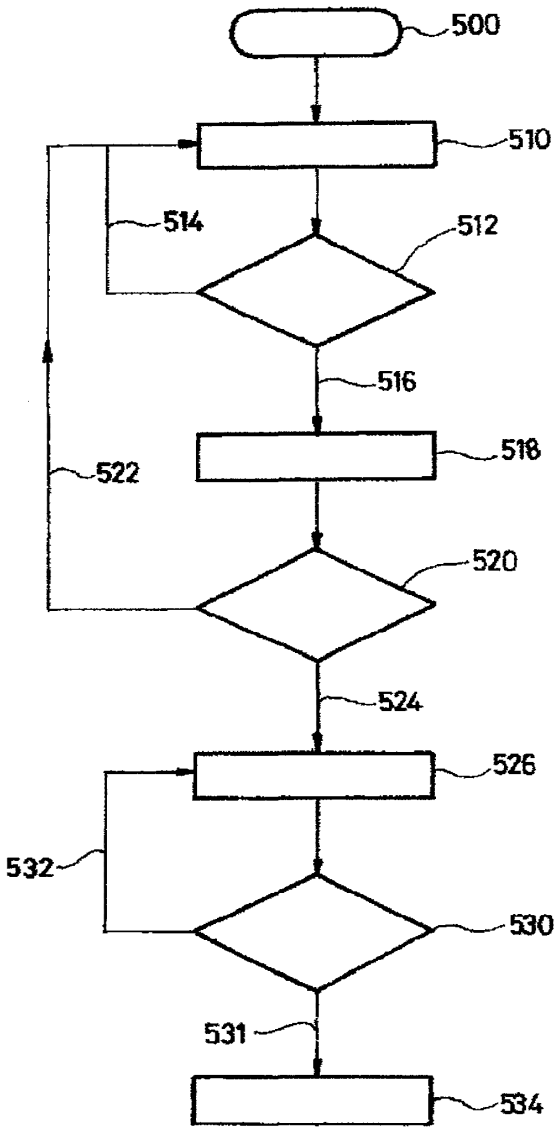


FIG_6

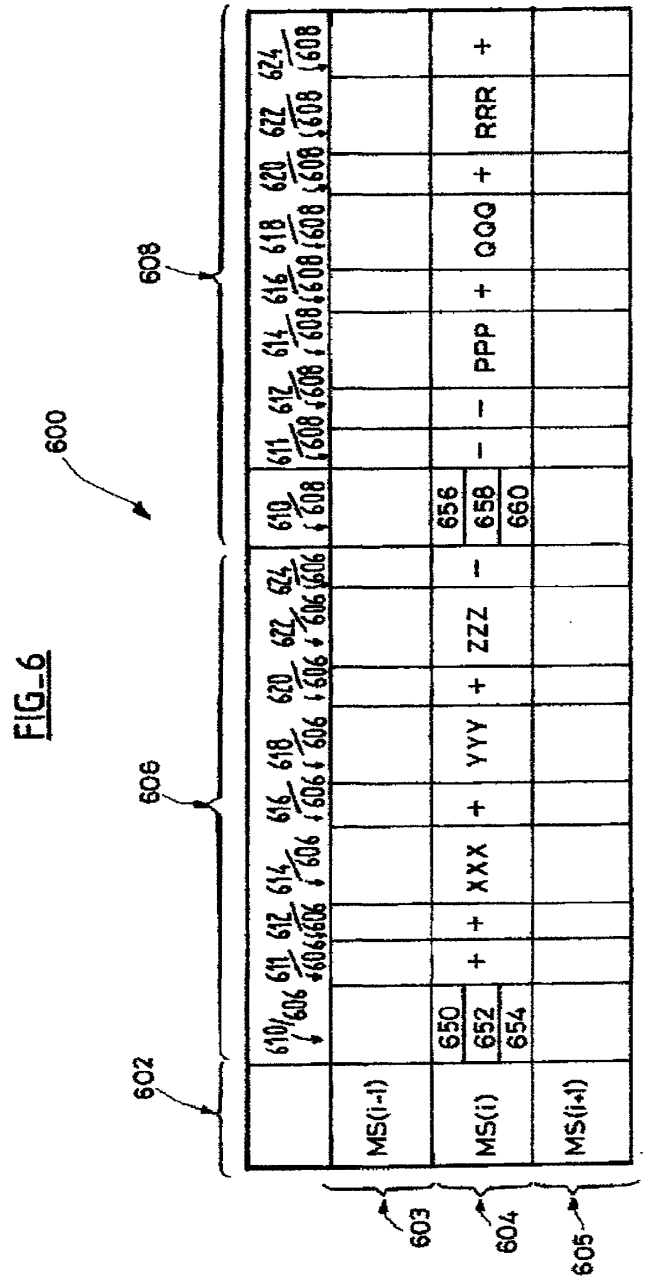
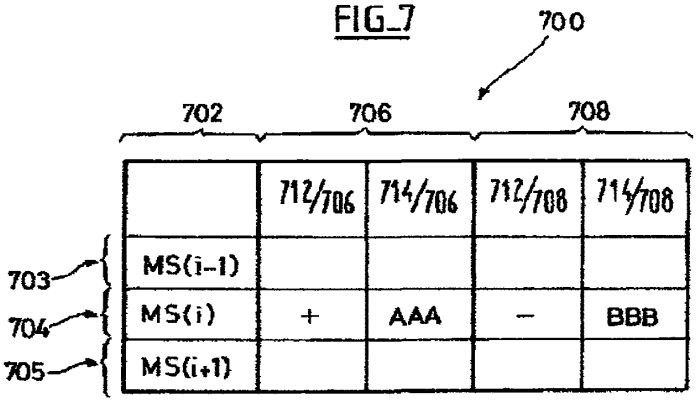

600
602
606
608
610
611
612
614
616
618
620
622
624
MS(i-1)
MS(i)
MS(i+1)
650
652
654
656
658
660
XXX
YYY
ZZZ
PPP
QQQ
RRR
603
604
605

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)

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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.

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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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STATEMENT UNDER 37 CFR 3.73(b)

Applicant/Patent Owner: Carlos Alberto Pérez LaFuente

Application No./Patent No.: 14/743,237 Filed/Issue Date: 18 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 035862, Frame 0440, 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

9893461-v1

Electronic Acknowledgement Receipt

EFS ID:	22860911
Application Number:	14743237
International Application Number:	
Confirmation Number:	4168
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:	122358-387289
Receipt Date:	08-JUL-2015
Filing Date:	18-JUN-2015
Time Stamp:	16:46:58
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	387289Statement373b.pdf	135348 2d993744afed47ee258b2c69d1cc69166c42a5dc	no	1

Warnings:	
Information:	
Total Files Size (in bytes):	4257980

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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.

PATENT APPLICATION FEE DETERMINATION RECORD

Substitute for Form PTO-875

Application or Docket Number: 14/743,237

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))	26 minus 20 =	* 6	x 40 =	240	OR		
INDEPENDENT CLAIMS (37 CFR 1.16(h))	3 minus 3 =	*	x 210 =	0.00			
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	970		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($)	ADDITIONAL FEE($)		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".
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APPLICATION NUMBER	FILING or 371(c) DATE	GRP ART UNIT	FIL FEE REC'D	ATTY.DOCKET.NO	TOT CLAIMS	IND CLAIMS
14/743,237	06/18/2015	2642	970	122358-387289	26	3

CONFIRMATION NO. 4168

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

FILING RECEIPT

OC000000075999128

Date Mailed: 06/30/2015

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
which is a 371 of PCT/EP2007/052939 03/27/2007

Foreign Applications (You may be eligible to benefit from the **Patent Prosecution Highway** program at the USPTO. Please see http://www.uspto.gov for more information.)
EUROPEAN PATENT OFFICE (EPO) 06111804.4 03/28/2006

Request to Retrieve - This application either claims priority to one or more applications filed in an intellectual property Office that participates in the Priority Document Exchange (PDX) program or contains a proper **Request to Retrieve Electronic Priority Application(s)** (PTO/SB/38 or its equivalent). Consequently, the USPTO will attempt to electronically retrieve these priority documents.

If Required, Foreign Filing License Granted: 06/29/2015

The country code and number of your priority application, to be used for filing abroad under the Paris Convention, is **US 14/743,237**

Projected Publication Date: 10/08/2015

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

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Title 35, United States Code, Section 184

Title 37, Code of Federal Regulations, 5.11 & 5.15

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PTO/AIA/15 (03-13)
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UTILITY PATENT APPLICATION TRANSMITTAL

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

Attorney Docket No.	122358-387289
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* 40]
   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 18, 2015
Name (Print/Type)	Jeffri A. Kaminski	Registration No. (Attorney/Agent)	42,709

Application Data Sheet

Inventor Information

Inventor Number::	1
Given Name::	Carlos
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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::	122358-387289
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

Domestic Priority Information

Application::	Continuity Type::	Parent Application::	Parent Filing Date::
This Application	Continuation of	14/561426	12/05/14
14/561426	Continuation of	14/315703	06/26/14
14/315703	Continuation of	14/250517	04/11/14
14/250517	Continuation of	12/294641	4/12/10

Foreign Priority Information

Country::	Application number::	Filing Date::	Priority Claimed::	DAS Access::
PCT	PCT/EP2007/052939	03/27/07	Yes	
EP	06111804.4	3/28/06	Yes	

Applicant Information

Applicant Number::	1
Applicant Type::	Assignee
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City of mailing address::	Madrid
Country of mailing address::	Spain
Postal or Zip Code of mailing address::	28029

Assignee Information Including Non-Applicant Assignee Information

Assignee Number::	1
Organization Name::	AFIRMA CONSULTING & TECHNOLOGIES, S.L.
Street of mailing address::	C/Julio Palacio 13, 8
City of mailing address::	Madrid
Country of mailing address::	Spain
Postal or Zip Code of mailing address::	28029

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 18, 2015
Name	Jeffri A. Kaminski	Registration Number	42,709

PTO/AIA/01 (06-12)
Approved for use through 01/31/2014. OMB 0651-0032
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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:	122358-387289

Filed as Small Entity

Filing Fees for Utility under 35 USC 111(a)

Description	Fee Code	Quantity	Amount	Sub-Total in USD($)
Basic Filing:				
Utility filing Fee (Electronic filing)	4011	1	70	70
Utility Search Fee	2111	1	300	300
Utility Examination Fee	2311	1	360	360
Pages:				
Claims:				
Claims in excess of 20	2202	6	40	240
Miscellaneous-Filing:				
Petition:				

Description	Fee Code	Quantity	Amount	Sub-Total in USD($)
Patent-Appeals-and-Interference:				
Post-Allowance-and-Post-Issuance:				
Extension-of-Time:				
Miscellaneous:				
		Total in USD ($)		**970**

Electronic Acknowledgement Receipt	
EFS ID:	22673146
Application Number:	14743237
International Application Number:	
Confirmation Number:	4168
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:	122358-387289
Receipt Date:	18-JUN-2015
Filing Date:	
Time Stamp:	15:14:55
Application Type:	Utility under 35 USC 111(a)

Payment information:

Submitted with Payment	yes
Payment Type	Deposit Account
Payment was successfully received in RAM	$970
RAM confirmation Number	1683
Deposit Account	220261
Authorized User	KAMINSKI, JEFFRI A
The Director of the USPTO is hereby authorized to charge indicated fees and credit any overpayment as follows: Charge any Additional Fees required under 37 C.F.R. Section 1.16 (National application filing, search, and examination fees) Charge any Additional Fees required under 37 C.F.R. Section 1.17 (Patent application and reexamination processing fees)	

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Charge any Additional Fees required under 37 C.F.R. Section 1.20 (Post Issuance fees)

Charge any Additional Fees required under 37 C.F.R. Section 1.21 (Miscellaneous fees and charges)

File Listing:

Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1		387289Application.pdf	180383 b1dd2da6b868aa21edd4ec7f66abee47550c259a	yes	40
	Multipart Description/PDF files in .zip description				
	Document Description		**Start**	**End**	
	Specification		1	34	
	Claims		35	39	
	Abstract		40	40	
Warnings:					
Information:					
2	Drawings-only black and white line drawings	387289Drawings.pdf	144735 757f28468c2f0bb89d40c0a04abdbb5690b00ee1	no	7
Warnings:					
Information:					
3	Transmittal of New Application	387289Transmittal.pdf	121592 8442be58905df39c5fc4a89c7f1f4cecfbdf0f57	no	1
Warnings:					
Information:					
4	Application Data Sheet	387289ADS.pdf	80921 11c1ea378644761539e4c9f15c85b80c75c5b264	no	4
Warnings:					
Information:					
This is not an USPTO supplied ADS fillable form					
5	Oath or Declaration filed	declaration.pdf	81207 f732bb431094c7f459d708b70d714f1399d5b1ec	no	1
Warnings:					
Information:					

6	Fee Worksheet (SB06)	fee-info.pdf	37295 00fea1d4816f8597e1b0c0455c1da55a39ce7017	no	2

Warnings:	
Information:	
Total Files Size (in bytes):	646133

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

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New International Application Filed with the USPTO as a Receiving Office

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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 a provider of presence related services in connection with the use of a mobile station and at least a first radio communication defining device that transmits a first distinctive defining signal, the first distinctive defining signal at least partly defines a special area by its coverage, the method comprising:

electronically storing in one or more memories data capable of linking the mobile station to the special area, the data including a checking data of the first radio communication defining device and an identifier related to the mobile station,

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,

deriving from the updating signal by one or more processing devices having access to at least a portion of the data whether or not the mobile station is present in the special area; and

enabling or disabling by use of the one or more processing devices a presence related service based upon the mobile station´s presence or non-presence in the special area.

2. The method according to claim 1, wherein the one or more processing devices has access to at least a portion of the data and updates at least one operating parameter in a database of the provider of presence related services depending on the presence of the mobile station in the special area.

3. The method according to claim 2, 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.

4. The method according to claim 1, wherein the enabling or disabling of the presence related service includes transmitting via the mobile telephone network a signal to the mobile station that is capable of being used to enable or disable one or more related functions in the mobile station.

5. The method according to claim 1, wherein the one or more memories and the one or more processing devices reside in one or more servers of the provider of presence related services and/or in one or more servers of the mobile telephone network.

6. The method according to claim 1, wherein the storing of the checking data in the one or more memories comprises electronically receiving from the mobile station the checking data.

7. The method according to claim 1, wherein the mobile telephone network is cellular.

8. The method according to claim 1, wherein the updating signal comprises the result of a previous determination performed by the mobile station about the mobile station´s presence in the special area.

9. The method according to claim 1, wherein the updating signal is received via the mobile telephone network from the mobile station at least one of (i) periodically, (ii) at times recent to when the mobile station enters into or exists from the special area, and (iii) when the mobile station remains in the special area.

10. The method according to claim 1, wherein the updating signal comprises a request to access to a service or to a multimedia content and the provider of presence related services enables or disables the provision of the service or multimedia content depending on the presence of the mobile station in the special area.

11. A method associated with a provider of presence related services in connection with the use of a mobile station and at least a first radio communication defining device that transmits a first distinctive defining signal, the first distinctive defining signal at least partly defines a special area by its coverage, the method comprising:

electronically storing in one or more memories data capable of linking the mobile station to the special area, the data including a checking data of the first radio communication defining device and an identifier related to the mobile station,

transmitting to the mobile station at least a portion of the checking data,

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 updating signal including the identifier or other identifier related to the mobile station,

deriving from the updating signal by one or more processing devices having access to at least a portion of the data whether or not the mobile station is present in the special area; and

enabling or disabling by use of the one or more processing devices a presence related service based upon the mobile station´s presence or non-presence in the special area.

12. The method according to claim 11, wherein the one or more processing devices has access to at least a portion of the data and updates at least one operating parameter in a database of the provider of presence related services depending on the presence of the mobile station in the special area.

13. The method according to claim 12, 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.

14. The method according to claim 11, wherein the enabling or disabling of the presence related service includes transmitting via the mobile telephone network a signal to the mobile station that is capable of being used to enable or disable one or more related functions in the mobile station.

15. The method according to claim 11, wherein the one or more memories and the one or more processing devices reside in one or more servers of the provider of presence related services and/or in one or more servers of the mobile telephone network.

16. The method according to claim 11, wherein the storing of the checking data in the one or more memories comprises electronically receiving from the mobile station the checking data.

17. The method according to claim 11, wherein the mobile telephone network is cellular.

18. The method according to claim 11, wherein the updating signal comprises the result of a previous determination performed by the mobile station about the mobile station´s presence in the special area.

19. The method according to claim 11, wherein the updating signal is received via the mobile telephone network from the mobile station at least one of (i) periodically, (ii) at times recent to when the mobile station enters into or exists from the special area, and (iii) when the mobile station remains in the special area.

20. The method according to claim 11, wherein the updating signal comprises a request to access to a service or to a multimedia content and the provider of presence related services enables or disables the provision of the service or multimedia content depending on the presence of the mobile station in the special area.

21. A method associated with providing presence related services in connection with the use of a mobile station and at least a first radio communication defining device that transmits a first distinctive defining signal, the first distinctive defining signal at least partly defines a special area by its coverage, the method comprising:

electronically storing in a first server first data capable of linking the mobile station to the special area, the first data including a first checking data of the first radio communication defining device and an identifier related to the mobile station,

receiving in a second server 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,

deriving from the updating signal by one or more processing devices of the second server whether or not the mobile station is present in the special area; and

enabling or disabling by use of the one or more processing devices a presence related service based upon the mobile station´s presence or non-presence in the special area.

22. The method according to claim 21, further comprising electronically storing in the second server second data capable of linking the mobile station to the special area, the second data including the first checking data or a second checking data of the first radio communication defining device and the identifier or other identifier related to the mobile station.

23. The method according to claim 21, wherein the enabling or disabling of the presence related service includes transmitting via the mobile telephone network a signal to the mobile station that is capable of being used to enable or disable one or more related functions in the mobile station.

24. The method according to claim 21, wherein the mobile telephone network is cellular.

25. The method according to claim 21, wherein the updating signal comprises the result of a previous determination performed by the mobile station about the mobile station´s presence in the special area.

26. The method according to claim 21, wherein the updating signal is received via the mobile telephone network from the mobile station at least one of (i) periodically, (ii) at times recent to when the mobile station enters into or exists from the special area, and (iii) when the mobile station remains 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.

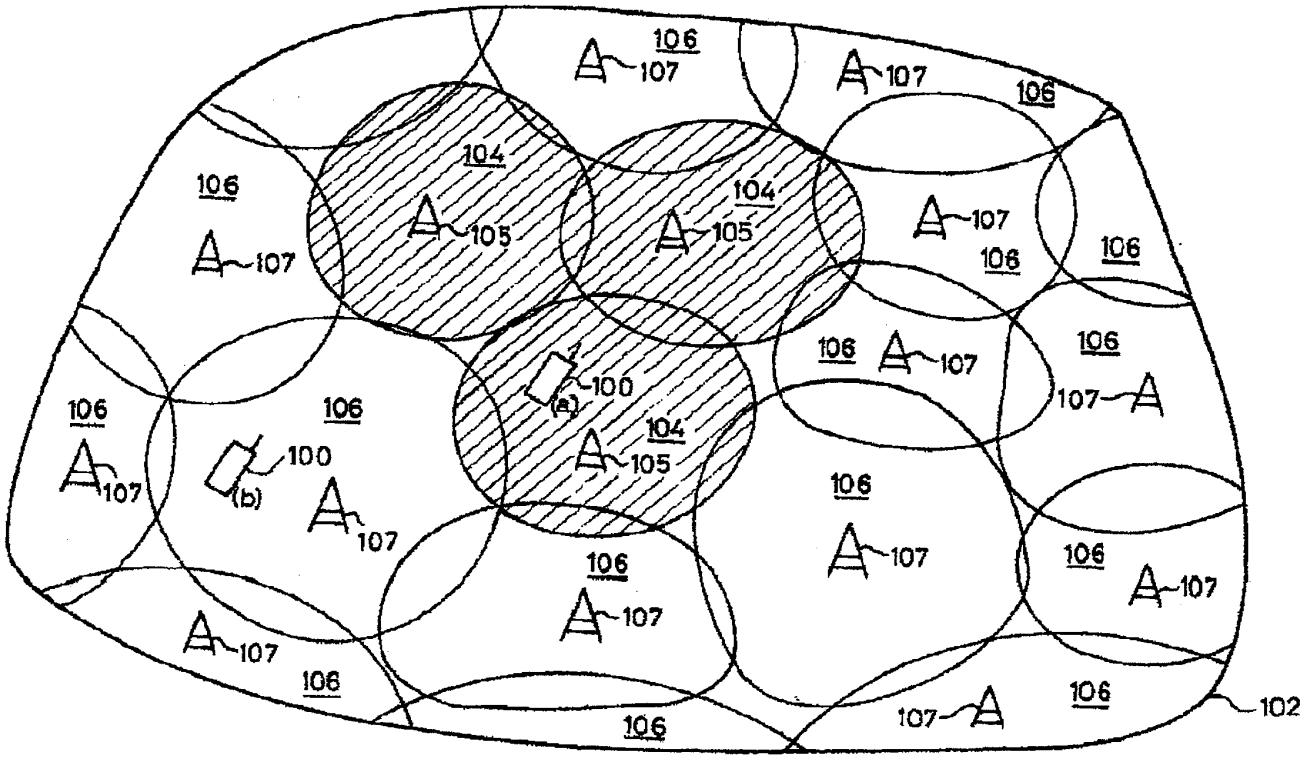

FIG_1

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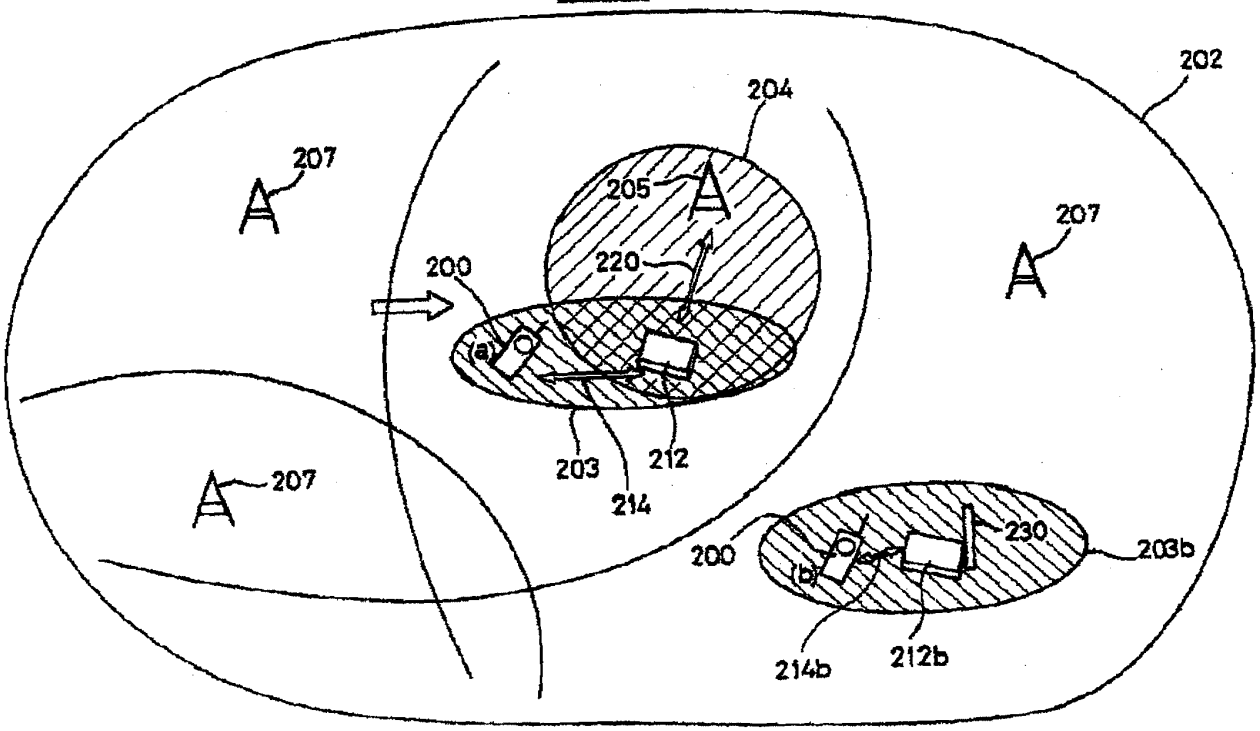
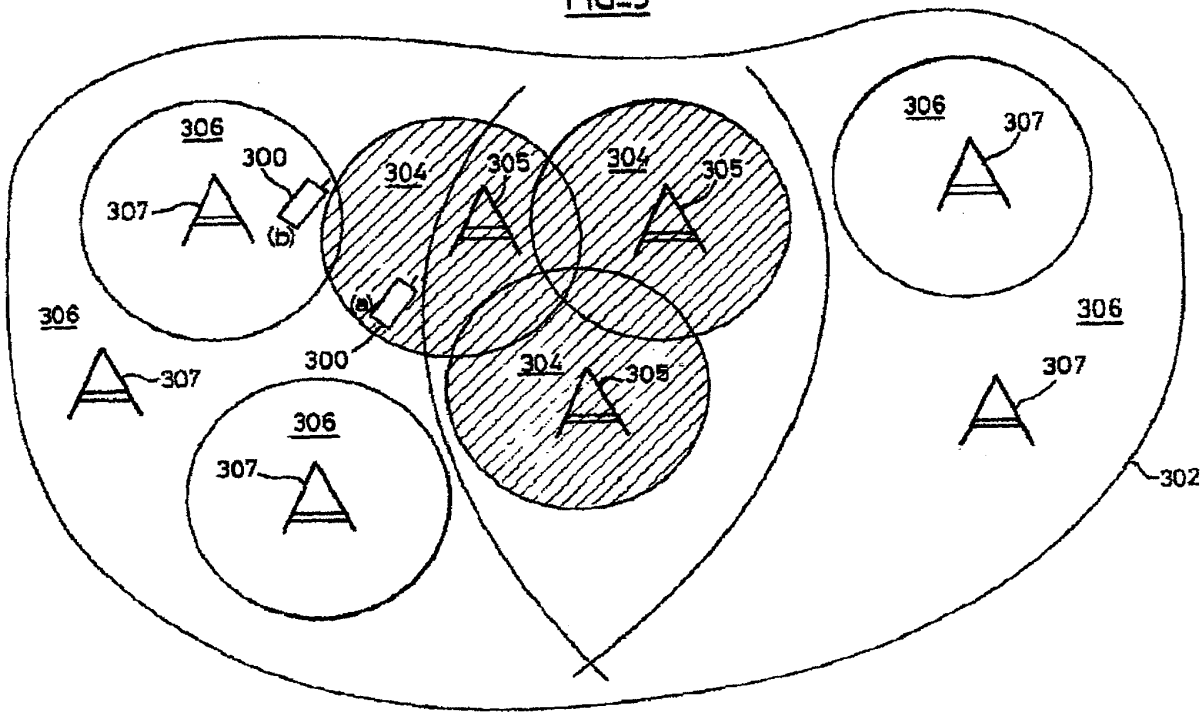
APPLE INC.

FIG_2



Ex.1002 / Page 311 of 322
APPLE INC.

FIG_3



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APPLE INC.

FIG_4

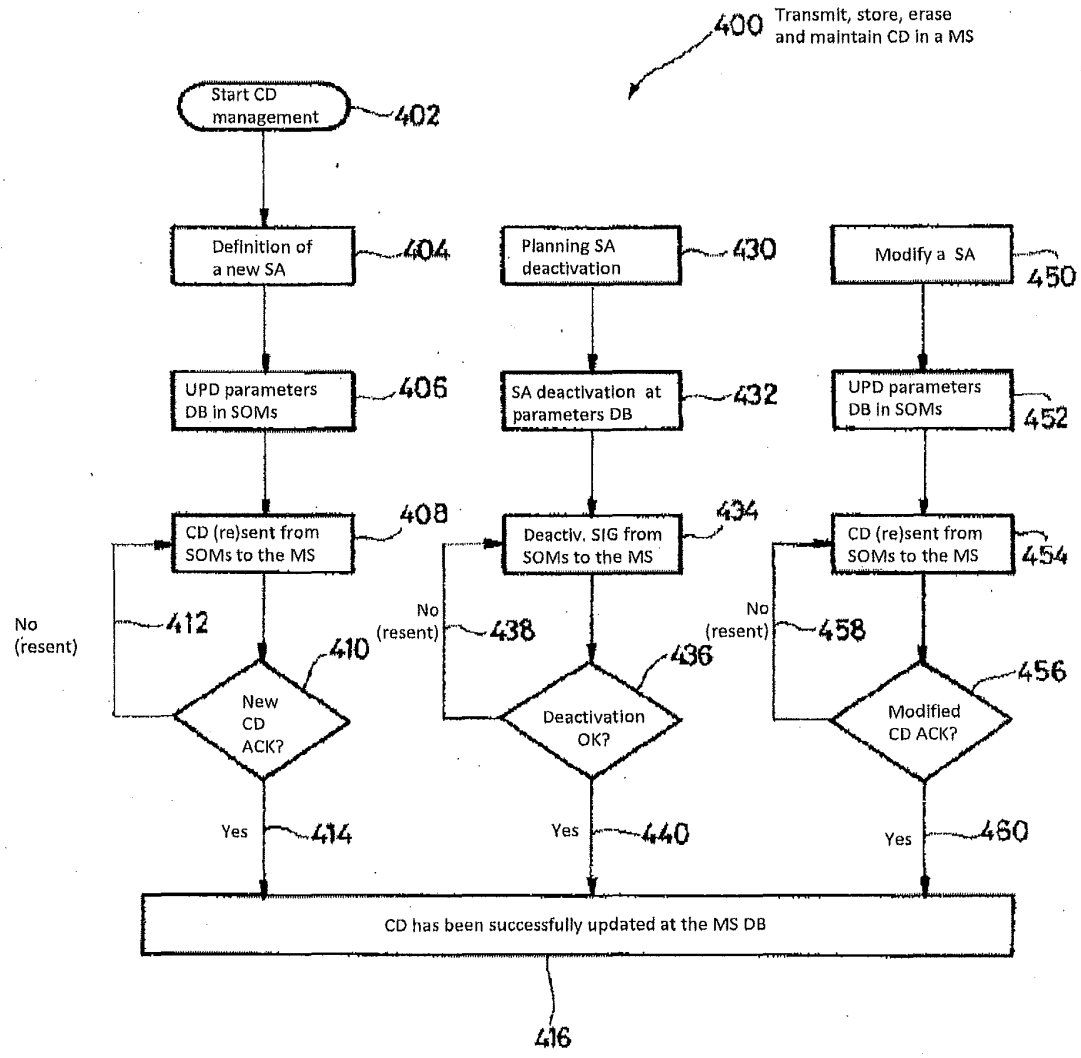
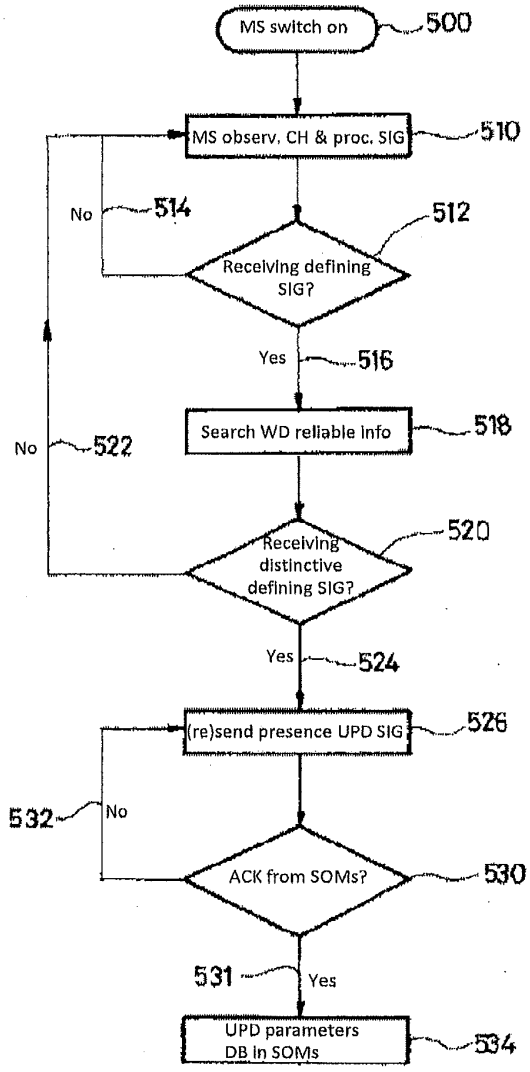

400
Transmit, store, erase and maintain CD in a MS
Start CD management
402
Definition of a new SA
404
UPD parameters DB in SOMs
406
CD (re)sent from SOMs to the MS
408
New CD ACK?
410
No (resent)
412
Yes
414
Planning SA deactivation
430
SA deactivation at parameters DB
432
Deactiv. SIG from SOMs to the 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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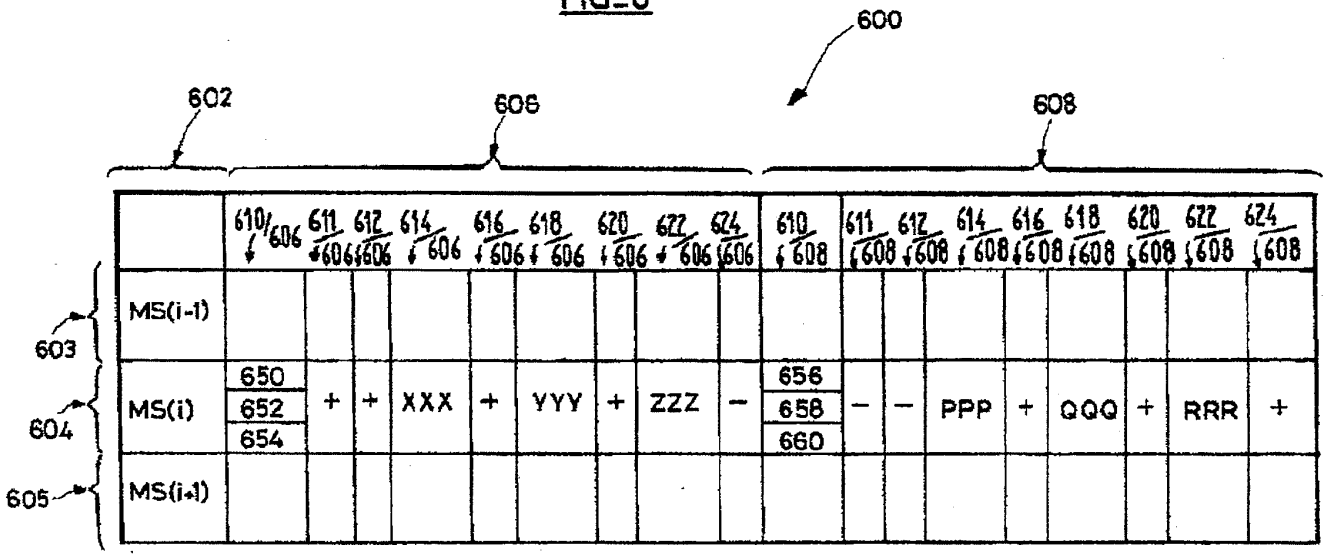
500
MS observ. CH & proc. SIG
510
No
514
512
Receiving defining SIG?
Yes
516
Search WD reliable info
518
No
522
Receiving distinctive defining SIG?
520
Yes
524
(re)send presence UPD SIG
526
532
No
ACK from SOMs?
530
531
Yes
UPD parameters DB in SOMs
534

FIG_6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602
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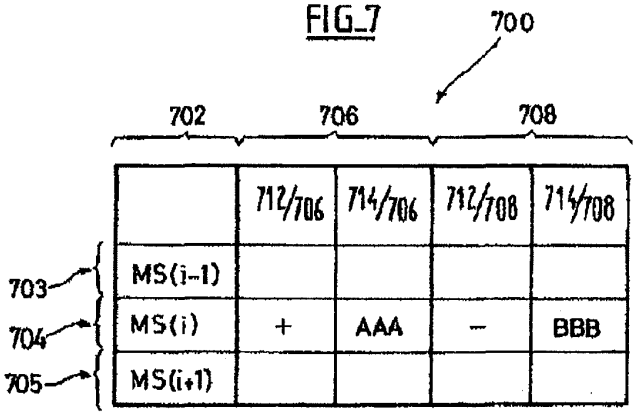
MS(i)
650
652
654
+
+
XXX
+
YYY
+
ZZZ
−
656
658
660
−
−
PPP
+
QQQ
+
RRR
+
605
MS(i+1)

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)
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

(Use as many sheets as necessary)

Sheet 1 of 2

Complete if Known	
Application Number	14/743,237
Filing Date	June 18, 2015
First Named Inventor	Carlos A. Pérez LaFuente
Art Unit	Not Yet Assigned
Examiner Name	Not Yet Assigned
Attorney Docket Number	122358-387289

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.	
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	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		Date Considered	

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

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Approved for use through 07/31/2012. OMB 0651-0031
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Sheet 2 of 2

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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		Date Considered	

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

Electronic Acknowledgement Receipt

EFS ID:	22673615
Application Number:	14743237
International Application Number:	
Confirmation Number:	4168
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:	122358-387289
Receipt Date:	18-JUN-2015
Filing Date:	
Time Stamp:	15:31:52
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	Transmittal Letter	387289IDS.pdf	85033 de2a82a348c71cf0081ae0244446cfb25ea6df83	no	2

Warnings:	
Information:	

2	Information Disclosure Statement (IDS) Form (SB08)	387289SB08.pdf	167057 b7aa71ae458e1788174c55e28b788bdd7a74158d	no	2

Warnings:	
Information:	
This is not an USPTO supplied IDS fillable form	
Total Files Size (in bytes):	252090

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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.

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of: Carlos A. Pérez LaFuente	Art Unit: Not Yet Assigned
Application No: 14/743,237	Examiner: Not Yet Assigned
Confirmation No: 4168	
Filed: June 18, 2015	Atty. Docket No: 122358-387289
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, 14/738,256, and 14/738,350, all filed on 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. 122358-387289.

Dated: June 18, 2015

Respectfully submitted,

9817940

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