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. an Samsung Electronics America, Inc.

	PATENT OR TRADEMARK NO.	DATE OF PATENT OR TRADEMARK	HOLDER OF PATENT OR TRADEMARK
1	8,738040	5/27/2014	Avant Location Technologies LLC
2	10,009,720	6/26/2018	Avant Location Technologies LLC
3	9,042,910	5/26/2015	Avant Location Technologies LLC
4	8,934,922	1/13/2015	Avant Location Technologies LLC
5	9,119,030	8/25/2015	Avant Location Technologies LLC

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

Ex.1002 / Page 1 of 639
APPLE INC.

UNITED STATES PATENT AND TRADEMARK OFFICE

CERTIFICATE OF CORRECTION

PATENT NO.	: 10,009,720 B2
APPLICATION NO.	: 14/738083
DATED	: June 26, 2018
INVENTOR(S)	: Carlos A. Pérez Lafuente

It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

In the Claims

In Column 21, Line 20, delete "the updating signal", and add --an updating signal--.

In Column 21, Line 36, delete "exists", and add --exits--.

Signed and Sealed this
Eighth Day of March, 2022

Drew Hirshfeld
Performing the Functions and Duties of the
Under Secretary of Commerce for Intellectual Property and
Director of the United States Patent and Trademark Office

Electronic Patent Application Fee Transmittal

Application Number:	14738083
Filing Date:	12-Jun-2015
Title of Invention:	METHOD AND SYSTEM FOR MONITORING A MOBILE STATION PRESENCE IN A SPECIAL AREA
First Named Inventor/Applicant Name:	Carlos A. Pérez LaFuente
Filer:	Tim L. Kitchen/Karen Wiley
Attorney Docket Number:	0572.0001C5

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:				
CERTIFICATE OF CORRECTION	2811	1	160	160

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

Electronic Acknowledgement Receipt	
EFS ID:	44918693
Application Number:	14738083
International Application Number:	
Confirmation Number:	4555
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/Karen Wiley
Filer Authorized By:	Tim L. Kitchen
Attorney Docket Number:	0572.0001C5
Receipt Date:	04-FEB-2022
Filing Date:	12-JUN-2015
Time Stamp:	15:24:40
Application Type:	Utility under 35 USC 111(a)

Payment information:

Submitted with Payment	yes
Payment Type	CARD
Payment was successfully received in RAM	$160
RAM confirmation Number	E202224F24560311
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	Miscellaneous Incoming Letter	COCXmtl.pdf	76821 734347c9d46fd7ca66e0e122ac17480090d0560f	no	1
Warnings:					
Information:					
2	Request for Certificate of Correction	CertificateOfCorrection.pdf	180694 ffe0a0c3b436539346a60737da4daefbe8c9651b	no	2
Warnings:					
Information:					
3	Fee Worksheet (SB06)	fee-info.pdf	38065 442f4b8c1ac69d2ee60f55f618009c70d1479766	no	2
Warnings:					
Information:					
		Total Files Size (in bytes):	295580		

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

Patent No.	:	10,009,720
Issue Date	:	June 26, 2018
Application No.	:	14/738,083
First Named Inventor	:	Carlos A. Pérez Lafuente
Confirmation No.	:	4555
Filed	:	June 12, 2015
TC/A.U.	:	2643
Examiner	:	San A. Htun
Customer No.	:	27896
Docket No.	:	0572.0001C5
Title	:	METHOD AND SYSTEM FOR MONITORING A MOBILE STATION PRESENCE IN A SPECIAL AREA

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

REQUEST FOR CERTIFICATE OF CORRECTION

Sir:

Transmitted herewith is a Certificate of Correction (1 page) correcting one or more errors in the Official Letters Patent.

The errors identified in the Certificate of Correction are believed to be the Applicant's responsibility. Therefore, in accordance with 37 CFR 1.323, Applicant is remitting the fee set forth in 37 CFR 1.20(a).

Total Fees due: $160.00.

In view of the foregoing, issuance of the Certificate of Correction is respectfully requested.

Dated: February 4, 2022

Respectfully submitted by:

/ Tim L. Kitchen /

Tim L. Kitchen
Reg. No. 41900

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

PTO/SB/44 (09-07)
Approved for use through 01/31/2020. OMB 0651-0033
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.
(Also Form PTO-1050)

UNITED STATES PATENT AND TRADEMARK OFFICE
CERTIFICATE OF CORRECTION

PATENT NO. : 10,009,720

APPLICATION NO.: 14/738,083

ISSUE DATE : June 26, 2018

INVENTOR(S) : Carlos A. Pérez Lafuente

It is certified that an error appears or errors appear in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

In Column 21, line 20, delete "the updating signal", and add --an updating signal--

In Column 21, line 36, delete "exists" , and add --exits--.

MAILING ADDRESS OF SENDER (Please do not use Customer Number below):

Edell, Shapiro & Finnan, LLC
9801 Washingtonian Blvd., Suite 750
Gaithersburg, Maryland 20878

This collection of information is required by 37 CFR 1.322, 1.323, and 1.324. 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 1.0 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: Attention Certificate of Corrections Branch, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

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

Privacy Act Statement

The **Privacy Act of 1974 (P.L. 93-579)** requires that you be given certain information in connection with your submission of the attached form related to a patent application or patent. Accordingly, pursuant to the requirements of the Act, please be advised that: (1) the general authority for the collection of this information is 35 U.S.C. 2(b)(2); (2) furnishing of the information solicited is voluntary; and (3) the principal purpose for which the information is used by the U.S. Patent and Trademark Office is to process and/or examine your submission related to a patent application or patent. If you do not furnish the requested information, the U.S. Patent and Trademark Office may not be able to process and/or examine your submission, which may result in termination of proceedings or abandonment of the application or expiration of the patent.

The information provided by you in this form will be subject to the following routine uses:

1. The information on this form will be treated confidentially to the extent allowed under the Freedom of Information Act (5 U.S.C. 552) and the Privacy Act (5 U.S.C 552a). Records from this system of records may be disclosed to the Department of Justice to determine whether disclosure of these records is required by the Freedom of Information Act.
2. A record from this system of records may be disclosed, as a routine use, in the course of presenting evidence to a court, magistrate, or administrative tribunal, including disclosures to opposing counsel in the course of settlement negotiations.
3. A record in this system of records may be disclosed, as a routine use, to a Member of Congress submitting a request involving an individual, to whom the record pertains, when the individual has requested assistance from the Member with respect to the subject matter of the record.
4. A record in this system of records may be disclosed, as a routine use, to a contractor of the Agency having need for the information in order to perform a contract. Recipients of information shall be required to comply with the requirements of the Privacy Act of 1974, as amended, pursuant to 5 U.S.C. 552a(m).
5. A record related to an International Application filed under the Patent Cooperation Treaty in this system of records may be disclosed, as a routine use, to the International Bureau of the World Intellectual Property Organization, pursuant to the Patent Cooperation Treaty.
6. A record in this system of records may be disclosed, as a routine use, to another federal agency for purposes of National Security review (35 U.S.C. 181) and for review pursuant to the Atomic Energy Act (42 U.S.C. 218(c)).
7. A record from this system of records may be disclosed, as a routine use, to the Administrator, General Services, or his/her designee, during an inspection of records conducted by GSA as part of that agency's responsibility to recommend improvements in records management practices and programs, under authority of 44 U.S.C. 2904 and 2906. Such disclosure shall be made in accordance with the GSA regulations governing inspection of records for this purpose, and any other relevant (*i.e.*, GSA or Commerce) directive. Such disclosure shall not be used to make determinations about individuals.
8. A record from this system of records may be disclosed, as a routine use, to the public after either publication of the application pursuant to 35 U.S.C. 122(b) or issuance of a patent pursuant to 35 U.S.C. 151. Further, a record may be disclosed, subject to the limitations of 37 CFR 1.14, as a routine use, to the public if the record was filed in an application which became abandoned or in which the proceedings were terminated and which application is referenced by either a published application, an application open to public inspection or an issued patent.
9. A record from this system of records may be disclosed, as a routine use, to a Federal, State, or local law enforcement agency, if the USPTO becomes aware of a violation or potential violation of law or regulation.

UNITED STATES PATENT AND TRADEMARK OFFICE

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

APPLICATION NO.	ISSUE DATE	PATENT NO.	ATTORNEY DOCKET NO.	CONFIRMATION NO.
14/738,083	06/26/2018	10009720	0572.0001C5	4555

27896 7590 06/06/2018

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

ISSUE NOTIFICATION

The projected patent number and issue date are specified above.

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

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

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

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

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Application Assistance Unit (AAU) of the Office of Data Management (ODM) at (571)-272-4200.

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

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

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

PART B - FEE(S) TRANSMITTAL

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

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

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

27896 7590 02/28/2018
EDELL, SHAPIRO & FINNAN, LLC
9801 Washingtonian Blvd.
Suite 750
Gaithersburg, MARYLAND 20878

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

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

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

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
14/738,083	06/12/2015	Carlos A. Pérez LaFuente	0572.0001C5	4555

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
REGULAR	SMALL	$500	$0.00	$0.00	$500	05/29/2018

EXAMINER	ART UNIT	CLASS-SUBCLASS
HTUN, SAN A	2643	455-456300

1. Change of correspondence address or indication of "Fee Address" (37 CFR 1.363).

☐ Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached.

☐ "Fee Address" indication (or "Fee Address" Indication form PTO/SB/47; Rev 03-02 or more recent) attached. **Use of a Customer Number is required.**

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

1 Edell, Shapiro & Finnan, LLC
2
3

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

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

(A) NAME OF ASSIGNEE: Afirma Consulting & Technologies, S.L.

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

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

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

☒ Issue Fee

☐ Publication Fee (No small entity discount permitted)

☐ Advance Order - # of Copies _____

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

☐ A check is enclosed.

☒ Payment by credit card. Form PTO-2038 is attached.

☒ The director is hereby authorized to charge the required fee(s), any deficiency, or credits any overpayment, to Deposit Account Number 05-0460 (enclose an extra copy of this form).

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

☐ Applicant certifying micro entity status. See 37 CFR 1.29

☐ Applicant asserting small entity status. See 37 CFR 1.27

☐ Applicant changing to regular undiscounted fee status.

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.
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.
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 May 25, 2018

Typed or printed name Tim L. Kitchen Registration No. 41,900

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

Electronic Patent Application Fee Transmittal

Application Number:	14738083
Filing Date:	12-Jun-2015
Title of Invention:	METHOD AND SYSTEM FOR MONITORING A MOBILE STATION PRESENCE IN A SPECIAL AREA
First Named Inventor/Applicant Name:	Carlos A. Pérez LaFuente
Filer:	Tim L. Kitchen
Attorney Docket Number:	0572.0001C5

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	500	500

Description	Fee Code	Quantity	Amount	Sub-Total in USD($)
Extension-of-Time:				
Miscellaneous:				
		Total in USD ($)		**500**

Electronic Acknowledgement Receipt	
EFS ID:	32723384
Application Number:	14738083
International Application Number:	
Confirmation Number:	4555
Title of Invention:	METHOD AND SYSTEM FOR MONITORING A MOBILE STATION PRESENCE IN A SPECIAL AREA
First Named Inventor/Applicant Name:	Carlos A. Pérez LaFuente
Customer Number:	27896
Filer:	Tim L. Kitchen
Filer Authorized By:	
Attorney Docket Number:	0572.0001C5
Receipt Date:	25-MAY-2018
Filing Date:	12-JUN-2015
Time Stamp:	12:27:25
Application Type:	Utility under 35 USC 111(a)

Payment information:

Submitted with Payment	yes
Payment Type	CARD
Payment was successfully received in RAM	$500
RAM confirmation Number	052918INTEFSW12274400
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)	2018-05-25_IssueFeeTransmittal-05720001C5.pdf	102720 8523b656ce9926e8dd9e6a22c30ece2af9375cda	no	1
Warnings:					
Information:					
2	Fee Worksheet (SB06)	fee-info.pdf	30221 0e937498da8cab691ea67c62a957f49801d52526	no	2
Warnings:					
Information:					
		Total Files Size (in bytes):	132941		

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

Commissioner for Patents
United States Patent and Trademark Office
P.O. Box 1450
Alexandria, VA 22313-1450
www.uspto.gov

MAILED

MAR 23 2018

INTERNATIONAL PATENT LEGAL ADM.

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

In re Application of
AFRIMA CONSULTING &TECHNOLOGIES, S.L.
Application No.: 14/738,083
Filing Date: 12 June 2015
Attorney Docket No.: 0572.0001C5

: DECISION ON PETITION
: UNDER 37 CFR 1.78(e)
: AND 1.55

This is a decision on the petitions under 37 CFR 1.78(e) and 1.55, filed 07 March 2018, to accept unintentionally delayed priority claims.

The petitions are **DISMISSED AS MOOT**.

Applicant is advised that when claiming benefit to a national stage application filed under 35 U.S.C. 371, reference to the U.S. application number is sufficient without identification of the international application number and international filing date. See Broadcast Innovation v. Charter Communications, CAFC, 05-1008, (2005). A filing receipt indicating that application no. 12/294,641 is a national phase entry of PCT/EP2007/052939 accompanies this decision.[1] The foreign priority application has also been added.

In view of the above, the $1000 petition fee submitted is unnecessary and will be refunded to petitioner's deposit account no. 05-0460.

Any questions concerning this decision on petition may be directed to the undersigned. This application is being referred to Technology Center 2643 for continued processing.

/Erin P. Thomson/
Erin P. Thomson
Attorney Advisor
International Patent Legal Administration
571-272-3292

Enclosed: Corrected Filing Receipt

[1] The corrected ADS requests that the filing date of 12/294,641 be changed from 12 April 2010 to 26 September 2008, but the application is pre-AIA and did not complete the requirements for entry under 35 USC 371(c) until 12 April 2010 with the submission of the declaration of the inventor. The filing receipt indicates that the ADS requests data inconsistent with Office records.

UNITED STATES PATENT AND TRADEMARK OFFICE

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

APPLICATION NUMBER	FILING or 371(c) DATE	GRP ART UNIT	FIL FEE REC'D	ATTY.DOCKET.NO	TOT CLAIMS	IND CLAIMS
14/738,083	06/12/2015	2643	730	0572.0001C5	18	2

CONFIRMATION NO. 4555

CORRECTED FILING RECEIPT

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

OC000000098220219

Date Mailed: 03/22/2018

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: The patent practitioners associated with Customer Number 27896

Domestic Priority data as claimed by applicant

This application is a CON of 14/561,426 12/05/2014 PAT 9119030
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
(*)Data provided by applicant is not consistent with PTO records.

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) 06111804.8 03/28/2006

Permission to Access Application via Priority Document Exchange: No

Permission to Access Search Results: No

Applicant may provide or rescind an authorization for access using Form PTO/SB/39 or Form PTO/SB/69 as appropriate.

If Required, Foreign Filing License Granted: 06/22/2015
The country code and number of your priority application, to be used for filing abroad under the Paris Convention, is **US 14/738,083**
Projected Publication Date: Not Applicable
Non-Publication Request: No
Early Publication Request: No
**** SMALL ENTITY ****
Title

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

Preliminary Class

455

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

PROTECTING YOUR INVENTION OUTSIDE THE UNITED STATES

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

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

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

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

For information on preventing theft of your intellectual property (patents, trademarks and copyrights), you may wish to consult the U.S. Government website, http://www.stopfakes.gov. Part of a Department of Commerce initiative, this website includes self-help "toolkits" giving innovators guidance on how to protect intellectual property in specific

countries such as China, Korea and Mexico. For questions regarding patent enforcement issues, applicants may call the U.S. Government hotline at 1-866-999-HALT (1-866-999-4258).

LICENSE FOR FOREIGN FILING UNDER

Title 35, United States Code, Section 184

Title 37, Code of Federal Regulations, 5.11 & 5.15

GRANTED

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

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

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

NOT GRANTED

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

SelectUSA

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 U.S. offers tremendous resources and advantages for those who invest and manufacture goods here. Through SelectUSA, our nation works to promote and facilitate business investment. SelectUSA provides information assistance to the international investor community; serves as an ombudsman for existing and potential investors; advocates on behalf of U.S. cities, states, and regions competing for global investment; and counsels U.S. economic development organizations on investment attraction best practices. To learn more about why the United States is the best country in the world to develop

technology, manufacture products, deliver services, and grow your business, visit http://www.SelectUSA.gov or call +1-202-482-6800.

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Application No.	:	14/738,083
First Named Inventor	:	Carlos A. Pérez Lafuente
Confirmation No.	:	4555
Filed	:	June 12, 2015
TC/A.U.	:	2643
Examiner	:	San A. Htun
Customer No.	:	27896
Docket No.	:	0572.0001C5
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

PETITION PURSUANT TO 37 C.F.R. § 1.55(e) TO ACCEPT AN UNINTENTIONALLY DELAYED FOREIGN PRIORITY CLAIM

Applicant submits this Petition for Unintentionally Delayed Priority Claim under 37 C.F.R. § 1.55(e). A Corrected Application Data Sheet (ADS) is submitted herewith (via the Electronic Filing System, as a Corrected Web ADS) to show the foreign priority benefit claim.

The present patent application is a continuation of U.S. Patent Application No. 14/561,426, which was filed on December 5, 2014. U.S. Patent Application No. 14/561,426 is a continuation of U.S. Patent Application No. 14/315,703, which was filed on June 26, 2014. U.S. Patent Application No. 14/315,703 is a continuation of U.S. Patent Application No. 14/250,517, which was filed on April 11, 2014. U.S. Patent Application No. 14/250,517 is a continuation of U.S. Patent Application No. 12/294,641. All of this domestic priority was properly claimed in the originally filed ADS and acknowledged in the Official Filing Receipt for this application.

However, U.S. Patent Application No. 12/294,641 was filed on September 26, 2008, as a U.S. National Phase filing, under 35 U.S.C. § 371, of International Patent Application No. PCT/EP2007/052939. International Patent Application No. PCT/EP2007/052939 was filed on March 27, 2007, and claims priority to European Patent Application No. 06111804.4, which was filed on March 28, 2006. The Corrected Web ADS submitted with this petition, clarifies that Application No. 12/294,641 (the earliest U.S. Application to which the present application claims priority), was filed on September 26, 2008, (not April 12, 2010) as a national stage

application under 35 U.S.C. § 371 of PCT/EP2007/052939 (not a continuation of PCT/EP2007/052939 under 35 U.S.C. § 111 as might be incorrectly implied in the original ADS). Additionally, the Corrected Web ADS adds a proper priority claim from PCT/EP2007/052939 to European Patent Application No. 06111804.4.

This Petition meets all of the requirements set forth under 37 C.F.R. § 1.55(e): (1) as is explained above, the priority claim is reflected in an Corrected Web ADS and specifies all of the required information for the priority applications; (2) the requirement to submit a certified copy of the priority document is satisfied because the certified document was previously submitted in U.S. Patent Application No. 12/294,641 for which the present application is a continuation; (3) the $1,000.00 small entity petition fee set forth in 37 C.F.R. § 1.17(m) is submitted herewith; and (4) Applicant hereby states that the entire delay between the date the benefit claim was due under 37 C.F.R. § 1.55 and the date the benefit claim was filed was unintentional.

Moreover, a Petition for Unintentionally Delayed Priority Claim under 37 C.F.R. § 1.78(e) is also submitted concurrently herewith to ensure that the filing date of U.S. Application No. 12/294,641 (i.e., September 26, 2008) and the benefit claim from U.S. Application No. 12/294,641 to International Patent Application No. PCT/EP2007/052939 (e.g., as a U.S. National Phase filing, under 35 U.S.C. § 371) are both correct (as is shown in the Corrected Web ADS). Applicants note that, per communications with the USPTO's PCT Helpdesk, Applicants understand that only one fee set forth in 37 C.F.R. § 1.17(m) is required for both petitions.

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**.

Date: March 7, 2018

Respectfully submitted by:

EDELL, SHAPIRO & FINNAN, LLC
9801 Washingtonian Blvd., Suite 750
Gaithersburg, MD 20878
(301) 424-3640

/Andrew G. Haberman/
Andrew G. Haberman
Reg. No. 69,209

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Application No.	:	14/738,083
First Named Inventor	:	Carlos A. Pérez Lafuente
Confirmation No.	:	4555
Filed	:	June 12, 2015
TC/A.U.	:	2643
Examiner	:	San A. Htun
Customer No.	:	27896
Docket No.	:	0572.0001C5
Title	:	METHOD AND SYSTEM FOR MONITORING A MOBILE STATION PRESENCE IN A SPECIAL AREA

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

PETITION PURSUANT TO 37 C.F.R. § 1.78(e) TO ACCEPT UNINTENTIONALLY DELAYED BENEFIT CLAIM UNDER 35 U.S.C. § 371

Applicant hereby submits this Petition for Unintentionally Delayed Claim of Benefit under 37 C.F.R. § 1.78(e). A Corrected Application Data Sheet (ADS) is submitted herewith (via the Electronic Filing System, as a Corrected Web ADS), which corrects the relationship to application PCT/EP2007/052939. That is, the Corrected Web ADS clarifies that Application No. 12/294,641 (the earliest U.S. Application to which the present application claims priority), was filed on September 26, 2008, (not April 12, 2010) as a national stage application under 35 U.S.C. § 371 of International Patent Application No. PCT/EP2007/052939 (not a continuation of International Patent Application No. PCT/EP2007/052939 under 35 U.S.C. § 111 as might be incorrectly implied in the original ADS).

This Petition meets all of the requirements set forth under 37 C.F.R. § 1.78(e): (1) the currently filed Corrected ADS meets the reference required by 35 U.S.C. § 120 and 37 C.F.R. § 1.78(d)(2) to the prior-filed application; (2) the $1,000.00 small entity petition fee set forth in 37 C.F.R. § 1.17(m) is submitted herewith; and (3) Applicant hereby states that the entire delay between the date the benefit claim was due under 37 C.F.R. § 1.78(d)(3) and the date the benefit claim was filed was unintentional.

A Petition for Unintentionally Delayed Priority Claim under 37 C.F.R. § 1.55(e) is also submitted concurrently herewith to correct the benefit claim from International Patent Application No. PCT/EP2007/052939 to European Patent Application No. 06111804.4, which was filed on March 28, 2016 (as is shown in the Corrected Web ADS). Applicants note that, per communications with the USPTO's PCT Helpdesk, Applicants understand that only one fee set forth in 37 C.F.R. § 1.17(m) is required for both petitions.

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: March 7, 2018

Respectfully submitted by:

/Andrew G. Haberman/

Andrew G. Haberman
Reg. No. 69,209

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

Electronic Patent Application Fee Transmittal

Application Number:	14738083
Filing Date:	12-Jun-2015
Title of Invention:	METHOD AND SYSTEM FOR MONITORING A MOBILE STATION PRESENCE IN A SPECIAL AREA
First Named Inventor/Applicant Name:	
Filer:	Andrew Garrett Haberman/Ariella Chukran
Attorney Docket Number:	0572.0001C5

Filed as Small Entity

Filing Fees for Utility under 35 USC 111(a)

Description	Fee Code	Quantity	Amount	Sub-Total in USD($)
Basic Filing:				
PET. DELAY SUB OR RESTORE PRIORITY-CLAIM	2454	1	1000	1000
Pages:				
Claims:				
Miscellaneous-Filing:				
Petition:				
Patent-Appeals-and-Interference:				
Post-Allowance-and-Post-Issuance:				

Description	Fee Code	Quantity	Amount	Sub-Total in USD($)
Extension-of-Time:				
Miscellaneous:				
		Total in USD ($)		**1000**

Electronic Acknowledgement Receipt	
EFS ID:	31979302
Application Number:	14738083
International Application Number:	
Confirmation Number:	4555
Title of Invention:	METHOD AND SYSTEM FOR MONITORING A MOBILE STATION PRESENCE IN A SPECIAL AREA
First Named Inventor/Applicant Name:	
Customer Number:	27896
Filer:	Andrew Garrett Haberman/Ariella Chukran
Filer Authorized By:	Andrew Garrett Haberman
Attorney Docket Number:	0572.0001C5
Receipt Date:	07-MAR-2018
Filing Date:	12-JUN-2015
Time Stamp:	09:39:46
Application Type:	Utility under 35 USC 111(a)

Payment information:

Submitted with Payment	yes
Payment Type	CARD
Payment was successfully received in RAM	$1000
RAM confirmation Number	030718INTEFSW09394500
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	Application Data Sheet to update/ correct info	CorrectedADS.pdf	87808 16c31d50493ab1d39e8e9a2b9c28ef0592591e8f	no	6
Warnings:					
Information:					
2	Petition for review by the Office of Petitions	2018-03-07_Petition155-05720001C5.pdf	101146 bf82572a71c97a4b2979c0f0c2b036495b517c0e	no	2
Warnings:					
Information:					
3	Petition for review by the Office of Petitions	2018-03-07_Petition178-05720001C5.pdf	71674 f3183b257ef09ddac36327fbbd125e058bc7ba5d	no	2
Warnings:					
Information:					
4	Fee Worksheet (SB06)	fee-info.pdf	30253 b18864576c95ac6433d700d7c7ba354ca8d733bf	no	2
Warnings:					
Information:					
		Total Files Size (in bytes):	290881		

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.

Document Description: Application Data Sheet to update/correct info
Doc Code: ADS.CORR

CORRECTED ADS FORM

Application Number	14738083
Title of Invention	METHOD AND SYSTEM FOR MONITORING A MOBILE STATION PRESENCE IN A SPECIAL AREA

Inventor Information

****If no data is shown, no data has been corrected****

	Data of Record	Updated Data
Order Number		
Name		
Residence Information		
Residency		
City		
State		
Country of Residence		
Mailing Address of Inventor		
Address 1		
Address 2		
City,State/Province, Postal Code		
Country		

Document Description: Application Data Sheet to update/correct info
Doc Code: ADS.CORR

Application Information

	Data of Record	Updated Data
Title of Invention	METHOD AND SYSTEM FOR MONITORING A MOBILE STATION PRESENCE IN A SPECIAL AREA	
Attorney Docket Number	0572.0001C5	
Entity Type	Small	

Domestic Benefit/National Stage Information

****If no data is shown, no data has been corrected****

This section allows for the applicant to either claim benefit under 35 U.S.C. 119(e), 120, 121,365(c), or 386(c) or indicate National Stage entry from a PCT application. Providing this information in the application data sheet constitutes the specific reference required by 35 U.S. C. 119(e) or 120, and 37 CFR 1.78(a).

		Data of Record	Updated Data
	Prior Application Status	patented	
	Application Number	14738083	
	Continuity Type	CON	
	Prior Application Number	14561426	
	Filing Date (YYYY-MM-DD)	2014-12-05	
	Patent Number	9119030	
	Issue Date (YYYY-MM-DD)	2015-08-25	

		Data of Record	Updated Data
	Prior Application Status	patented	
	Application Number	14561426	
	Continuity Type	CON	
	Prior Application Number	14315703	
	Filing Date (YYYY-MM-DD)	2014-06-26	
	Patent Number	8934922	
	Issue Date (YYYY-MM-DD)	2015-01-13	

		Data of Record	Updated Data
	Prior Application Status	patented	
	Application Number	14315703	
	Continuity Type	CON	
	Prior Application Number	14250517	
	Filing Date (YYYY-MM-DD)	2014-04-11	
	Patent Number	9042910	
	Issue Date (YYYY-MM-DD)	2015-05-26	

		Data of Record	Updated Data
	Prior Application Status	patented	
	Application Number	14250517	
	Continuity Type	CON	
	Prior Application Number	12294641	
	Filing Date (YYYY-MM-DD)	~~2010-04-12~~	2008-09-26
	Patent Number	8738040	
	Issue Date (YYYY-MM-DD)	2014-05-27	

Corrected ADS 1.0

		Data of Record	Updated Data
	Prior Application Status		expired
	Application Number		12294641
	Continuity Type		NST
	Prior Application Number		PCT/EP2007/052939
	Filing Date (YYYY-MM-DD)		2007-03-27
	Patent Number		
	Issue Date (YYYY-MM-DD)		

Foreign Priority Information

****If no data is shown, no data has been corrected****

This section allows for the applicant to claim priority to a foreign application. Providing this information in the application data sheet constitutes the claim for priority as required by 35 U.S.C. 119(b) and 37 CFR 1.55. When priority is claimed to a foreign application that is eligible for retrieval under the priority document exchange program (PDX) the information will be used by the Office to automatically attempt retrieval pursuant to 37 CFR 1.55(i)(1) and (2). Under the PDX program, applicant bears the ultimate responsibility for ensuring that a copy of the foreign application is received by the Office from the participating foreign intellectual property office, or a certified copy of the foreign priority application is filed, within the time period specified in 37 CFR 1.55(g)(1).

		Data of Record	Updated Data
	Application Number	~~PCT/EP2007/052939~~	06111804.4
	Country	EP	
	Filing Date	~~2007-03-27~~	2006-03-28
	Access Code		

Applicant Information

****If no data is shown, no data has been corrected****
Providing assignment information in this section does not substitute for compliance with any requirement of part 3 of Title 37 of CFR to have an assignment recorded by the Office.

	Data of Record	Updated Data
Applicant Type		

If applicant is the legal representative, indicate the authority to file the patent application, the inventor is		
Name of the Deceased or Legally Incapacitated Inventor		
Applicant is an Organization		
Name		
Organization Name		
Address 1		
Address 2		
City,State/Province,Postal Code		
Country		
Phone Number		
Fax Number		
Email Address		

Assignee Information including Non-Applicant Assignee Information

****If no data is shown, no data has been corrected****
Providing this information in the application data sheet does not substitute for compliance with any requirement of part 3 of Title 37 of the CFR to have an assignment recorded in the Office

	Data of Record	Updated Data
Order		
Applicant is an Organization		
Name		

Organization Name		
Mailing Address		
Address 1		
Address 2		
City,State/Province,Postal Code		
Country		
Phone Number		
Fax Number		
Email Address		

Signature

NOTE: This Application Data Sheet must be signed in accordance with 37 CFR 1.33(b).

This Application Data Sheet **must** be signed by a patent practitioner if one or more of the applicants is a **juristic entity** (e.g., corporation or association). If the applicant is two or more joint inventors, this form must be signed by a patent practitioner, **all** joint inventors who are the applicant, or one or more joint inventor-applicants who have been given power of attorney (e.g., see USPTO Form PTO/AIA/81) on behalf of **all** joint inventor-applicants.

See 37 CFR 1.4(d) for the manner of making signatures and certifications.

Signature	/Andrew G. Haberman/	Registration Number	69209
First Name	Andrew	Last Name	Haberman

EAST Search History

EAST Search History (Prior Art)

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
S1	34	("6529491" | "20080220782" | "20080102896" | "20080132225" | "20060084443" | "20080280604" | "20080085703" | "20070037577" | "20020032032" | "6434389" | "20090047968" | "20080207195" | "20110269460" | "20070171871").PN.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2016/04/21 17:18
S2	72	("20050075124" | "20100167725" | "6516190" | "7634255" | "6920317" | "6836653" | "6526267" | "7266366" | "20030092450" | "20050148297" | "20080004045" | "20080261604" | "6122520" | "7778652" | "7848765" | "6516193" | "6552648" | "5642303" | "6671506" | "7171189" | "6920317" | "20030176197" | "6526267" | "20020094801" | "6826414" | "6920317" | "6625442" | "8723664" | "6826414" | "20040192267" | "20040224682" | "6334052" | "6516193" | "6785536" | "7142869" | "20020094801" | "6516193" | "6826414").PN.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2016/04/21 17:24
S3	2	"7548731".pn.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2016/04/21 17:41
S4	2	US-20100317371-A1.did.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2016/04/21 17:44
S5	2	("20150281895").PN.	US-PGPUB; USPAT; USOCR; DERWENT	ADJ	ON	2016/04/21 17:51
S6	0	(("PÃ‰REZ") near3 ("LAFUENTE") near3 ("Carlos")).INV.	EPO; JPO; DERWENT	ADJ	ON	2016/04/21 17:51
S7	0	(("PÃ‰REZ") near3 ("LAFUENTE") near3 ("Carlos")).INV.	US-PGPUB; USPAT; USOCR	ADJ	ON	2016/04/21 17:51
S8	3	"7324824".pn.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO;	ADJ	ON	2016/04/21 17:54

			DERWENT; IBM_TDB			
S9	0	(AFIRMA near CONSULTING near TECHNOLOGIES).as.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2016/04/21 17:56
S10	16	(AFIRMA near CONSULTING near TECHNOLOGIES).as. or afirma.as.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2016/04/21 17:56
S11	691018	(H04W4/00-206 or H04W8/$ or H04W12/$ or H04W16/$ or H04W28/$ or H04W36/$ or H04W48/$ or H04W60/$ or H04W64/$ or H04W72/$ or H04W74/$ or H04M1/7253 or H04B5/00 or H04B3/$ or H04B2203/$).CPC.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2016/04/21 18:03
S12	11923	(location or area or boundary or position or zone or region or geographic$3) and (special or private or home or specific or environment) and (wirless or mobile or cell$4) and (wi?fi or bluetooth or wlan or nfc) and (network near7 (identity or code or id or identif$7)) and (connect$3 or status or communicat$3) and (power? line or (power near3 line) or plc or adsl or pstn) and (detect$3 or measur$5 or report$3 or monitor$3 or track$3) and ((identif$7 or location or position) near7 (code or id or identity or identif$7)) and (bs or (base station) or (access point) or ap or enb or hnb) and GSM	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2016/04/21 18:09
S13	4373	S11 and S12	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2016/04/21 18:11
S14	545	S13 and (power line)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2016/04/21 18:11
S15	540	S14 and (server or controller)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2016/04/21 18:11
S16	456	S15 and database	US-PGPUB; USPAT;	ADJ	ON	2016/04/21 18:12

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S17	2	"7756485".pn.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2016/04/21 18:20
S18	2	("20080242299").PN.	US-PGPUB; USPAT; USOCR; DERWENT	ADJ	ON	2016/04/21 18:22
S19	44	("20060234762" | "7133669" | "7756485" | "20030119454" | "20070042777" | "5903832" | "7245913" | "20040076177" | "20040215845" | "20070255797" | "20050079863" | "20040266426" | "20050152304" | "20070067734" | "6438390" | "20030119454" | "20080113692" | "20040076177" | "6546263" | "7072468").PN.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2016/04/21 18:23
S20	2	"7466986".pn.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2016/04/21 18:32
S21	4	"8014776".pn.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2016/04/21 18:34
S22	2	("20140295813").PN.	US-PGPUB; USPAT; USOCR; DERWENT	ADJ	ON	2016/04/25 13:29
S23	21	("20100020710" | "20110059744" | "20110086652" | "20100291929" | "20100317351" | "20140073304" | "20130040640" | "20110274097").PN.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2016/04/25 13:29
S24	2	us-20080242298-a1.did.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2016/04/25 17:35
S25	2	US-20090061914-A1.did.	US-PGPUB; USPAT; USOCR;	ADJ	ON	2016/04/26 15:49

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S26	2	US-20150036494-A1.did.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2016/04/26 15:50
S27	10445	(location or area or boundary or position or zone or region or geographic$3) and (special or private or home or specific or environment) and (wirless or mobile or cell$4) and (wi?fi or bluetooth or wlan or nfc) and (network near7 (identity or code or id or identif$7)) and (connect$3 or status or communicat$3) and (power? line or (power near3 line) or plc or adsl or pstn) and (detect$3 or measur$5 or report$3 or monitor$3 or track$3) and ((identif$7 or location or position) near7 (code or id or identity or identif$7)) and (bs or (base station) or (access point) or ap or enb or hnb) and GSM and (Wi?fi or wlan or femtocell or (private network))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2016/08/19 16:21
S28	242	htun.xp. or htun.xa.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2016/08/19 16:22
S29	0	S28 and (special cell)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2016/08/19 16:22
S30	125	S28 and cell	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2016/08/19 16:22
S31	2	("20100298017").PN.	US-PGPUB; USPAT; USOCR; DERWENT	ADJ	ON	2016/08/19 17:05
S32	34	("6529491" | "20080220782" | "20080102896" | "20080132225" | "20060084443" | "20080280604" | "20080085703" | "20070037577" | "20020032032" | "6434389" | "20090047968" | "20080207195" | "20110269460" | "20070171871").PN.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2016/08/19 17:10
S33	10431	S27 and (bs or (base station))	US-PGPUB; USPAT;	ADJ	ON	2016/08/19 17:27

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S34	8872	S33 and (pstn or (telephone network))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2016/08/19 17:28
S35	39	S34 and (periodically or periodic) and (special near5 area)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2016/08/19 17:31
S36	6	us-20020097852-a1.did. or us-20020126691-a1.did. or us-20040038688-a1.did.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2016/11/07 16:24
S37	4284	(transmitter and (area or location or code or (cell ID)) and signal and (presen$4 or active) and (radio or wireless or cell$4 or mobile)).clm.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2016/11/07 16:30
S38	13	S37 and (special near (area or environment))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2016/11/07 16:31
S39	23	S37 and (scan$4 same channel same (cell or transmitter or (access point) or (base station) or ap or bs) same (detect$3 or determin$5) same presen$4)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2016/11/07 16:34
S40	460	(transmitter and (area or location or code or (cell ID)) and signal and (presen$4 or active) and (radio or wireless or cell$4 or mobile) and (format or filed or flag or bit) and (parameter or service or id or identity or identif$7 or tariff)).clm.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2017/03/06 12:24
S41	288	S40 and (timer or periodic or periodical$3)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2017/03/06 12:33

S42	172	S40 not S41	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2017/03/06 12:34
S43	4	"7831263".pn.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2017/03/06 14:40
S44	2	US-20040147221-A1.did.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2017/03/06 14:40
S45	112	("20130157640" | "20150054934" | "6138041" | "8270933" | "8880047" | "20090029675" | "20110153367" | "20120214408" | "7555378" | "8774842" | "8884750" | "8971927" | "20110093161" | "20070072616" | "20090002147" | "20130303143" | "7505784" | "8280438" | "8761821" | "20030096593" | "20100087137" | "6690940" | "6771946" | "8204649" | "9185526" | "20060286930" | "20120268235" | "7697917" | "8527013" | "8787936" | "20010050614" | "20060148490" | "20090128286" | "20130084847" | "8626121" | "20100216509" | "20110294520" | "20050255874" | "20090085728" | "9094533" | "8036839").PN.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2017/03/07 16:08
S46	54	S45 and (location or position or area or zone) and (car or vehicle or automobile or truck)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2017/03/07 16:09
S47	4	US-20070072553-A1.did. or US20090085728-A1.did. or us-20110294520-a1.did.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2017/03/07 16:15
S48	2	US-20090085728-A1.did.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2017/03/07 16:16
S49	2	US-20020115436-A1.did.	US-PGPUB; USPAT;	ADJ	ON	2017/03/07 16:59

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S50	1	"8400292".pn. and location	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2017/03/07 17:36
S51	74	("20030117281" | "20040100930" | "20060014548" | "20060046664" | "20060276201" | "20060281913" | "20070129085" | "20070159388" | "20070229350" | "20080085439" | "20080085440" | "20080113672" | "20080132244" | "20080160953" | "20080167049" | "20080174502" | "20080175175" | "20080186955" | "20080191941" | "20080198955" | "20080200117" | "20080232305" | "20080248744" | "20080248811" | "20080261615" | "20080284647" | "20090021345" | "20090045939" | "20090138336" | "20090295639" | "6184829" | "6249252" | "6674403" | "6873852" | "6952181" | "6961367" | "6996392" | "7194275" | "7245925" | "7257387" | "7298327" | "7321777" | "7327258" | "7427952" | "7440762" | "7525425" | "7525484" | "7528723" | "7529236" | "7539161" | "7546084" | "7570615" | "7616155" | "7665263" | "7732088" | "7738836" | "7837774" | "7848733" | "7852262").PN. OR ("8400292").URPN.	US-PGPUB; USPAT; USOCR	ADJ	ON	2017/03/07 17:37
S52	30	("6434389" | "6526267" | "8019364" | "20060072760" | "20050207381" | "20040166870" | "6785536" | "20020131387" | "8737996" | "20080242298" | "20050054291" | "20020094801" | "20020094801").PN.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2017/10/03 19:32
S53	14	("20050068925" | "20060075131" | "20060095348" | "20060142004" | "20070121560").PN.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2017/10/03 19:34
S54	2	("20090093956").PN.	US-PGPUB; USPAT; USOCR; DERWENT	ADJ	ON	2017/10/03 19:36
S55	2	("20080095125").PN.	US-PGPUB; USPAT; USOCR; DERWENT	ADJ	ON	2017/10/03 19:39
S56	15	"8605691".pn.	US-PGPUB; USPAT;	ADJ	ON	2017/10/03 19:40

			USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB			
S57	21	("7260395" | "7146130" | "5960344" | "20040137905" | "20040039817" | "20040127240" | "6332077" | "20020188723" | "20030181215").PN.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2017/10/03 19:41
S58	6	us-20030119454-a1.did. or us-20050111463-a1.did. or us-20050238046-a1.did.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2017/10/13 17:14
S59	2	us-20050096026-a1.did.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2017/10/13 17:20
S60	2	US-20030040313-A1.did.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2017/10/13 18:12
S61	909636	(H04W4/00-206 or H04W8/$ or H04W12/$ or H04W16/$ or H04W28/$ or H04W36/$ or H04W48/$ or H04W60/$ or H04W64/$ or H04W72/$ or H04W74/$ or H04M1/7253 or H04B5/00 or H04B3/$ or H04B2203/$).CPC.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2018/02/16 20:13
S62	12	((location or area or boundary or position or zone or region or geographic$3 or coordinates or coverage) and (special or private or home or specific or environment or overlapping) and (wirless or mobile or cell$4) and (wi?fi or bluetooth or wlan or nfc or "802.11"?) and (connect$3 or status or communicat$3 or service or parameter or setting) and (power?line or (power near3 line) or plc or adsl or pstn or cell$4 or GSM or CDMA or UTRAN or EUTRAN or 4G or LTE) and (detect$3 or measur$5 or report$3 or monitor$3 or track$3) and (code or id or identity or identif$7) and (bs or (base station) or (access point) or ap or enb or hnb or macro or femto or cell or network) and (activat$3 or deactivat$3 or register$3 or provision$3 or roam$3) and (flag or tariff)).clm.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2018/02/16 20:36
S63	12	((location or area or boundary or position	US-PGPUB;	ADJ	ON	2018/02/16

		or zone or region or geographic$3 or coordinates or coverage) and (special or private or home or specific or environment or overlapping) and (wirless or mobile or cell$4) and (wi?fi or bluetooth or wlan or nfc or "802.11"?) and (connect$3 or status or communicat$3 or service or parameter or setting) and (power?line or (power near3 line) or plc or adsl or pstn or cell$4 or GSM or CDMA or UTRAN or EUTRAN or 4G or LTE) and (detect$3 or measur$5 or report$3 or monitor$3 or track$3) and (code or id or identity or identif$7) and (activat$3 or deactivat$3 or register$3 or provision$3 or roam$3) and (flag or tariff)).clm.	USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB			20:40

EAST Search History (Interference)

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
S64	240701	(H04W4/00-206 or H04W8/$ or H04W12/$ or H04W16/$ or H04W28/$ or H04W36/$ or H04W48/$ or H04W60/$ or H04W64/$ or H04W72/$ or H04W74/$ or H04M1/7253 or H04B5/00 or H04B3/$ or H04B2203/$).CPC.	US-PGPUB; USPAT	ADJ	ON	2018/02/16 22:40
S65	558	((location or area or boundary or position or zone or region or geographic$3 or coordinates or coverage) and (special or private or home or specific or environment or overlapping or boundary) and (wirless or mobile or cell$4) and (wi?fi or bluetooth or wlan or nfc or "802.11"? or packet or internet) and (connect$3 or status or communicat$3 or service or parameter or setting) and (power?line or (power near3 line) or plc or adsl or pstn or cell$4 or GSM or CDMA or UTRAN or EUTRAN or 4G or LTE or network or server) and (detect$3 or measur$5 or report$3 or monitor$3 or track$3 or scanning or roam$3) and (code or id or identity or identif$7) and (activat$3 or deactivat$3 or register$3 or provision$3 or authenticat$3) and (flag or tariff or field)).clm.	US-PGPUB; USPAT	ADJ	ON	2018/02/16 22:45
S66	164	S64 and S65	US-PGPUB; USPAT	ADJ	ON	2018/02/16 22:50
S67	175	S65 and ((location or position or area or coverage or zone or boundry or border) near (code or id or identity or identif$7))	US-PGPUB; USPAT	ADJ	ON	2018/02/16 22:51

2/17/2018 9:58:15 AM
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BIB DATA SHEET

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SERIAL NUMBER	FILING or 371(c) DATE	CLASS	GROUP ART UNIT	ATTORNEY DOCKET NO.
14/738,083	06/12/2015 RULE	455	2643	0572.0001C5

APPLICANTS
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INVENTORS
Carlos A. Pérez LaFuente, Madrid, SPAIN;

**** CONTINUING DATA ********************************
This application is a CON of 14/561,426 12/05/2014 PAT 9119030
which is a CON of 14/315,703 06/26/2014 PAT 8934922
which is a CON of 14/250,517 04/11/2014 PAT 9042910
which is a CON of 12/294,641 04/12/2010 PAT 8738040

**** FOREIGN APPLICATIONS ********************************
EUROPEAN PATENT OFFICE (EPO) PCT/EP2007/052939 03/27/2007

**** IF REQUIRED, FOREIGN FILING LICENSE GRANTED **** ** SMALL ENTITY **
06/22/2015

Foreign Priority claimed	35 USC 119(a-d) conditions met	Verified and Acknowledged	Met after Allowance	STATE OR COUNTRY	SHEETS DRAWINGS	TOTAL CLAIMS	INDEPENDENT CLAIMS
☑ Yes ☐ No	☐ Yes ☑ No	/SAN A HTUN/ Examiner's Signature	☐ Initials	SPAIN	7	18	2

ADDRESS

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UNITED STATES

TITLE

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

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

BIB (Rev. 05/07).

Listing of the Claims:

14. (Currently Amended) A method associated with the use of a mobile station and ~~at least one~~ a radio communication defining device that transmits a distinctive defining signal ~~that defines a special area by its coverage~~, the method comprising: ~~the distinctive defining signal including information indicating whether or not the radio communication defining device is in a predetermined environment, the method comprising:~~

receiving and processing the distinctive defining signal in the mobile station, the distinctive defining signal at least partially defining a special area by one or more of: (1) a coverage area of the distinctive defining signal; (2) a portion of the coverage area that intersects with another area of coverage of another radio communication defining device; and (3) a sum of the area of coverage and the another area of coverage, the distinctive defining signal including information indicating whether or not the radio communication defining device is in a predetermined environment; and

sending from the mobile station via [[the]]a mobile telephone network [[an]]the updating signal to one or more servers of a provider of presence related services about the mobile station's presence in the special area, the updating signal being useable by the one or more servers of the provider of presence related services to adjust an operating parameter, which comprises one or more of a tariff and a service flag, to adjust, activate, or deactivate the presence related services provided to the mobile station, and the updating signal comprising the information indicative of whether or not the radio communication defining device is located in [[a]]the predetermined environment.

15. (Cancelled)

16. (Original) The method according to claim 14, wherein the sending of the updating signal is uncorrelated to any mobile station phone call establishment, the updating signal being sent 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.

17. (Original) The method according to claim 14, 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.

18. (Original) The method according to claim 14, wherein the frequency of the updating signal is different from the frequency of the distinctive defining signal.

19-21. (Cancelled)

22. (Currently Amended) A method comprising:

wirelessly receiving, in a radio communication defining device, first information from a radio transmitting device;

the radio communication defining device using the first information to determine whether or not the radio communication defining device is in a predetermined environment; and

transmitting from the radio communication defining device to a mobile station a distinctive defining signal that at least partially defines a special area by one or more of: (1) [[its]] a coverage area of the distinctive defining signal; (2) a portion of the coverage area that intersects with another coverage area of another radio communication defining device; and (3) a sum of the coverage area and the another coverage area,

wherein the distinctive defining signal ~~including~~ includes second information indicating whether or not the radio communication defining device is located in a predetermined environment and the second information allowing the mobile station to generate an updating signal that enables presence related services for the mobile station to be adjusted based on one or more of tariffs and service flags generated based on the updating signal.

23. (Previously Presented) The method according to claim 22, further comprising storing in a database of the radio communication defining device identification data of the radio transmitting device.

24. (Previously Presented) The method according to claim 22, wherein the distinctive defining signal is coded.

25. (Currently Amended) A method comprising:

receiving first information in a radio communication defining device via communication with a fixed network to which the radio communication defining device is physically connected;

the radio communication defining device using the first information to determine whether or not the radio communication defining device is in a predetermined environment; and

transmitting from the radio communication defining device to a mobile station a distinctive defining signal that at least partially defines a special area by one or more of: (1) [[its]] a coverage area of the distinctive defining signal; (2) a portion of the coverage area that intersects with another coverage area of another radio communication defining device; and (3) a sum of the coverage area and the another coverage area,

wherein the distinctive defining signal ~~including~~ includes second information indicating whether or not the radio communication defining device is located in a predetermined environment and the second information allowing the mobile station to generate an updating signal that enables presence related services for the mobile station to be adjusted based on one or more of tariffs and service flags generated based on the updating signal.

26. (Previously Presented) The method according to claim 25, wherein the fixed network is an embedded system in a car.

27. (Previously Presented) The method according to claim 25, further comprising storing in a memory of the radio communication defining device one or more parameters useable to authenticate the radio communication defining device in the fixed network.

28. (New) The method according to claim 14, wherein the predetermined environment comprises one or more of: (1) one or more specific geographic locations; (2) a physical environment; (3) an environment defined by an operator of the mobile telephone network; and (4) an area defined by a fixed network.

29. (New) The method according to claim 14, wherein the distinctive defining signal comprises a signal with a frequency that is outside a frequency range allocated for the mobile telephone network.

30. (New) The method according to claim 22, wherein the predetermined environment comprises one or more of: (1) one or more specific geographic locations; (2) a physical environment; (3) an environment defined by an operator of a mobile telephone network associated with the mobile station; and (4) an area defined by a fixed network.

31. (New) The method according to claim 22, wherein the distinctive defining signal comprises a signal with a frequency that is outside a frequency range allocated for a mobile telephone network associated with the mobile station.

32. (New) The method according to claim 25, wherein the predetermined environment comprises one or more of: (1) one or more specific geographic locations; (2) a physical environment; (3) an environment defined by an operator of a mobile telephone network associated with the mobile station; and (4) an area defined by the fixed network.

33. (New) The method according to claim 25, wherein the distinctive defining signal comprises a signal with a frequency that is outside a frequency range allocated for a mobile telephone network associated with the mobile station.

Issue Classification	Application/Control No.	Applicant(s)/Patent Under Reexamination
	14/738,083	Pérez LaFuente, Carlos A.
	Examiner	**Art Unit**
	SAN A HTUN	2643

CPC						
Symbol					**Type**	**Version**
H04W	/	4	/	021	F	2013-01-01
H04W	/	4	/	50	I	2018-02-01
H04W	/	24	/	00	I	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
H04W	/	28	/	18	A	2013-01-01
H04W	/	48	/	08	A	2013-01-01
H04W	/	48	/	16	A	2013-01-01

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

NONE		Total Claims Allowed:	
(Assistant Examiner)	(Date)	16	
/SAN HTUN/ Primary Examiner, Art Unit 2643	17 February 2018	O.G. Print Claim(s)	O.G. Print Figure
(Primary Examiner)	(Date)	14	3

U.S. Patent and Trademark Office — Part of Paper No.: 20180217

Ex.1002 / Page 50 of 639
APPLE INC.

Issue Classification	Application/Control No.	Applicant(s)/Patent Under Reexamination
	14/738,083	Pérez LaFuente, Carlos A.
	Examiner	**Art Unit**
	SAN A HTUN	2643

INTERNATIONAL CLASSIFICATION					
CLAIMED					
H04W	/	36	/	00	
H04W	/	40	/	001	

NON-CLAIMED				
	/		/	

US ORIGINAL CLASSIFICATION	
CLASS	**SUBCLASS**

CROSS REFERENCES(S)						
CLASS	**SUBCLASS (ONE SUBCLASS PER BLOCK)**					
455	444	448				

NONE (Assistant Examiner)	(Date)	**Total Claims Allowed:** 16	
/SAN HTUN/ Primary Examiner, Art Unit 2643 (Primary Examiner)	17 February 2018 (Date)	O.G. Print Claim(s) 14	O.G. Print Figure 3

U.S. Patent and Trademark Office — Part of Paper No.: 20180217

Issue Classification	Application/Control No.	Applicant(s)/Patent Under Reexamination
	14/738,083	Pérez LaFuente, Carlos A.
	Examiner	**Art Unit**
	SAN A HTUN	2643

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

CLAIMS

Final	Original	Final	Original	Final	Original	Final	Original	Final	Original	Final	Original	Final	Original	Final	Original
1	14	14	27												
2	16	5	28												
3	17	6	29												
4	18	10	30												
7	22	11	31												
8	23	15	32												
9	24	16	33												
12	25														
13	26														

NONE (Assistant Examiner)	(Date)	**Total Claims Allowed:** 16	
/SAN HTUN/ Primary Examiner, Art Unit 2643 (Primary Examiner)	17 February 2018 (Date)	O.G. Print Claim(s) 14	O.G. Print Figure 3

U.S. Patent and Trademark Office

Part of Paper No.: 20180217

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UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
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NOTICE OF ALLOWANCE AND FEE(S) DUE

27896 7590 02/28/2018

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

EXAMINER	
HTUN, SAN A	
ART UNIT	PAPER NUMBER
2643	

DATE MAILED: 02/28/2018

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
14/738,083	06/12/2015	Carlos A. Pérez LaFuente	0572.0001C5	4555

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
REGULAR	SMALL	$500	$0.00	$0.00	$500	05/29/2018

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

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

HOW TO REPLY TO THIS NOTICE:

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

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

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

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

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

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

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

PART B - FEE(S) TRANSMITTAL

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

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

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

27896 7590 02/28/2018
EDELL, SHAPIRO & FINNAN, LLC
9801 Washingtonian Blvd.
Suite 750
Gaithersburg, MARYLAND 20878

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

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

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

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
14/738,083	06/12/2015	Carlos A. Pérez LaFuente	0572.0001C5	4555

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
REGULAR	SMALL	$500	$0.00	$0.00	$500	05/29/2018

EXAMINER	ART UNIT	CLASS-SUBCLASS
HTUN, SAN A	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

❑ Applicant asserting small entity status. See 37 CFR 1.27

❑ Applicant changing to regular undiscounted fee status.

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.
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.
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. _____

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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
14/738,083	06/12/2015	Carlos A. Pérez LaFuente	0572.0001C5	4555

27896 7590 02/28/2018

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

EXAMINER	
HTUN, SAN A	

ART UNIT	PAPER NUMBER
2643	

DATE MAILED: 02/28/2018

PTOL-85 (Rev. 02/11)

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

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

The information collected by PTOL-85 Part B is required by 37 CFR 1.311. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, Virginia 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450. Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

Privacy Act Statement

The Privacy Act of 1974 (P.L. 93-579) requires that you be given certain information in connection with your submission of the attached form related to a patent application or patent. Accordingly, pursuant to the requirements of the Act, please be advised that: (1) the general authority for the collection of this information is 35 U.S.C. 2(b)(2); (2) furnishing of the information solicited is voluntary; and (3) the principal purpose for which the information is used by the U.S. Patent and Trademark Office is to process and/or examine your submission related to a patent application or patent. If you do not furnish the requested information, the U.S. Patent and Trademark Office may not be able to process and/or examine your submission, which may result in termination of proceedings or abandonment of the application or expiration of the patent.

The information provided by you in this form will be subject to the following routine uses:

1. The information on this form will be treated confidentially to the extent allowed under the Freedom of Information Act (5 U.S.C. 552) and the Privacy Act (5 U.S.C 552a). Records from this system of records may be disclosed to the Department of Justice to determine whether disclosure of these records is required by the Freedom of Information Act.
2. A record from this system of records may be disclosed, as a routine use, in the course of presenting evidence to a court, magistrate, or administrative tribunal, including disclosures to opposing counsel in the course of settlement negotiations.
3. A record in this system of records may be disclosed, as a routine use, to a Member of Congress submitting a request involving an individual, to whom the record pertains, when the individual has requested assistance from the Member with respect to the subject matter of the record.
4. A record in this system of records may be disclosed, as a routine use, to a contractor of the Agency having need for the information in order to perform a contract. Recipients of information shall be required to comply with the requirements of the Privacy Act of 1974, as amended, pursuant to 5 U.S.C. 552a(m).
5. A record related to an International Application filed under the Patent Cooperation Treaty in this system of records may be disclosed, as a routine use, to the International Bureau of the World Intellectual Property Organization, pursuant to the Patent Cooperation Treaty.
6. A record in this system of records may be disclosed, as a routine use, to another federal agency for purposes of National Security review (35 U.S.C. 181) and for review pursuant to the Atomic Energy Act (42 U.S.C. 218(c)).
7. A record from this system of records may be disclosed, as a routine use, to the Administrator, General Services, or his/her designee, during an inspection of records conducted by GSA as part of that agency's responsibility to recommend improvements in records management practices and programs, under authority of 44 U.S.C. 2904 and 2906. Such disclosure shall be made in accordance with the GSA regulations governing inspection of records for this purpose, and any other relevant (i.e., GSA or Commerce) directive. Such disclosure shall not be used to make determinations about individuals.
8. A record from this system of records may be disclosed, as a routine use, to the public after either publication of the application pursuant to 35 U.S.C. 122(b) or issuance of a patent pursuant to 35 U.S.C. 151. Further, a record may be disclosed, subject to the limitations of 37 CFR 1.14, as a routine use, to the public if the record was filed in an application which became abandoned or in which the proceedings were terminated and which application is referenced by either a published application, an application open to public inspection or an issued patent.
9. A record from this system of records may be disclosed, as a routine use, to a Federal, State, or local law enforcement agency, if the USPTO becomes aware of a violation or potential violation of law or regulation.

Notice of Allowability	Application No. 14/738,083	Applicant(s) Pérez LaFuente, Carlos A.	
	Examiner SAN A HTUN	Art Unit 2643	AIA 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 interview conducted on 02/14/2018 .
   ☐ 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 14,16-18 and 22-33 renumbered as 1-16 . 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: a new ADS required as notified on 06/24/2015 .

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

5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
   ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____ .

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

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

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date _____
3. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material _____
4. ☐ Interview Summary (PTO-413), Paper No./Mail Date. _____ .
5. ☑ Examiner's Amendment/Comment
6. ☑ Examiner's Statement of Reasons for Allowance
7. ☑ Other Proposed 14/738083 .

/SAN HTUN/
Primary Examiner, Art Unit 2643

Notice of Allowance

1. This Office Action is in response to applicant's proposed claim emailed on 02/16/2018 after Final Rejection. In virtue of this communication, Claims 14, 16-18 and 22-33 are currently patentable by examiner's amendment in this application.

Examiner's Amendment

2. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given by a telephone call and an electronic mail from Mr. Buschbach, Michael (ATTNY., Reg. No.: 69,209) on 02/16/2018.

The application has been amended as follows:

14. (Currently Amended) A method associated with the use of a mobile station and ~~at least one~~ a radio communication defining device that transmits a distinctive defining signal ~~that defines a special area by its coverage~~, the method comprising: ~~the distinctive defining signal including information indicating whether or not the radio communication defining device is in a predetermined environment, the method comprising:~~

receiving and processing the distinctive defining signal in the mobile station, the distinctive defining signal at least defining a special area by one or more of: (1) a

coverage area of the distinctive defining signal; (2) a portion of the coverage area that intersects with another area of coverage of another radio communication defining device; and (3) a sum of the area of coverage and the another area of coverage, the distinctive defining signal including information indicating whether or not the radio communication defining device is in a predetermined environment; and

sending from the mobile station via [[the]]a mobile telephone network [[an]]the updating signal to one or more servers of a provider of presence related services about the mobile station's presence in the special area, the updating signal being useable by the one or more servers of the provider of presence related services to adjust an operating parameter, which comprises one or more of a tariff and a service flag, to adjust, activate, or deactivate the presence related services provided to the mobile station, and the updating signal comprising the information indicative of whether or not the radio communication defining device is located in [[a]]the predetermined environment.

15. (Cancelled)

16. (Original) The method according to claim 14, wherein the sending of the updating signal is uncorrelated to any mobile station phone call establishment, the updating signal being sent 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.

17. (Original) The method according to claim 14, 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.

18. (Original) The method according to claim 14, wherein the frequency of the updating signal is different from the frequency of the distinctive defining signal.

19-21. (Cancelled)

22. (Currently Amended) A method comprising:

wirelessly receiving, in a radio communication defining device, first information from a radio transmitting device;

the radio communication defining device using the first information to determine whether or not the radio communication defining device is in a predetermined environment; and

transmitting from the radio communication defining device to a mobile station a distinctive defining signal that at least defines a special area by one or more of: (1) [[its]] a coverage area of the distinctive defining signal; (2) a portion of the coverage area that intersects with another coverage area of another radio communication defining device; and (3) a sum of the coverage area and the another coverage area,

wherein the distinctive defining signal ~~including~~ includes second information indicating whether or not the radio communication defining device is located in a predetermined environment and the second information allowing the mobile station to generate an updating signal that enables presence related services for the mobile station to be adjusted based on one or more of tariffs and service flags generated based on the updating signal.

23. (Previously Presented) The method according to claim 22, further comprising storing in a database of the radio communication defining device identification data of the radio transmitting device.

24. (Previously Presented) The method according to claim 22, wherein the distinctive defining signal is coded.

25. (Currently Amended) A method comprising:

receiving first information in a radio communication defining device via communication with a fixed network to which the radio communication defining device is physically connected;

the radio communication defining device using the first information to determine whether or not the radio communication defining device is in a predetermined environment; and

transmitting from the radio communication defining device to a mobile station a distinctive defining signal that at least partially defines a special area by one or

more of: (1) [[its]] a coverage area of the distinctive defining signal; (2) a portion of the coverage area that intersects with another coverage area of another radio communication defining device; and (3) a sum of the coverage area and the another coverage area,

wherein the distinctive defining signal ~~including~~ includes second information indicating whether or not the radio communication defining device is located in a predetermined environment and the second information allowing the mobile station to generate an updating signal that enables presence related services for the mobile station to be adjusted based on one or more of tariffs and service flags generated based on the updating signal.

26. (Previously Presented) The method according to claim 25, wherein the fixed network is an embedded system in a car.

27. (Previously Presented) The method according to claim 25, further comprising storing in a memory of the radio communication defining device one or more parameters useable to authenticate the radio communication defining device in the fixed network.

28. (New) The method according to claim 14, wherein the predetermined environment comprises one or more of: (1) one or more specific geographic locations; (2) a physical environment; (3) an environment defined by an operator of the mobile telephone network; and (4) an area defined by a fixed network.

29. (New) The method according to claim 14, wherein the distinctive defining signal comprises a signal with a frequency that is outside a frequency range allocated for the mobile telephone network.

30. (New) The method according to claim 22, wherein the predetermined environment comprises one or more of: (1) one or more specific geographic locations; (2) a physical environment; (3) an environment defined by an operator of a mobile telephone network associated with the mobile station; and (4) an area defined by a fixed network.

31. (New) The method according to claim 22, wherein the distinctive defining signal comprises a signal with a frequency that is outside a frequency range allocated for a mobile telephone network associated with the mobile station.

32. (New) The method according to claim 25, wherein the predetermined environment comprises one or more of: (1) one or more specific geographic locations; (2) a physical environment; (3) an environment defined by an operator of a mobile telephone network associated with the mobile station; and (4) an area defined by the fixed network.

33. (New) The method according to claim 25, wherein the distinctive defining signal comprises a signal with a frequency that is outside a frequency range allocated for a mobile telephone network associated with the mobile station.

End of Amendment.

Allowable Subject Matter

3. Claims 14, 16-18 and 22-33 are allowed and renumbered as 1-16.

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

the prior art of record fails to anticipate or render the claimed limitations obvious, singly or in combination, particularly, as a whole, to update the available service based on the signal received in a special area specified in the claimed invention.

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

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to SAN A HTUN whose telephone number is (571)270-3190. The examiner can normally be reached on Monday - Thursday 7 AM - 5 PM.

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

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jinsong Hu can be reached on 5712723965. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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

/SAN HTUN/

Primary Examiner, Art Unit 2643

Search Notes	Application/Control No.	Applicant(s)/Patent Under Reexamination
	14/738,083	Pérez LaFuente, Carlos A.
	Examiner	Art Unit
	SAN A HTUN	2643

CPC - Searched*		
Symbol	Date	Examiner
H04W4/00-206.H04W8/$.H04W12/$.H04W16/$.H04W28/$.H04W36/$. H04W48/$.H04W60/$.H04W64/$.H04W72/$.H04W74/$.H04M1/7253. H04B5/00. H04B3/$.H04B2203/$.	04/21/2016	/S.H./
H04W4/00-206.H04W8/$.H04W12/$.H04W16/$.H04W28/$.H04W36/$. H04W48/$.H04W60/$.H04W64/$.H04W72/$.H04W74/$. H04M1/7253. H04B5/00.H04B3/$.H04B2203/$.	02/16/2018	/S.H./

CPC Combination Sets - Searched*		
Symbol	Date	Examiner

US Classification - Searched*			
Class	Subclass	Date	Examiner
455	456.4, 555, 408, 432.2, 406, 458, 414.1, 446, 456.1, 433	8/10/2015	jc
455	456.4, 555, 408, 432.2, 406, 458, 414.1, 446, 456.1, 433	1/20/2016	jc

* See search history printout included with this form or the SEARCH NOTES box below to determine the scope of the search.

/SAN HTUN/ Primary Examiner, Art Unit 2643	

Search Notes	Application/Control No.	Applicant(s)/Patent Under Reexamination
	14/738,083	Pérez LaFuente, Carlos A.
	Examiner	**Art Unit**
	SAN A HTUN	2643

Search Notes		
Search Notes	**Date**	**Examiner**
inventor search and text search on East for transmitting device location monitor wireless fixed location	8/10/2015	jc
update inventor search and text search on East	1/20/2016	jc
Searched in EAST attached.	04/21/2016	/S.H./
Conducted inventor and assignee search in EAST.	04/21/2016	/S.H./
Consulted with Danieal Swerdlow (QAS) for 112, sencond and enablement.	04/25/2016	/S.H./
Searched updated in EAST.	08/19/2016	/S.H./
Updated search in EAST.	03/6-7/2017	/S.H./
Updated search in EAST.	10/3/2017	/S.H./
Consulted with John Peng (QAS) for 101 rejection.	07/05/2017	/S.H./
Verified priority for PCT & EP via PASM.	10/14/2017	/S.H./
Updated search in EAST.	02/16/2018	/S.H./
Updated interference search in EAST.	02/16/2018	/S.H./

Interference Search			
US Class/CPC Symbol	**US Subclass/CPC Group**	**Date**	**Examiner**
H04W	4/00-206.8/$.12/$.16/$.28/$.36/$.48/$.60/$.64/$.72/$.74/$.	02/16/2018	/S.H./
H04M	1/7253.	02/16/2018	/S.H./
H04B	5/00.3/$.2203/$.	02/16/2018	/S.H./

/SAN HTUN/ Primary Examiner, Art Unit 2643	

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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
14/738,083	06/12/2015	Carlos A. Pérez LaFuente	0572.0001C5	4555

27896 7590 02/20/2018

EDELL, SHAPIRO & FINNAN, LLC
9801 Washingtonian Blvd.
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EXAMINER
HTUN, SAN A

ART UNIT	PAPER NUMBER
2643	

NOTIFICATION DATE	DELIVERY MODE
02/20/2018	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

Applicant-Initiated Interview Summary	**Application No.** 14/738,083	**Applicant(s)** Pérez LaFuente, Carlos A.	
	Examiner SAN A HTUN	**Art Unit** 2643	**AIA Status** No

All participants (applicant, applicants representative, PTO personnel):

(1) SAN A. HTUN. (3) _____.

(2) ANDREW HABERMAN. (4) _____.

Date of Interview: 14 February 2018.

Type: ☑ Telephonic ☐ Video Conference
☐ Personal [copy given to: ☐ applicant ☐ applicant's representative]

Exhibit shown or demonstration conducted: ☐ Yes ☑ No.
If Yes, brief description: _____.

Issues Discussed ☑101 ☐112 ☐102 ☑103 ☐Others
(For each of the checked box(es) above, please describe below the issue and detailed description of the discussion)

Claim(s) discussed: 14,22 and 25.

Identification of prior art discussed: prior art of record.

Substance of Interview
(For each issue discussed, provide a detailed description and indicate if agreement was reached. Some topics may include: identification or clarification of a reference or a portion thereof, claim interpretation, proposed amendments, arguments of any applied references etc...)

Mr. Haberman (Attny., Reg.: 69,209) presented the proposed amendment and argued if the proposed claims overcame 101 and 103 rejections. Examiner responded that as proposed, claims 22 and 25 could have overcome 101 rejections, but claim 14 would not overcome 103 rejection or would not put the application into an allowable condition. In addition, examiner suggested that if independent claims were incorporated by further reciting a special area in light of par. 00104, and signal for updating or activating or deactivating in light of par. 0085-0086, the claimed invention, as a whole, might be holding a patentable weight. Mr. Haberman acknowledged to present the proposal to applicant for consideration. No agreement towards allowability was reached at this time.

Applicant recordation instructions: The formal written reply to the last Office action must include the substance of the interview. (See MPEP section 713.04). If a reply to the last Office action has already been filed, applicant is given a non-extendable period of the longer of one month or thirty days from this interview date, or the mailing date of this interview summary form, whichever is later, to file a statement of the substance of the interview

Examiner recordation instructions: Examiners must summarize the substance of any interview of record. A complete and proper recordation of the substance of an interview should include the items listed in MPEP 713.04 for complete and proper recordation including the identification of the general thrust of each argument or issue discussed, a general indication of any other pertinent matters discussed regarding patentability and the general results or outcome of the interview, to include an indication as to whether or not agreement was reached on the issues raised.

☑ Attachment

/SAN HTUN/ Primary Examiner, Art Unit 2643	

Summary of Record of Interview Requirements

Manual of Patent Examining Procedure (MPEP), Section 713.04, Substance of Interview Must be Made of Record
A complete written statement as to the substance of any face-to-face, video conference, or telephone interview with regard to an application must be made of record in the application whether or not an agreement with the examiner was reached at the interview.

Title 37 Code of Federal Regulations (CFR) 1.133 Interviews
Paragraph (b)

In every instance where reconsideration is requested in view of an interview with an examiner, a complete written statement of the reasons presented at the interview as warranting favorable action must be filed by the applicant. An interview does not remove the necessity for reply to Office action as specified in §§ 1.111, 1.135. (35 U.S.C. 132)

37 CFR §1.2 Business to be transacted in writing.
All business with the Patent or Trademark Office should be transacted in writing. The personal attendance of applicants or their attorneys or agents at the Patent and Trademark Office is unnecessary. The action of the Patent and Trademark Office will be based exclusively on the written record in the Office. No attention will be paid to any alleged oral promise, stipulation, or understanding in relation to which there is disagreement or doubt.

The action of the Patent and Trademark Office cannot be based exclusively on the written record in the Office if that record is itself incomplete through the failure to record the substance of interviews.

It is the responsibility of the applicant or the attorney or agent to make the substance of an interview of record in the application file, unless the examiner indicates he or she will do so. It is the examiners responsibility to see that such a record is made and to correct material inaccuracies which bear directly on the question of patentability.

Examiners must complete an Interview Summary Form for each interview held where a matter of substance has been discussed during the interview by checking the appropriate boxes and filling in the blanks. Discussions regarding only procedural matters, directed solely to restriction requirements for which interview recordation is otherwise provided for in Section 812.01 of the Manual of Patent Examining Procedure, or pointing out typographical errors or unreadable script in Office actions or the like, are excluded from the interview recordation procedures below. Where the substance of an interview is completely recorded in an Examiners Amendment, no separate Interview Summary Record is required.

The Interview Summary Form shall be given an appropriate Paper No., placed in the right hand portion of the file, and listed on the "Contents" section of the file wrapper. In a personal interview, a duplicate of the Form is given to the applicant (or attorney or agent) at the conclusion of the interview. In the case of a telephone or video-conference interview, the copy is mailed to the applicants correspondence address either with or prior to the next official communication. If additional correspondence from the examiner is not likely before an allowance or if other circumstances dictate, the Form should be mailed promptly after the interview rather than with the next official communication.

The Form provides for recordation of the following information:
- Application Number (Series Code and Serial Number)
- Name of applicant
- Name of examiner
- Date of interview
- Type of interview (telephonic, video-conference, or personal)
- Name of participant(s) (applicant, attorney or agent, examiner, other PTO personnel, etc.)
- An indication whether or not an exhibit was shown or a demonstration conducted
- An identification of the specific prior art discussed
- An indication whether an agreement was reached and if so, a description of the general nature of the agreement (may be by attachment of a copy of amendments or claims agreed as being allowable). Note: Agreement as to allowability is tentative and does not restrict further action by the examiner to the contrary.
- The signature of the examiner who conducted the interview (if Form is not an attachment to a signed Office action)

It is desirable that the examiner orally remind the applicant of his or her obligation to record the substance of the interview of each case. It should be noted, however, that the Interview Summary Form will not normally be considered a complete and proper recordation of the interview unless it includes, or is supplemented by the applicant or the examiner to include, all of the applicable items required below concerning the substance of the interview.

A complete and proper recordation of the substance of any interview should include at least the following applicable items:
1) A brief description of the nature of any exhibit shown or any demonstration conducted,-
2) an identification of the claims discussed,
3) an identification of the specific prior art discussed,
4) an identification of the principal proposed amendments of a substantive nature discussed, unless these are already described on the Interview Summary Form completed by the Examiner,
5) a brief identification of the general thrust of the principal arguments presented to the examiner,
(The identification of arguments need not be lengthy or elaborate. A verbatim or highly detailed description of the arguments is not required. The identification of the arguments is sufficient if the general nature or thrust of the principal arguments made to the examiner can be understood in the context of the application file. Of course, the applicant may desire to emphasize and fully describe those arguments which he or she feels were or might be persuasive to the examiner.)
6) a general indication of any other pertinent matters discussed, and
7) if appropriate, the general results or outcome of the interview unless already described in the Interview Summary Form completed by the examiner.

Examiners are expected to carefully review the applicants record of the substance of an interview. If the record is not complete and accurate, the examiner will give the applicant an extendable one month time period to correct the record.

Examiner to Check for Accuracy

If the claims are allowable for other reasons of record, the examiner should send a letter setting forth the examiners version of the statement attributed to him or her. If the record is complete and accurate, the examiner should place the indication, Interview Record OK on the paper recording the substance of the interview along with the date and the examiners initials.

Application No.	:	14/738,083
First Named Inventor	:	Carlos A. Pérez LaFuente
Confirmation No.	:	4555
Filed	:	June 12, 2015
TC/A.U.	:	2643
Examiner	:	HTUN, SAN A.
Customer No.	:	27896
Docket No.	:	0572.0001C5
Title	:	Method and System for Monitoring a Mobile Station Presence in a Special Area

EXAMINER INTERVIEW AGENDA

Date / Time

Wednesday, February 14, 2018, at 2:00PM EST

Outline of Discussion Points

1) Discuss the outstanding 101 rejections of Claims 22 and 25 (but not 14)

- Applicants submit that that independent claims 22 and 25 are not directed to an abstract idea at least because they each recite "transmitting from the radio communication defining device to a mobile station a distinctive defining signal."
    - As was explained in detail in Applicant's Remarks from July 7, 2017, transmitting a particular type of signal is not an abstract idea.
- However, to expedite prosecution, if the Examiner provides a suggestion as to which language from independent claim 14 should be incorporated into claims 22 and 25, Applicant is willing to amend claims 22 and 25 to recite subject matter similar to the language in independent claim 14 to overcome the rejection.

2) Discuss the proposed Amendments to the independent claims with regards to the outstanding 103 Rejection.

- Generally, the present application provides embodiments that provide flexibility needed to activate a special way of operating a mobile station in a special area. *See* ¶ [0009]. This flexibility is achieved because new data (e.g., ID codes of mobile station) need not be introduced to a radio communication defining device; instead, a mobile station determines that it is in a special area and sends an updating signal based on the determining. *See id; see also* ¶ [0011].
- To highlight this feature, proposed amended independent claim 14 now recites, in part, that the mobile station determines an updating signal to send "based on the distinctive defining signal and independent of other information stored at the radio communication defining device"
    - By way of the proposed amendments, Claims 22 and 25 include similar features

- By comparison, the cited art generally renders decisions at the alleged radio communication defining devices.
    - For example, in *Soomro*, "an AP collects regulatory information about the channel it is operating in and about the channel in which other APs are

operating." ¶ [0029]. The AP then transmits the most recent version of this information to an STA so that an STA can choose an AP.

- Meanwhile, in *Hogan,* "each time the mobile terminal attempts to perform a location area update in a given location area, the present invention sends the mobile terminal the forbidden list at the first location update . . . ." ¶ [0044].
- Finally, in *Chitrapu*, the P&S management server "has knowledge of a user's current presence and situation information," so that the server can maintain information on a variety of devices and make centralized decisions. ¶ [0018]

Listing of the Claims:

14. (Proposed Amendment) A method associated with the use of a mobile station and at least one radio communication defining device that transmits a distinctive defining signal that defines a special area by its coverage, the distinctive defining signal including information indicating whether or not the radio communication defining device is in a predetermined environment, the method comprising:

receiving and processing the distinctive defining signal in the mobile station; [[and]]

determining at the mobile station, based on the distinctive defining signal and independent of other information stored at the radio communication defining device, an updating signal to send to one or more servers of a provider of presence related services about the mobile station's presence in the special area; and

sending from the mobile station via the mobile telephone network [[an]]the updating signal to the one or more servers of [[a]]the provider of presence related services ~~about the mobile station's presence in the special area~~, the updating signal being useable by the one or more servers of the provider of presence related services to adjust an operating parameter of, to activate, or to deactivate the presence related services provided to the mobile station, and the updating signal comprising the information indicative of whether or not the radio communication defining device is located in a predetermined environment.

15. (Cancelled)

16. (Original) The method according to claim 14, wherein the sending of the updating signal is uncorrelated to any mobile station phone call establishment, the updating signal being sent 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.

17. (Original) The method according to claim 14, 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.

18. (Original) The method according to claim 14, wherein the frequency of the updating signal is different from the frequency of the distinctive defining signal.

19-21. (Cancelled)

22. (Proposed Amendment) A method comprising:

wirelessly receiving, in a radio communication defining device, first information from a radio transmitting device;

the radio communication defining device using the first information to determine ~~whether or not~~ that the radio communication defining device is in a predetermined environment; and

transmitting from the radio communication defining device to a mobile station a distinctive defining signal that defines a special area by its coverage, the distinctive defining signal including second information indicating whether or not the radio communication defining device is located in a predetermined environment and the second information allowing the mobile station to generate, based on the distinctive defining signal and independent of other information stored at the radio communication defining device, an updating signal that enables presence related services for the mobile station to be adjusted.

23. (Previously Presented) The method according to claim 22, further comprising storing in a database of the radio communication defining device identification data of the radio transmitting device.

24. (Previously Presented) The method according to claim 22, wherein the distinctive defining signal is coded.

25. (Proposed Amendment) A method comprising:

receiving first information in a radio communication defining device via communication with a fixed network to which the radio communication defining device is physically connected;

the radio communication defining device using the first information to determine whether or not the radio communication defining device is in a predetermined environment; and

transmitting from the radio communication defining device to a mobile station a distinctive defining signal that defines a special area by its coverage, the distinctive defining signal including second information indicating whether or not the radio communication defining device is located in a predetermined environment and the second information allowing the mobile station to generate, based on the distinctive defining signal and independent of other information stored at the radio communication defining device, an updating signal that enables presence related services for the mobile station to be adjusted.

26. (Previously Presented) The method according to claim 25, wherein the fixed network is an embedded system in a car.

27. (Previously Presented) The method according to claim 25, further comprising storing in a memory of the radio communication defining device one or more parameters useable to authenticate the radio communication defining device in the fixed network.

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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
14/738,083	06/12/2015	Carlos A. Pérez LaFuente	0572.0001C5	4555

27896 7590 10/18/2017

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EXAMINER
HTUN, SAN A

ART UNIT	PAPER NUMBER
2643	

NOTIFICATION DATE	DELIVERY MODE
10/18/2017	ELECTRONIC

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

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

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

epatent@usiplaw.com

Office Action Summary	Application No. 14/738,083	Applicant(s) PÉREZ LAFUENTE, CARLOS A.	
	Examiner SAN HTUN	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 *07/05/2017*.

☐ 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) *14,16-18 and 22-27* 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) *14,16-18 and 22-27* 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. This Office Action is in response to applicant's communication filed on 07/05/2017. In virtue of this communication, claims 14, 16-18 and 22-27 are currently pending in this Office Action. Claims 22-27 are newly added.

Response to Arguments

2. In Remarks, on pg. 6-11, applicant presented the arguments to overcome 35 U.S.C. 112 rejection, previously given to only claims 1 & 19-21. Since claims 1 and 19-21 are currently cancelled, and thus, no reply is needed regarding to 35 U.S.C. 112 rejection.

Regarding to 35 U.S.C. 101 rejection, the rejection given to claim 14 is hereby withdrawn due to amendment to the claim. However, newly added claims 22 and 25 are rejected under 35 U.S.C. 101 as set forth below.

Priority

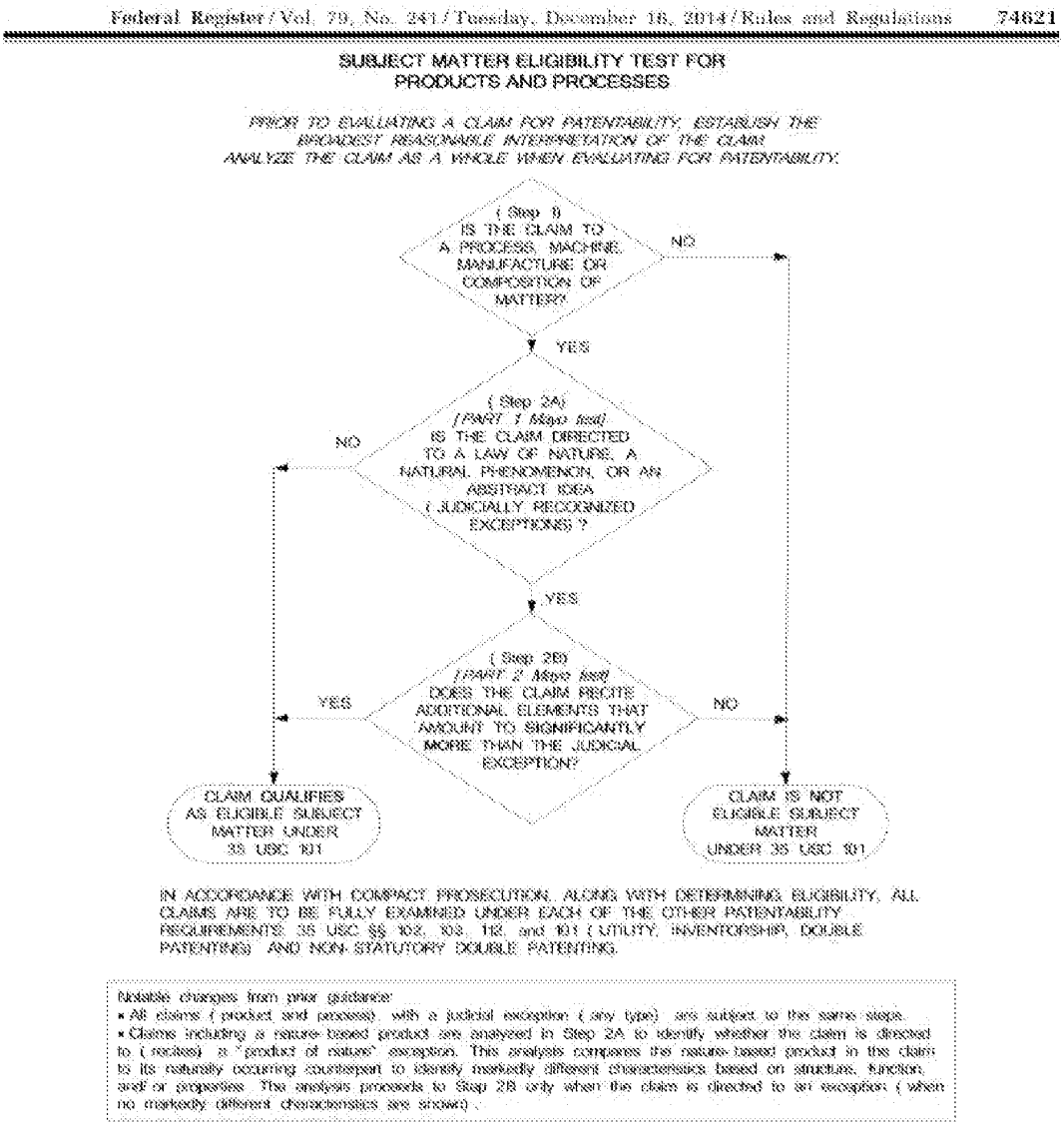
3. A petition and a corrected ADS are required to get a benefit of PCT and EP priority. Please follow the instruction or contact the number in Improper Priority Response Letter mailed out to applicant on 06/24/2015.

Claim Rejections - 35 USC § 101

4. 35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

5. Claims 22 and 25 are rejected under 35 U.S.C. 101 because the claimed invention is directed to an abstract idea (a judicial exception, i.e., a law of nature, or a natural phenomenon) without significantly more.



As illustrated in the above flow chart, at Step 2A, claims are analyzed to determine whether it is directed to a judicial exception. Claims recite receiving

information to determine whether or not in a predetermined environment, i.e., a location, and transmitting a location information signal to define a special area, i.e., the location. However, it is important to note that claims do not specifically define what involved in receiving, transmitting, decoding and encoding a location information into a signal. Furthermore, claims fail to particularly point out what represents a predetermined environment and a special area. For instance, even dialing signal including country code and area code could be reasonably interpreted as first and second information for describing environment and a special area such that country code is an environment and area code is a special area. Further example could be a signal including Wi-Fi name, i.e., BSSID: USPTO GUEST Knox meaning Knox Building in USPTO Campus in VA. Therefore, claim is directed to an abstract idea i.e., from Step 2A to Step 2B in the chart.

Next, Step 2B requires to analyze the claim as a whole whether any element or combination of elements, is sufficient to ensure that the claim amounts significantly more than the exception. Claims 22 and 25 recite the intrinsic features of location information for receiving and transmitting as explained above. Claim does not define what involved or required in receiving and transmitting location information to determine whether or not in a predetermined environment and to define a special area. Accordingly, the additional limitations in claims 22 and 25 do not amount to claims as a whole that is significantly more than the abstract idea [Step 2B yielding NO]. Thus claims are not patent eligible.

See MPEP 2106(I) or Federal Register/Vol. 79, No. 241/ Tuesday, December 16, 2014/ Rules and Regulations.

Claim Rejections - 35 USC § 103

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

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

7. 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 pre-AIA 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

8. Claims 14 and 16-18 are rejected under pre-AIA 35 U.S.C. 103(a) as being unpatentable over **Soomro** et al. Pub. No.: US 2008/0095125 A1 in view of **Hogan** et al. Pub. No.: US 2003/0040313 A1 and **Chitrapu** et al. Pub. No.: US 2005/0096026 A1.

Claim 14

Soomro discloses a method associated with the use of a mobile station (26 of fig. 1) and at least one radio communication defining device (24 of fig. 1) that transmits a

distinctive defining signal that defines a special area by its coverage (AP transmits a frame with regulatory information in 64 of fig. 3 and par. 0059), the distinctive defining signal including information indicating whether or not the radio communication defining device is in a predetermined environment (see fig. 5-6; country string 41 in fig. 5 and 43 of fig. 5 in fig. 6), the method comprising:

receiving and processing the distinctive defining signal in the mobile station (72-73 in fig. 4, par. 0030).

Although **Soomro** does not disclose: “sending from the mobile station via the mobile telephone network an updating signal to one or more servers of a provider of presence related services about the mobile station's presence in the special area, the updating signal useable by the one or more servers of the provider of presence related services to adjust an operating parameter to activate or deactivate services provided to the mobile station, the updating signal comprising the information indicative of whether or not the radio communication defining device is located in a predetermined environment”, the claim limitations are considered obvious by the following rationales.

Firstly, in particular, **Hogan** teaches sending from the mobile station via the mobile telephone network an updating signal to one or more servers of a provider of presence related services about the mobile station's presence in the special area (location updating request from UE to core network node in fig. 9-13 and see par. 0044), and the updating signal comprising the information indicative of whether or not the radio communication defining device is located in a predetermined environment (location updating request from UE to core network node in fig. 9-13; see par. 0050; S1 in fig. 3;

as claim does not define what involved or required in indication, any field in fig. 13C would render the claim limitation obvious).

Therefore, it would have been obvious to one of ordinary skill in the art, at the time of this invention was made, to modify the frame independent of the regular beacons of **Soomro** by providing location area updating as taught in **Hogan**. Such a modification would have facilitated location area updating in situations where a radio access network is shared by two or more operators to optimize the location cost and the paging cost as suggested in par. 0002 & 0007 of **Hogan**.

Secondly, to consider the obviousness of the claim limitation "the updating signal useable by the one or more servers of the provider of presence related services to adjust an operating parameter to activate or deactivate services provided to the mobile station", initially, **Hogan** discusses that keeping the accurate location of UE is to adjusting the parameters for paging, i.e., to notify the incoming calls (par. 0035). Thus, location area updating in fig. 9-13 of **Hogan** would have rendered the claim limitation obvious. To advance the prosecution, the further evidence is applied herein. In particular, **Chitrapu** discloses the updating signal useable by the one or more servers (P & S server 112 in fig. 1) of the provider of presence related services to adjust an operating parameter to activate or deactivate services provided to the mobile station (310-312 in fig. 3; see par. 0021, 0027 & 0030).

Therefore, it would have been obvious to one of ordinary skill in the art, at the time of this invention was made, to modify the frame independent of the regular beacons of **Soomro** in view of **Hogan** by providing presence and situation management

as taught in **Chitrapu**. Such a modification would have automatically adjusted the operating parameters of a wireless device based upon its presence and situation to avoid the dangerous distractions and ringing at inappropriate times as suggested in par. 0002 & 0005 of **Chitrapu**.

Claim 16

Soomro, in view of **Hogan** and **Chitrapu**, discloses the method according to claim 14, wherein the sending of the updating signal is uncorrelated to any mobile station phone call establishment, the updating signal being sent at least one of (i) periodically, (ii) at times recent to when the mobile station enters into or exists from the special area (**Soomro**, 72 of fig. 4; **Hogan**, location area updating in fig. 9-12; **Chitrapu**, 412 of fig. 4), and (iii) when the mobile station remains in the special area (**Soomro**, 72 of fig. 4; **Hogan**, location area updating in fig. 9-12; **Chitrapu**,412 of fig. 4).

Claim 17

Soomro, in view of **Hogan** and **Chitrapu**, discloses the method according to claim 14, 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 (**Hogan**, updating location area in fig. 9-12; see fig. 12 and par. 0047 for indicating flag with false or 0).

Claim 18

Soomro, in view of **Hogan** and **Chitrapu**, discloses the method according to claim 14, wherein the frequency of the updating signal is different from the frequency of the distinctive defining signal (**Soomro**, depicted in fig. 6 for detecting radar in par. 0026-0031; radar beacon frequency and broadcasting frequency are different from the frequency the user device or the mobile device uses to communicate to the network or base station; accordingly, claim limitation is rendered obvious).

9. Claims 22-25 and 27 are rejected under pre-AIA 35 U.S.C. 103(a) as being unpatentable over **Soomro** in view of **Hogan**.

Claim 22

Soomro discloses a method comprising:

wirelessly receiving in a radio communication defining device (AP 24 in fig. 4) first information from a radio transmitting device (62 in fig. 3 and par. 0029; other APs as explained in par. 0029 and radar bit indicated in fig. 6 could be reasonably interpreted as a radio transmitting device); and

transmitting from the radio communication defining device to a mobile station a distinctive defining signal that defines a special area by its coverage (64 of fig. 3; 41 or 43 of fig. 5), the distinctive defining signal including second information indicating whether or not the radio communication defining device is located in a predetermined environment (504 of fig. 6; country information bit 81 in fig. 8 and 92 in fig. 9).

Although **Soomro** does not explicitly show: “the radio communication defining device using the first information to determine whether or not the radio communication defining device is in a predetermined environment”, the claim limitation is considered obvious by the following rationales.

In fact, **Soomro** discusses to create frame including country information and radar presence information by scanning channels using regulatory information (par. 0029 and fig. 5-9). What is more, claim fails to specifically define what included or involved in determining whether or not the radio communication defining device is in a predetermined environment. Accordingly, scanning by AP as explained in par. 0029 of **Soomro** would have at least rendered the addressing claim limitation obvious. However, further evidence is applied herein to advance the prosecution. In particular, **Hogan** teaches that NodeB or RNC determines if its location identifier is in forbidden location areas or restricted location identifiers for UE (par. 0043, 0046 & 0047; see par. 0035 an fig. 2 & 5).

Therefore, it would have been obvious to one of ordinary skill in the art, at the time of this invention was made, to modify the frame independent of the regular beacons of **Soomro** by providing location area updating as taught in **Hogan**. Such a modification would have facilitated location area updating in situations where a radio access network is shared by two or more operators to optimize the location cost and the paging cost as suggested in par. 0002 & 0007 of **Hogan**.

the radio communication defining device using the first information to determine whether or not the radio communication defining device is in a predetermined environment;

Claim 23

Soomro, in view of **Hogan**, discloses the method according to claim 22, further comprising storing in a database of the radio communication defining device identification data of the radio transmitting device (**Hogan**, par. 0033, a core network node crates a list of forbidden location areas).

Claim 24

Soomro, in view of **Hogan**, discloses the method according to claim 22, wherein the distinctive defining signal is coded (**Soomro**, fig. 5-9; **Hogan**, par. 0037).

Claim 25

Claim 25 recites the similar limitations of claim 22 but broadens the scope of claim 22 by omitting wirelessly. Accordingly, the rationales applied to reject scope of claim 22 would render the obviousness of the claim limitations in claims 25. See rejection of claim 22 set forth above.

Claim 27

Soomro, in view of **Hogan**, discloses the method according to claim 25, further comprising storing in a memory of the radio communication defining device one or more

parameters useable to authenticate the radio communication defining device in the fixed network (**Hogan**, IMSI and forbidden list in par. 0033-0037).

10. Claim 26 is rejected under pre-AIA 35 U.S.C. 103(a) as being unpatentable over **Soomro** in view of **Hogan** and **Howell** et al. Pub. No. US 2002/015436 A1.

Claim 26

Although **Soomro**, in view of **Hogan**, does not disclose "the method according to claim 25, wherein the fixed network is an embedded system in a car", claim 26 is considered obvious by the rationales found in **Howell**.

In fact, a wireless system in a car could be widely found as mobile router or mobile base station used by a wireless provider or TV broadcasting companies. In particular, **Howell** teaches an embedded system in a car (fig. 1B).

Therefore, it would have been obvious to one of ordinary skill in the art, at the time of this invention was made, to modify the frame independent of the regular beacons of **Soomro** in view of **Hogan** by providing a telematics system in a car as taught in **Howell**. Such a modification would have included telematics system in a car to provide location and other information of a cell phone to a base station upon occurrence of certain conditions without being polled by the base station as suggested in par. 0003-0004 of **Howell**.

Conclusion

11. 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

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to SAN HTUN whose telephone number is (571)270-3190. The examiner can normally be reached on MON-THU 7:00-5:30.

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

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

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

/SAN HTUN/

Primary Examiner, Art Unit 2643

Notice of References Cited	Application/Control No. 14/738,083	Applicant(s)/Patent Under Reexamination PÉREZ LAFUENTE, CARLOS A	
	Examiner SAN HTUN	Art Unit 2643	Page 1 of 1

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*	A	US-2003/0040313 A1	02-2003	Hogan, William Damian	H04W60/00	455/435.1
*	B	US-2005/0096026 A1	05-2005	Chitrapu, Prabhakar R.	H04M3/436	455/418
*	C	US-2008/0095125 A1	04-2008	Soomro; Amjad	H04W48/12	370/338
	D	US-				
	E	US-				
	F	US-				
	G	US-				
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	I	US-				
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NON-PATENT DOCUMENTS

*		Include as applicable: Author, Title Date, Publisher, Edition or Volume, Pertinent Pages)
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*A copy of this reference is not being furnished with this Office action. (See MPEP § 707.05(a).)
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PTO/SB/08a (01-10)
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INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Not for submission under 37 CFR 1.99)

Application Number	14738083
Filing Date	2015-06-12
First Named Inventor	Carlos A. Perez Lafuente
Art Unit	2643
Examiner Name	San A. Htun
Attorney Docket Number	0572.0001C5

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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
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/S.H./	1	20050054291	A1	2005-03-10	PARK	
/S.H./	2	20060072760	A1	2006-04-06	GATES	

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/S.H./	1	0001171	WO	A1	2000-01-06	MOTOROLA INC.		

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Receipt date: 06/06/2017	Application Number	14738083
INFORMATION DISCLOSURE STATEMENT BY APPLICANT	Filing Date	2015-06-12
(**Not for submission under 37 CFR 1.99**)	First Named Inventor	Carlos A. Perez Lafuente
	Art Unit	2643 14/738,083 - GAU: 2643
	Examiner Name	San A. Htun
	Attorney Docket Number	0572.0001C5

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]
/S.H./	1	Office Action in corresponding U.S. Patent Application No. 14/738,256, mailed on March 6, 2017.	

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Examiner Signature	/SAN HTUN/	Date Considered	10/03/2017

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[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.

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14/738,083	06/12/2015	455	2643	0572.0001C5

APPLICANTS
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**** CONTINUING DATA ************************
This application is a CON of 14/561,426 12/05/2014 PAT 9119030
which is a CON of 14/315,703 06/26/2014 PAT 8934922
which is a CON of 14/250,517 04/11/2014 PAT 9042910
which is a CON of 12/294,641 04/12/2010 PAT 8738040

**** FOREIGN APPLICATIONS ************************
EUROPEAN PATENT OFFICE (EPO) PCT/EP2007/052939 03/27/2007

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06/22/2015

Foreign Priority claimed ☑ Yes ☐ No 35 USC 119(a-d) conditions met ☐ Yes ☑ No Verified and Acknowledged /SAN A HTUN/ Examiner's Signature	☐ Met after Allowance Initials	STATE OR COUNTRY	SHEETS DRAWINGS	TOTAL CLAIMS	INDEPENDENT CLAIMS
		SPAIN	7	18	2

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UNITED STATES

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

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

Index of Claims	Application/Control No.	Applicant(s)/Patent Under Reexamination
	14738083	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	08/10/2015	01/20/2016	04/30/2016	08/19/2016	03/07/2017	10/14/2017			
	1	✓	✓	✓	✓	✓	-			
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	26						✓			
	27						✓			

EAST Search History

EAST Search History (Prior Art)

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
S1	34	("6529491" | "20080220782" | "20080102896" | "20080132225" | "20060084443" | "20080280604" | "20080085703" | "20070037577" | "20020032032" | "6434389" | "20090047968" | "20080207195" | "20110269460" | "20070171871").PN.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2016/04/21 17:18
S2	72	("20050075124" | "20100167725" | "6516190" | "7634255" | "6920317" | "6836653" | "6526267" | "7266366" | "20030092450" | "20050148297" | "20080004045" | "20080261604" | "6122520" | "7778652" | "7848765" | "6516193" | "6552648" | "5642303" | "6671506" | "7171189" | "6920317" | "20030176197" | "6526267" | "20020094801" | "6826414" | "6920317" | "6625442" | "8723664" | "6826414" | "20040192267" | "20040224682" | "6334052" | "6516193" | "6785536" | "7142869" | "20020094801" | "6516193" | "6826414").PN.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2016/04/21 17:24
S3	2	"7548731".pn.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2016/04/21 17:41
S4	2	US-20100317371-A1.did.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2016/04/21 17:44
S5	2	("20150281895").PN.	US-PGPUB; USPAT; USOCR; DERWENT	ADJ	ON	2016/04/21 17:51
S6	0	(("PÃ‰ REZ") near3 ("LAFUENTE") near3 ("Carlos")).INV.	EPO; JPO; DERWENT	ADJ	ON	2016/04/21 17:51
S7	0	(("PÃ‰ REZ") near3 ("LAFUENTE") near3 ("Carlos")).INV.	US-PGPUB; USPAT; USOCR	ADJ	ON	2016/04/21 17:51
S8	3	"7324824".pn.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO;	ADJ	ON	2016/04/21 17:54

			DERWENT; IBM_TDB			
S9	0	(AFIRMA near CONSULTING near TECHNOLOGIES).as.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2016/04/21 17:56
S10	16	(AFIRMA near CONSULTING near TECHNOLOGIES).as. or afirma.as.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2016/04/21 17:56
S11	691018	(H04W4/00-206 or H04W8/$ or H04W12/$ or H04W16/$ or H04W28/$ or H04W36/$ or H04W48/$ or H04W60/$ or H04W64/$ or H04W72/$ or H04W74/$ or H04M1/7253 or H04B5/00 or H04B3/$ or H04B2203/$).CPC.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2016/04/21 18:03
S12	11923	(location or area or boundary or position or zone or region or geographic$3) and (special or private or home or specific or environment) and (wirless or mobile or cell$4) and (wi?fi or bluetooth or wlan or nfc) and (network near7 (identity or code or id or identif$7)) and (connect$3 or status or communicat$3) and (power? line or (power near3 line) or plc or adsl or pstn) and (detect$3 or measur$5 or report$3 or monitor$3 or track$3) and ((identif$7 or location or position) near7 (code or id or identity or identif$7)) and (bs or (base station) or (access point) or ap or enb or hnb) and GSM	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2016/04/21 18:09
S13	4373	S11 and S12	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2016/04/21 18:11
S14	545	S13 and (power line)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2016/04/21 18:11
S15	540	S14 and (server or controller)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2016/04/21 18:11
S16	456	S15 and database	US-PGPUB; USPAT;	ADJ	ON	2016/04/21 18:12

			USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB			
S17	2	"7756485".pn.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2016/04/21 18:20
S18	2	("20080242299").PN.	US-PGPUB; USPAT; USOCR; DERWENT	ADJ	ON	2016/04/21 18:22
S19	44	("20060234762" | "7133669" | "7756485" | "20030119454" | "20070042777" | "5903832" | "7245913" | "20040076177" | "20040215845" | "20070255797" | "20050079863" | "20040266426" | "20050152304" | "20070067734" | "6438390" | "20030119454" | "20080113692" | "20040076177" | "6546263" | "7072468").PN.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2016/04/21 18:23
S20	2	"7466986".pn.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2016/04/21 18:32
S21	4	"8014776".pn.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2016/04/21 18:34
S22	2	("20140295813").PN.	US-PGPUB; USPAT; USOCR; DERWENT	ADJ	ON	2016/04/25 13:29
S23	21	("20100020710" | "20110059744" | "20110086652" | "20100291929" | "20100317351" | "20140073304" | "20130040640" | "20110274097").PN.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2016/04/25 13:29
S24	2	us-20080242298-a1.did.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2016/04/25 17:35
S25	2	US-20090061914-A1.did.	US-PGPUB; USPAT; USOCR;	ADJ	ON	2016/04/26 15:49

			FPRS; EPO; JPO; DERWENT; IBM_TDB			
S26	2	US-20150036494-A1.did.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2016/04/26 15:50
S27	10445	(location or area or boundary or position or zone or region or geographic$3) and (special or private or home or specific or environment) and (wirless or mobile or cell$4) and (wi?fi or bluetooth or wlan or nfc) and (network near7 (identity or code or id or identif$7)) and (connect$3 or status or communicat$3) and (power? line or (power near3 line) or plc or adsl or pstn) and (detect$3 or measur$5 or report$3 or monitor$3 or track$3) and ((identif$7 or location or position) near7 (code or id or identity or identif$7)) and (bs or (base station) or (access point) or ap or enb or hnb) and GSM and (Wi?fi or wlan or femtocell or (private network))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2016/08/19 16:21
S28	242	htun.xp. or htun.xa.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2016/08/19 16:22
S29	0	S28 and (special cell)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2016/08/19 16:22
S30	125	S28 and cell	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2016/08/19 16:22
S31	2	("20100298017").PN.	US-PGPUB; USPAT; USOCR; DERWENT	ADJ	ON	2016/08/19 17:05
S32	34	("6529491" | "20080220782" | "20080102896" | "20080132225" | "20060084443" | "20080280604" | "20080085703" | "20070037577" | "20020032032" | "6434389" | "20090047968" | "20080207195" | "20110269460" | "20070171871").PN.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2016/08/19 17:10
S33	10431	S27 and (bs or (base station))	US-PGPUB; USPAT;	ADJ	ON	2016/08/19 17:27

			USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB			
S34	8872	S33 and (pstn or (telephone network))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2016/08/19 17:28
S35	39	S34 and (periodically or periodic) and (special near5 area)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2016/08/19 17:31
S36	6	us-20020097852-a1.did. or us-20020126691-a1.did. or us-20040038688-a1.did.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2016/11/07 16:24
S37	4284	(transmitter and (area or location or code or (cell ID)) and signal and (presen$4 or active) and (radio or wireless or cell$4 or mobile)).clm.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2016/11/07 16:30
S38	13	S37 and (special near (area or environment))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2016/11/07 16:31
S39	23	S37 and (scan$4 same channel same (cell or transmitter or (access point) or (base station) or ap or bs) same (detect$3 or determin$5) same presen$4)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2016/11/07 16:34
S40	460	(transmitter and (area or location or code or (cell ID)) and signal and (presen$4 or active) and (radio or wireless or cell$4 or mobile) and (format or filed or flag or bit) and (parameter or service or id or identity or identif$7 or tariff)).clm.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2017/03/06 12:24
S41	288	S40 and (timer or periodic or periodical$3)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2017/03/06 12:33

S42	172	S40 not S41	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2017/03/06 12:34
S43	4	"7831263".pn.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2017/03/06 14:40
S44	2	US-20040147221-A1.did.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2017/03/06 14:40
S45	112	("20130157640" | "20150054934" | "6138041" | "8270933" | "8880047" | "20090029675" | "20110153367" | "20120214408" | "7555378" | "8774842" | "8884750" | "8971927" | "20110093161" | "20070072616" | "20090002147" | "20130303143" | "7505784" | "8280438" | "8761821" | "20030096593" | "20100087137" | "6690940" | "6771946" | "8204649" | "9185526" | "20060286930" | "20120268235" | "7697917" | "8527013" | "8787936" | "20010050614" | "20060148490" | "20090128286" | "20130084847" | "8626121" | "20100216509" | "20110294520" | "20050255874" | "20090085728" | "9094533" | "8036839").PN.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2017/03/07 16:08
S46	54	S45 and (location or position or area or zone) and (car or vehicle or automobile or truck)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2017/03/07 16:09
S47	4	US-20070072553-A1.did. or US20090085728-A1.did. or us-20110294520-a1.did.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2017/03/07 16:15
S48	2	US-20090085728-A1.did.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2017/03/07 16:16
S49	2	US-20020115436-A1.did.	US-PGPUB; USPAT;	ADJ	ON	2017/03/07 16:59

			USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB			
S50	1	"8400292".pn. and location	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2017/03/07 17:36
S51	74	("20030117281" | "20040100930" | "20060014548" | "20060046664" | "20060276201" | "20060281913" | "20070129085" | "20070159388" | "20070229350" | "20080085439" | "20080085440" | "20080113672" | "20080132244" | "20080160953" | "20080167049" | "20080174502" | "20080175175" | "20080186955" | "20080191941" | "20080198955" | "20080200117" | "20080232305" | "20080248744" | "20080248811" | "20080261615" | "20080284647" | "20090021345" | "20090045939" | "20090138336" | "20090295639" | "6184829" | "6249252" | "6674403" | "6873852" | "6952181" | "6961367" | "6996392" | "7194275" | "7245925" | "7257387" | "7298327" | "7321777" | "7327258" | "7427952" | "7440762" | "7525425" | "7525484" | "7528723" | "7529236" | "7539161" | "7546084" | "7570615" | "7616155" | "7665263" | "7732088" | "7738836" | "7837774" | "7848733" | "7852262").PN. OR ("8400292").URPN.	US-PGPUB; USPAT; USOCR	ADJ	ON	2017/03/07 17:37
S52	30	("6434389" | "6526267" | "8019364" | "20060072760" | "20050207381" | "20040166870" | "6785536" | "20020131387" | "8737996" | "20080242298" | "20050054291" | "20020094801" | "20020094801").PN.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2017/10/03 19:32
S53	14	("20050068925" | "20060075131" | "20060095348" | "20060142004" | "20070121560").PN.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2017/10/03 19:34
S54	2	("20090093956").PN.	US-PGPUB; USPAT; USOCR; DERWENT	ADJ	ON	2017/10/03 19:36
S55	2	("20080095125").PN.	US-PGPUB; USPAT; USOCR; DERWENT	ADJ	ON	2017/10/03 19:39
S56	15	"8605691".pn.	US-PGPUB; USPAT;	ADJ	ON	2017/10/03 19:40

			USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB			
S57	21	("7260395" | "7146130" | "5960344" | "20040137905" | "20040039817" | "20040127240" | "6332077" | "20020188723" | "20030181215").PN.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2017/10/03 19:41
S58	6	us-20030119454-a1.did. or us-20050111463-a1.did. or us-20050238046-a1.did.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2017/10/13 17:14
S59	2	us-20050096026-a1.did.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2017/10/13 17:20
S60	2	US-20030040313-A1.did.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2017/10/13 18:12

10/ 14/ 2017 2:44:30 PM
C:\ Users\ shtun\ Documents\ EAST\ Workspaces\ 14738083.wsp

Search Notes	Application/Control No.	Applicant(s)/Patent Under Reexamination
	14738083	PÉREZ LAFUENTE, CARLOS A.
	Examiner	Art Unit
	JEAN CHANG	2643

CPC- SEARCHED		
Symbol	Date	Examiner
H04W4/00-206.H04W8/$.H04W12/$.H04W16/$.H04W28/$.H04W36/$.H04W48/$.H04W60/$.H04W64/$.H04W72/$.H04W74/$.H04M1/7253.H04B5/00. H04B3/$.H04B2203/$.	04/21/2016	/S.H./

CPC COMBINATION SETS - SEARCHED		
Symbol	Date	Examiner

US CLASSIFICATION SEARCHED			
Class	Subclass	Date	Examiner
455	456.4, 555, 408, 432.2, 406, 458, 414.1, 446, 456.1, 433	8/10/2015	jc
455	456.4, 555, 408, 432.2, 406, 458, 414.1, 446, 456.1, 433	1/20/2016	jc

* See search history printout included with this form or the SEARCH NOTES box below to determine the scope of the search.

SEARCH NOTES		
Search Notes	Date	Examiner
inventor search and text search on East for transmitting device location monitor wireless fixed location	8/10/2015	jc
update inventor search and text search on East	1/20/2016	jc
Searched in EAST attached.	04/21/2016	/S.H./
Conducted inventor and assignee search in EAST.	04/21/2016	/S.H./
Consulted with Danieal Swerdlow (QAS) for 112, sencond and enablement.	04/25/2016	/S.H./
Searched updated in EAST.	08/19/2016	/S.H./
Updated search in EAST.	03/6-7/2017	/S.H./
Updated search in EAST.	10/3/2017	/S.H./
Consulted with John Peng (QAS) for 101 rejection.	07/05/2017	/S.H./
Verified priority for PCT & EP via PASM.	10/14/2017	/S.H./

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

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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
14/738,083	06/12/2015	Carlos A. Pérez LaFuente	0572.0001C5	4555

27896 7590 07/10/2017

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9801 Washingtonian Blvd.
Suite 750
Gaithersburg, MD 20878

EXAMINER
HTUN, SAN A

ART UNIT	PAPER NUMBER
2643	

NOTIFICATION DATE	DELIVERY MODE
07/10/2017	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

Applicant-Initiated Interview Summary	Application No.	Applicant(s)	
	14/738,083	PÉREZ LAFUENTE, CARLOS A.	
	Examiner	Art Unit	
	SAN HTUN	2643	

All participants (applicant, applicant's representative, PTO personnel):

(1) *SAN HTUN*. (3)_____.

(2) *TIM KITCHEN*. (4)_____.

Date of Interview: *05 July 2017*.

Type: ☒ Telephonic ☐ Video Conference
☐ Personal [copy given to: ☐ applicant ☐ applicant's representative]

Exhibit shown or demonstration conducted: ☐ Yes ☒ No.
If Yes, brief description: _____.

Issues Discussed ☒101 ☒112 ☐102 ☒103 ☐Others
(For each of the checked box(es) above, please describe below the issue and detailed description of the discussion)

Claim(s) discussed: *14*.

Identification of prior art discussed: *N/A*.

Substance of Interview
(For each issue discussed, provide a detailed description and indicate if agreement was reached. Some topics may include: identification or clarification of a reference or a portion thereof, claim interpretation, proposed amendments, arguments of any applied references etc...)

Mr. Kitchen (Reg. No.: 41,900) explained the proposed claims as attached. Examiner responded that previous 112 rejection would not be applicable and 101 rejection regarding eligibility to proposed claim 14 would not be applicable as well. However, the newly proposed claim 22 might still have the issue with 101 eligibility for being abstract idea. Opinions from both sides were exchanged to advance the prosecution. No agreement towards allowability was reached at this time.

Applicant recordation instructions: The formal written reply to the last Office action must include the substance of the interview. (See MPEP section 713.04). If a reply to the last Office action has already been filed, applicant is given a non-extendable period of the longer of one month or thirty days from this interview date, or the mailing date of this interview summary form, whichever is later, to file a statement of the substance of the interview

Examiner recordation instructions: Examiners must summarize the substance of any interview of record. A complete and proper recordation of the substance of an interview should include the items listed in MPEP 713.04 for complete and proper recordation including the identification of the general thrust of each argument or issue discussed, a general indication of any other pertinent matters discussed regarding patentability and the general results or outcome of the interview, to include an indication as to whether or not agreement was reached on the issues raised.

☒ Attachment

/SAN HTUN/ Primary Examiner, Art Unit 2643	

Summary of Record of Interview Requirements

Manual of Patent Examining Procedure (MPEP), Section 713.04, Substance of Interview Must be Made of Record
A complete written statement as to the substance of any face-to-face, video conference, or telephone interview with regard to an application must be made of record in the application whether or not an agreement with the examiner was reached at the interview.

Title 37 Code of Federal Regulations (CFR) § 1.133 Interviews
Paragraph (b)

In every instance where reconsideration is requested in view of an interview with an examiner, a complete written statement of the reasons presented at the interview as warranting favorable action must be filed by the applicant. An interview does not remove the necessity for reply to Office action as specified in §§ 1.111, 1.135. (35 U.S.C. 132)

37 CFR §1.2 Business to be transacted in writing.
All business with the Patent or Trademark Office should be transacted in writing. The personal attendance of applicants or their attorneys or agents at the Patent and Trademark Office is unnecessary. The action of the Patent and Trademark Office will be based exclusively on the written record in the Office. No attention will be paid to any alleged oral promise, stipulation, or understanding in relation to which there is disagreement or doubt.

The action of the Patent and Trademark Office cannot be based exclusively on the written record in the Office if that record is itself incomplete through the failure to record the substance of interviews.

It is the responsibility of the applicant or the attorney or agent to make the substance of an interview of record in the application file, unless the examiner indicates he or she will do so. It is the examiner's responsibility to see that such a record is made and to correct material inaccuracies which bear directly on the question of patentability.

Examiners must complete an Interview Summary Form for each interview held where a matter of substance has been discussed during the interview by checking the appropriate boxes and filling in the blanks. Discussions regarding only procedural matters, directed solely to restriction requirements for which interview recordation is otherwise provided for in Section 812.01 of the Manual of Patent Examining Procedure, or pointing out typographical errors or unreadable script in Office actions or the like, are excluded from the interview recordation procedures below. Where the substance of an interview is completely recorded in an Examiners Amendment, no separate Interview Summary Record is required.

The Interview Summary Form shall be given an appropriate Paper No., placed in the right hand portion of the file, and listed on the "Contents" section of the file wrapper. In a personal interview, a duplicate of the Form is given to the applicant (or attorney or agent) at the conclusion of the interview. In the case of a telephone or video-conference interview, the copy is mailed to the applicant's correspondence address either with or prior to the next official communication. If additional correspondence from the examiner is not likely before an allowance or if other circumstances dictate, the Form should be mailed promptly after the interview rather than with the next official communication.

The Form provides for recordation of the following information:
- Application Number (Series Code and Serial Number)
- Name of applicant
- Name of examiner
- Date of interview
- Type of interview (telephonic, video-conference, or personal)
- Name of participant(s) (applicant, attorney or agent, examiner, other PTO personnel, etc.)
- An indication whether or not an exhibit was shown or a demonstration conducted
- An identification of the specific prior art discussed
- An indication whether an agreement was reached and if so, a description of the general nature of the agreement (may be by attachment of a copy of amendments or claims agreed as being allowable). Note: Agreement as to allowability is tentative and does not restrict further action by the examiner to the contrary.
- The signature of the examiner who conducted the interview (if Form is not an attachment to a signed Office action)

It is desirable that the examiner orally remind the applicant of his or her obligation to record the substance of the interview of each case. It should be noted, however, that the Interview Summary Form will not normally be considered a complete and proper recordation of the interview unless it includes, or is supplemented by the applicant or the examiner to include, all of the applicable items required below concerning the substance of the interview.

A complete and proper recordation of the substance of any interview should include at least the following applicable items:
1) A brief description of the nature of any exhibit shown or any demonstration conducted,
2) an identification of the claims discussed,
3) an identification of the specific prior art discussed,
4) an identification of the principal proposed amendments of a substantive nature discussed, unless these are already described on the Interview Summary Form completed by the Examiner,
5) a brief identification of the general thrust of the principal arguments presented to the examiner,
   (The identification of arguments need not be lengthy or elaborate. A verbatim or highly detailed description of the arguments is not required. The identification of the arguments is sufficient if the general nature or thrust of the principal arguments made to the examiner can be understood in the context of the application file. Of course, the applicant may desire to emphasize and fully describe those arguments which he or she feels were or might be persuasive to the examiner.)
6) a general indication of any other pertinent matters discussed, and
7) if appropriate, the general results or outcome of the interview unless already described in the Interview Summary Form completed by the examiner.

Examiners are expected to carefully review the applicant's record of the substance of an interview. If the record is not complete and accurate, the examiner will give the applicant an extendable one month time period to correct the record.

Examiner to Check for Accuracy

If the claims are allowable for other reasons of record, the examiner should send a letter setting forth the examiner's version of the statement attributed to him or her. If the record is complete and accurate, the examiner should place the indication, "Interview Record OK" on the paper recording the substance of the interview along with the date and the examiner's initials.

EDELL, SHAPIRO & FINNAN, LLC

Facsimile

Date:	June 30, 2017
Recipient:	San Htun
Recipient Fax:	571-270-4190
Sender:	Tim L. Kitchen
Sender Phone:	240-864-2435
Sender Fax:	301-762-4056
Re:	Appln. No. 14/738,083
Pages:	20 Pages (including cover page)

The information contained within this facsimile and its attachments, if any, may be confidential and/or privileged. This facsimile is intended to be reviewed only by the individual to whom it is addressed. If you are not the intended recipient or an authorized representative of the intended recipient, please be aware that any review, dissemination, or copying of the information contained within this facsimile and its attachments, if any, is prohibited. If you have received this facsimile in error, please immediately notify me by return facsimile and delete this facsimile from your system.

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Application No.	:	14/738,083
First Named Inventor	:	Carlos A. Pérez Lafuente
Confirmation No.	:	4555
Filed	:	June 12, 2015
TC/A.U.	:	2643
Examiner	:	San A. Htun
Customer No.	:	27896
Docket No.	:	0572.0001C5
Title	:	METHOD AND SYSTEM FOR MONITORING A MOBILE STATION PRESENCE IN A SPECIAL AREA

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

RESPONSE TO NON-FINAL OFFICE ACTION

Dear Sir:

In response to the non-final Office Action dated March 15, 2017, please consider the response as follows:

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

Remarks begin on page 5 of this paper.

PAGE 2/20 * RCVD AT 6/30/2017 9:54:27 AM [Eastern Daylight Time] * SVR:W-PTOFAX-003/20 * DNIS:2704190 * CSID:301 762 4056 * DURATION (mm-ss):08-29

Amendments to the Claims:

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

Listing of the Claims

1. (Currently Cancelled)

2. (Previously Cancelled)

3. (Previously Cancelled)

4. (Previously Cancelled)

5. (Previously Cancelled)

6. (Previously Cancelled)

7. (Currently Cancelled)

8. (Previously Cancelled)

9. (Previously Cancelled)

10. (Previously Cancelled)

11. (Previously Cancelled)

12. (Previously Cancelled).

13. (Currently Cancelled)

14. (Currently Amended) A method associated with the use of a mobile station and at least one ~~transmitter~~ radio communication defining device that transmits a distinctive defining signal that defines a special area by its coverage, the distinctive defining signal including information indicating whether or not the ~~transmitter~~ radio communication defining device is in a predetermined environment, the method comprising:

receiving and processing the distinctive defining signal in the mobile station; and

sending from the mobile station via the mobile telephone network an updating signal to one or more servers of a provider of presence related services about the mobile station's presence in the special area, the updating signal useable by the one or more servers of the provider of presence related services to adjust an operating parameter to activate or deactivate services provided to the mobile station, the updating signal comprising the information indicative of whether or not the ~~transmitter~~ radio communication defining device is located in a predetermined environment.

15. (Previously Cancelled)

16. (Original) The method according to claim 14, wherein the sending of the updating signal is uncorrelated to any mobile station phone call establishment, the updating signal being sent 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.

PAGE 4/20 * RCVD AT 6/30/2017 9:54:27 AM [Eastern Daylight Time] * SVR:W-PTOFAX-003/20 * DNIS:2704190 * CSID:301 762 4056 * DURATION (mm-ss):08-29

Ex.1002 / Page 112 of 639
APPLE INC.

17. (Original) The method according to claim 14, 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.

18. (Original) The method according to claim 14, wherein the frequency of the updating signal is different from the frequency of the distinctive defining signal.

19. (Currently Cancelled)

20. (Currently Cancelled

21. (Currently Cancelled)

22. (New) A method comprising:

wirelessly receiving in a radio communication defining device first information from a radio transmitting device;

the radio communication defining device using the first information to determine whether or not the radio communication defining device is in a predetermined environment; and

transmitting from the radio communication defining device to a mobile station a distinctive defining signal that defines a special area by its coverage, the distinctive defining signal including second information indicating whether or not the radio communication defining device is located in a predetermined environment.

23. (New) The method according to claim 22, further comprising storing in a database of the radio communication defining device identification data of the radio transmitting device.

24. (New) The method according to claim 22, wherein the distinctive defining signal is coded.

PAGE 5/20 * RCVD AT 6/30/2017 9:54:27 AM [Eastern Daylight Time] * SVR:W-PTOFAX-003/20 * DNIS:2704190 * CSID:301 762 4056 * DURATION (mm-ss):08-29

25. (New) A method comprising:

receiving first information in a radio communication defining device via communication with a fixed network to which the radio communication defining device is physically connected;

the radio communication defining device using the first information to determine whether or not the radio communication defining device is in a predetermined environment; and

transmitting from the radio communication defining device to a mobile station a distinctive defining signal that defines a special area by its coverage, the distinctive defining signal including second information indicating whether or not the radio communication defining device is located in a predetermined environment.

26. (New) The method according to claim 25, wherein the fixed network is an embedded system in a car.

27. (New) The method according to claim 25, further comprising storing in a memory of the radio communication defining device one or more parameters useable to authenticate the radio communication defining device in the fixed network.

PAGE 6/20 * RCVD AT 6/30/2017 9:54:27 AM [Eastern Daylight Time] * SVR:W-PTOFAX-003/20 * DNIS:2704190 * CSID:301 762 4056 * DURATION (mm-ss):08-29

REMARKS

Claim 14 has been amended. Claims 1, 7, 13 and 19-21 have been cancelled. Claims 22-27 have been added. Claims 14, 16-18 and 22-27 are pending in the application.

Claim Rejections – 35 USC §112

Claims 1 and 19 were rejected under 35 USC §112(a), first paragraph. The Office asserts the scope of the claims is not commensurate with the scope of the enabling disclosure.

The Examiner has misconstrued altogether what a 35 USC §112(a), first paragraph rejection is. The enablement requirement refers to the requirement that the specification describe how to make and how to use the invention. The invention that one skilled in the art must be enabled to make and use is that defined by the claim(s) of the particular application or patent.

The purpose of the requirement that the specification describe the invention in such terms that one skilled in the art can make and use the claimed invention is to ensure that the invention is communicated to the interested public in a meaningful way. The information contained in the disclosure of an application must be sufficient to inform those skilled in the relevant art how to both make and use the claimed invention. However, to comply with 35 USC §112(a), first paragraph, it is not necessary to "enable one of ordinary skill in the art to make and use a perfected, commercially viable embodiment absent a claim limitation to that effect." *CFMT, Inc. v. Yieldup Int'l Corp.*, 349 F.3d 1333, 1338, 68 USPQ2d 1940, 1944 (Fed. Cir. 2003) (an invention directed to a general system to improve the cleaning process for semiconductor wafers was enabled by a disclosure showing improvements in the overall system). Detailed procedures for making and using the invention may not be necessary if the description of the invention itself is sufficient to permit those skilled in the art to make and use the invention. A patent claim is invalid if it is not supported by an enabling disclosure.

The enablement requirement of 35 USC §112(a), first paragraph, is separate and distinct from the written description requirement. *Vas-Cath,Inc. v. Mahurkar,* 935 F.2d 1555, 1563, 19 USPQ2d 1111, 1116-17 (Fed. Cir. 1991) ("the purpose of the 'written description' requirement is broader than to merely explain how to 'make and use'"). See also MPEP § 2161. Therefore, the fact that an additional limitation to a claim may lack descriptive support in the disclosure as originally filed does not necessarily mean that the limitation is also not enabled. In other words, even if a new limitation is not described in the original disclosure, the addition of a new limitation in and of itself may not create an enablement problem provided that one skilled in the art could make and use the claimed invention with the new limitation. Consequently, such limitations must be analyzed for both enablement and description using their separate and distinct criteria.

Furthermore, when the limitation is not described in the specification portion of the application as filed but is in the claims, the limitation in and of itself may enable one skilled in the art to make and use the claimed invention.

Any analysis of whether a particular claim is supported by the disclosure in an application requires a determination of whether that disclosure, when filed, contained sufficient information regarding the subject matter of the claims as to enable one skilled in the pertinent art to make and use the claimed invention. The standard for determining whether the specification meets the enablement requirement was cast in the Supreme Court decision of *Minerals Separation Ltd. v. Hyde,* 242 U.S. 261, 270 (1916) which postured the question: is the experimentation needed to practice the invention undue or unreasonable? That standard is still the one to be applied. *In re Wands,* 858 F.2d 731, 737, 8 USPQ2d 1400, 1404 (Fed. Cir. 1988). Accordingly, even though the statute does not use the term "undue experimentation," it has been interpreted to require that the claimed invention be enabled so that any person skilled in the art can make and use the invention without undue experimentation. *In re Wands,* 858 F.2d at 737, 8 USPQ2d at 1404 (Fed. Cir. 1988). See also *United States v. Telectronics, Inc.,* 857 F.2d 778, 785, 8 USPQ2d 1217, 1223 (Fed. Cir. 1988) ("The test of enablement is whether one reasonably

skilled in the art could make or use the invention from the disclosures in the patent coupled with information known in the art without undue experimentation."). A patent need not teach, and preferably omits, what is well known in the art. *In re Buchner,* 929 F.2d 660, 661, 18 USPQ2d 1331, 1332 (Fed. Cir. 1991); *Hybritech, Inc. v. Monoclonal Antibodies, Inc.,* 802 F.2d 1367, 1384, 231 USPQ 81, 94 (Fed. Cir. 1986), *cert. denied,* 480 U.S. 947 (1987); and *Lindemann Maschinenfabrik GMBH v. American Hoist & Derrick Co.,* 730 F.2d 1452, 1463, 221 USPQ 481, 489 (Fed. Cir. 1984). Any part of the specification can support an enabling disclosure, even a background section that discusses, or even disparages, the subject matter disclosed therein. *Callicrate v. Wadsworth Mfg., Inc.,* 427 F.3d 1361, 77 USPQ2d 1041 (Fed. Cir. 2005)(discussion of problems with a prior art feature does not mean that one of ordinary skill in the art would not know how to make and use this feature). Determining enablement is a question of law based on underlying factual findings. *In re Vaeck,* 947 F.2d 488, 495, 20 USPQ2d 1438, 1444 (Fed. Cir. 1991); *Atlas Powder Co. v. E.I. du Pont de Nemours & Co.,* 750 F.2d 1569, 1576, 224 USPQ 409, 413 (Fed. Cir. 1984).

In the context of the foregoing text taken from MPEP 2164, the Examiner's comments on page 4 of the Office Action are misguided since they fail to provide any analysis as to whether the disclosure, when filed, contained sufficient information regarding the subject matter of the claims 1 and 19 as to enable one skilled in the pertinent art to make and use the claimed invention.

On the basis alone, Applicant respectfully requests that the rejection be withdrawn.

Notwithstanding the foregoing, the Applicant provides the following additional comments.

First, Applicant draws attention to the non-final Office Action dated May 9, 2016. On page 3 of the Office Action the Office itself suggested that the term "a radio communication defining device" be replaced with the term "a transmitter". The Applicant has now amended the claims to replace "transmitter" with "radio communication defining device". In the May 9, 2016

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non-final Office Action the Office asserted that the term "radio communication defining device" was pure function terms without describing the corresponding structure to perform. The Applicant disagrees. Claims must be interpreted "consistent with the specification." Phillips v. AWH Corp., 415 F.3d 1303, 75 USPQ2d 1321 (Fed. Cir. 2005). Throughout the entirety of the specification the term "radio communication defining device" is used consistently to denote a device that, wirelessly transmits radio defining signals and radio distinctive defining signals. According to some embodiments the radio communication defining device also receives signals as expressed in the pending claims. According to some embodiments, the radio communicating defining device is a base station of a mobile telephone network, while in other embodiments the radio communication defining device is a short range radio transmitting device such as a WIFI, Bluetooth or DECT device. See, for example, paragraph [0008], lines 4-6; paragraph [0015], lines 1-4; paragraph [0016]; paragraph [0017]; paragraph [0022], lines 7-8; paragraph [0025]; paragraph [0038], lines 3-5; paragraph [0047], lines 1-7; paragraph [0066] and paragraph [0113], lines 1-2. One of ordinary skill in the art at the time of the present invention would have readily understood the structure of a radio communicating defining device as used in the claims by virtue of the structure and function attributed to it throughout the written description.

In addition, the inventor may act as his own lexicographer, and in this case has used the term "radio communication defining device" as the name of the device that at least wirelessly transmits radio distinctive defining signals that by their coverage define a special area. Because the term "radio communication defining device" is a name of a device that is well defined in the specification, the name itself is not subject to scrutiny under 35 USC §112, first paragraph, since the inventor could have just as well named the device a "watermelon".

On page 4 of the Office Action the Office states:

> *Since the transmitter of claims 1 and 19 is claimed in purely functional terms, the claims may encompass embodiments that are not enabled by the specification. In fact, it could lead to the claims which essentially cover not only the functions disclosed and enabled but also any structure that performs the functions.*

The Examiner appears to believe that when a claim includes a functional limitation, it cannot cover devices that also perform other functions. This is, of course, wrong.

In the context of evaluating whether or not a prior art apparatus performs a claimed function, it is well established that in order to satisfy the functional limitations in an apparatus claim the prior art apparatus must be capable of performing the claimed function, *In re Schreiber*, 128 F.3d 1473, 1477-78 (Fed. Cir. 1997). The same rule applies when evaluating whether an apparatus infringes a claim. The infringement analysis only looks to whether the apparatus is capable of performing the claimed function. It makes no difference if the apparatus performs other functions. Any structure that performs the claimed function is deemed to infringe the claim. A person or entity cannot escape a finding of infringement by merely providing in an apparatus additional functions not claimed or disclosed in the alleged infringed patent.

The Office goes on to state:

> *Furthermore, the transmitter in the claim does not limit a scope to receive and transmit the information in accordance with any kind of wireless technologies including upcoming future technologies. But, yet specification, as described in par. 0059, 0061 of PG Pub, limits the scopes of transmitter to GSM, WiFi, Bluetooth or DECT, etc.*

As a first matter, paragraph [0047] of the specification states;

> *FIG. 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.*

First, nowhere in the specification is a radio communication defining device defined to be limited to GSM, WiFi, Bluetooth or DECT. As clearly stated in the specification, these are mere examples.

Second, it appears the Examiner believes that the claims of a patent cannot cover technologies that are developed in the future. This is, of course, wrong. There is absolutely no statutory or case law that limits patent claims only to those technologies that existed at the time of the invention.

For all the reasons above, Applicant requests that the rejection be withdrawn.

Claim Rejections – 35 USC §101

Claims 1, 14 and 19 were rejected under 35 USC §101 as assertively be directed to a judicial exception (i.e., a law of nature, a natural phenomenon, or an abstract idea) without significantly more.

Applicant respectfully traverses this rejection for the following reasons.

The test for determining subject matter eligibility consists of: 1) determining whether the claim is directed to a law of nature, a natural phenomenon, or an abstract idea and, if so; 2) determining whether any element or combination of elements in the claim is sufficient to ensure that the claim amounts to significantly more than the law of nature, natural phenomenon, or abstract idea. *See, Alice Corp. Pty. Ltd. v. CLS Bank Int'l et al.*, 134 S.Ct. 2347, 2355 (2014). Limitations recited in a claim that may be enough to qualify as significantly more than the law of nature, natural phenomenon, or abstract idea include: improvements to another technology (or technical field); and improvements to the functioning of a computer itself. *Id.* at 2358 and 2359.

In July 2015, the USPTO issued an Update to the Interim Guidance that substantially clarified for examiners how to go about assessing claims under 35 U.S.C. § 101 in view of the USPTO's comprehensive and up-to-date analysis of relevant case law. As explained below in detail, Applicant submits that these most recent guidelines help clarify that the claims of the subject application are patent eligible under 35 U.S.C. § 101.

The Claims Do Not Recite a Mere Abstract Idea Under the Present Guidelines

As noted above, the first part of the test for patent eligible subject matter is an analysis of the claim to determine the presence of an ineligible concept (e.g., a law of nature, a natural phenomenon, or an abstract idea). The July 2015 Update to the Interim Guidance specifies that a claimed concept is NOT an abstract idea unless it is similar to at least one concept the courts have identified as an abstract idea. The Updated Interim Guidance indicates that these concepts identified by the courts include: 1) a fundamental economic practice; 2) certain methods of organizing human activity; 3) an idea "of itself"; and 4) mathematical relationships/formulas.

According to the Updated Interim Guidance:

- a fundamental economic practice relates to the economy and commerce (i.e., agreements between people in the form of contracts, legal obligations and business relationships);
- certain methods of organizing human activities relate to interpersonal and intrapersonal activities (i.e., managing relationships or transactions between people, social activities and human behavior; satisfying or avoiding a legal obligation; advertising, marketing, and sales activities or behaviors; and managing human mental activity);
- an idea of itself relates to an idea standing alone (i.e., an uninstantiated concept, plan, or scheme; and a mental process that can be performed in the human mind or by pencil and paper); and

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- a mathematical relationship/formula relates to mathematical concepts (i.e., mathematical algorithms, mathematical relationships, mathematical formulas, and calculations).

Claims 1 and 19 have been cancelled in order to expedite prosecution. In any event arguments related to the now cancelled claims are provided.

The Office Action does not meet the requirements of the July 2015 Update to the Interim Guidance for establishing that the claims are directed to an abstract idea. In regard to claim 1, the Office Action merely states without support that "Claim 1 is directed to an abstract idea as claim 1 recites merely transmitting, measuring and processing a signal, i.e., concerned with a mathematical equation or an algorithm for transmitting, measuring and processing" without any explanation of how such subject matter constitutes a mathematical equation or an algorithm for transmitting, measuring and processing. The rejection fails to take into account any of the claim language itself. Claim 1 did not merely recite the transmitting, measuring and processing of a signal but requires that the distinctive defining signal to contain data including information indicating whether or not the transmitter is located in a predetermined environment. In regard to claim 1, the Office states that the claim does not specifically recite how to define a special area. This is not true. The claim recites that the special area is defined by the coverage of the distinctive defining signal. Support in the specification is provided at least in paragraphs [0008], [0067], [0072], [0076], [0117], [0118], [0123] and [0124].

In regard to claim 14, the Office merely states that "Similarly, claim 14 is ineligible as the claim fails to recite additional elements that amount to significantly more than conventional features [i.e., an abstract idea] commonly known in the related art for instance, intrinsic location updating procedure". The Office has failed to provide any analysis that involves the language of claim 14 itself. Nor has the Office provided any explanation as to what an "intrinsic location updating procedure" is, nor any rationale as to how it forms the basis of a 35 USC §101

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rejection. Applicants submit that the mere generalities provided by the Office, in conjunction with a complete lack of an analysis that involves the language of claim 14, render the 35 USC §101 rejection of the claims improper.

In regard to claim 19, the Office has likewise failed to provide any analysis that involves the language of claim 19 itself. Nor has the Office provided any explanation as to what an "intrinsic location updating procedure" is, nor any rationale as to how it forms the basis of a 35 USC §101 rejection. Applicants submit that the mere generalities provided by the Office, in conjunction with a complete lack of an analysis that involves the language of claim 19, render the 35 USC §101 rejection of the claims improper.

The USPTO's July 2015 Update regarding Subject Matter Eligibility states "the initial burden is on the examiner to explain why a claim or claims are patentable clearly and specifically, so that applicant has sufficient notice and is able to effectively respond. For subject matter eligibility, the examiner's burden is met by clearly articulating the reason(s) why the claimed invention is not eligible, for example by providing a reasoned rational that identifies the judicial exception recited in the claim and why it is considered an exception, and that identifies the additional elements in the claim (if any) and explains why they do not amount to significantly more than the exception." The 35 USC §101 rejection is improper for having failed to comply with the USPTO's guideline.

A review of the claim requirements of the present Application reveals that the claims do not fall under any of these categories or concepts identified as an abstract idea; therefore, the claim requirements cannot be considered merely abstract ideas.

Independent claim 14 sets forth a method associated with the use of a mobile station and at least one radio communication defining device that transmits a distinctive defining signal that defines a special area by its coverage, the distinctive defining signal

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including information indicating whether or not the radio communication defining device is in a predetermined environment, the method includes receiving and processing the distinctive defining signal in the mobile station; and sending from the mobile station via the mobile telephone network an updating signal to one or more servers of a provider of presence related services about the mobile station's presence in the special area, the updating signal comprising the information indicative of whether or not the radio communication defining device is located in a predetermined environment.

New independent claim 22 sets forth a method that includes wirelessly receiving in a radio communication defining device first information from a radio transmitting device; the radio communication defining device using the first information to determine whether or not the radio communication defining device is in a predetermined environment; and transmitting from the radio communication defining device to a mobile station a distinctive defining signal that defines a special area by its coverage, the distinctive defining signal including second information indicating whether or not the radio communication defining device is located in a predetermined environment.

New independent claim 25 sets forth a method that includes receiving first information in a radio communication defining device via communication with a fixed network to which the radio communication defining device is physically connected; the radio communication defining device using the first information to determine whether or not the radio communication defining device is in a predetermined environment; and transmitting from the radio communication defining device to a mobile station a distinctive defining signal that defines a special area by its coverage, the distinctive defining signal including second information indicating whether or not the radio communication defining device is located in a predetermined environment.

Considering the first of the four categories described in the July 2105 Update, the claims do not constitute a fundamental economic practice that relates to the economy and commerce (i.e., agreements between people in the form of contracts, legal obligations and business relationships). Claims 14, 22 and 25 have nothing to do with contracts, legal obligations and business relationships between people.

Likewise, such claim requirements clearly do not relate to the second category of abstract ideas, namely "certain methods of organizing human activities," which relate to interpersonal and intrapersonal activities, "i.e., managing relationships or transactions between people, social activities and human behavior; satisfying or avoiding a legal obligation; advertising, marketing, and sales activities or behaviors; and managing human mental activity." (*See, July 2015 Update to the Interim Guidance*).

Plainly, the claims are not directed to the third category of abstract ideas, "an idea of itself," which the July 2015 Update clarifies relates to an idea standing alone (i.e., an uninstantiated concept, plan, or scheme; and a mental process that can be performed in the human mind or by pencil and paper). The rationale set forth by the Office on pages 5 and 6 of the Office Action appears to be that for a 35 USC §102 rejection and not that of a 35 USC §101 rejection. In any event, in regard to claim 1, it should go without saying that a radio communication defining device that transmits a particular type of signal with particular types of data for the purpose of being processed in a mobile station by its very nature, cannot be performed in the human mind or by pencil or paper. The same applies to claim 22. In regard to claim 14, it should also go without saying that receiving and processing a distinctive defining signal in the mobile station; and sending from the mobile station via the mobile telephone network an updating signal to one or more servers of a provider of presence related services about the mobile station's presence in the special area, the updating signal comprising the data regarding a status of the radio communication defining device, by its very nature, cannot be performed in the human mind or by pencil or paper. The same applies to cancelled claim 19 and

new claim 25. Finally, the claims are not directed to the fourth category of abstract ideas, a mathematical relationship/formula (i.e., mathematical algorithms, mathematical relationships, mathematical formulas, and calculations).

In summary, because the July 2015 Update to the Interim Guidance specifies that a claimed concept is NOT an abstract idea unless it is similar to at least one concept the courts have identified as an abstract idea, and since the claims are not similar to any of these concepts identified by the courts, including *O'Reilly v. Morse* [U.S. Reissue Patent No. RE117], the claims cannot be considered to recite merely abstract ideas and thus comply with 35 U.S.C. § 101. If the Examiner disagrees, the Examiner is respectfully requested to provide a fact-based explanation why the actual claim limitations of each of claims 14-18 and 22-27 are considered abstract under the indicated category.

Notwithstanding the foregoing, to expedite prosecution of the present application Applicant has cancelled claims 1, 7, 13 and 19-21 and has provided new claims 22-27.

On page 7 of the Office Action the Office states that page 74622 of Vol. 79, No. 241 of the Federal Register makes reference to the Supreme Court having identified that electromagnetism to transmit is directed to a judicial exception. The Applicant is unable to find any such reference on page 74622. It appears that the Office is referring to *In re Nuijten*, No. 06-1371 (Fed. Cir. Sept. 20, 2007), where the Federal Circuit affirmed the decision of the Board in which the Board had rejected "signal" claims in Petrus A.C.M. Nuijten's application as unpatentable subject matter outside the scope of 35 U.S.C. § 101.

Nuijten's patent application disclosed a technique for reducing distortion induced by the introduction of "watermarks" into signals. In the context of signal processing, watermarking is a technique by which an original signal (such as a digital audio file) is manipulated so as to embed within it additional data. This ability to encode additional data into a signal is useful to publishers of sound and video recordings, who can use watermarks to embed in the media

information intended to protect that media against unauthorized copying. Mr. Nuijten's technique improves existing watermark technology by further modifying the watermarked signal in a way that partially compensates for distortion introduced by the watermark.

The Nuijten claims relate to a method of embedding supplemental data in a signal, an arrangement for embedding supplemental data in a signal, and a storage medium having stored thereon a signal with embedded supplemental data. The Federal Circuit determined that the Nuijten claims relate strictly to a signal product and not to a process that requires specific acts. As such, Nuitjen has no relevance to the claims in the present application that relate to processes involving specific acts that occur among tangible equipment. To reiterate, the claims in the present application are not signal product claims and are therefore not subject to a judicial exception as in Nuijten.

Claim Rejections – 35 USC §103

Claims 1, 7, 13, 14 and 16-19 were rejected under 35 USC §103(a) as being unpatentable over U.S. Publication No. 2010/0317371 (hereinafter "Westerinen") in view of U.S. Publication No. 2008/0242298 (hereinafter "Nylander").

As noted in the response to Office Action filed on May 24, 2016 and again in the response to Office Action filed on January 17, 2017, the earliest priority date of the present application is March 28, 2006. The earliest priority date of Westerinen is June 12, 2009. Because Westerinen does not predate the present application, Applicant respectfully submits that the rejection of the claims under 35 USC §103(a) is improper and should be withdrawn.

Conclusion

In view of the foregoing, Applicant respectfully requests the Examiner to find the application in condition for allowance with claims 1, 7 and 13-21. However, if for any reason the Examiner

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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: ??, ??, 2017

Respectfully submitted by:

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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Application No.	:	14/738,083
First Named Inventor	:	Carlos A. Pérez Lafuente
Confirmation No.	:	4555
Filed	:	June 12, 2015
TC/A.U.	:	2643
Examiner	:	San A. Htun
Customer No.	:	27896
Docket No.	:	0572.0001C5
Title	:	METHOD AND SYSTEM FOR MONITORING A MOBILE STATION PRESENCE IN A SPECIAL AREA

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

RESPONSE TO NON-FINAL OFFICE ACTION

Dear Sir:

In response to the non-final Office Action dated March 15, 2017, please consider the response as follows:

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

Remarks begin on page 5 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 the Claims

1. (Currently Cancelled)

2. (Previously Cancelled)

3. (Previously Cancelled)

4. (Previously Cancelled)

5. (Previously Cancelled)

6. (Previously Cancelled)

7. (Currently Cancelled)

8. (Previously Cancelled)

9. (Previously Cancelled)

10. (Previously Cancelled)

11. (Previously Cancelled)

12. (Previously Cancelled).

13. (Currently Cancelled)

14. (Currently Amended) A method associated with the use of a mobile station and at least one ~~transmitter~~ radio communication defining device that transmits a distinctive defining signal that defines a special area by its coverage, the distinctive defining signal including information indicating whether or not the ~~transmitter~~ radio communication defining device is in a predetermined environment, the method comprising:

receiving and processing the distinctive defining signal in the mobile station; and

sending from the mobile station via the mobile telephone network an updating signal to one or more servers of a provider of presence related services about the mobile station's presence in the special area, the updating signal useable by the one or more servers of the provider of presence related services to adjust an operating parameter to activate or deactivate services provided to the mobile station, the updating signal comprising the information indicative of whether or not the ~~transmitter~~ radio communication defining device is located in a predetermined environment.

15. (Previously Cancelled)

16. (Original) The method according to claim 14, wherein the sending of the updating signal is uncorrelated to any mobile station phone call establishment, the updating signal being sent 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.

17. (Original) The method according to claim 14, 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.

18. (Original) The method according to claim 14, wherein the frequency of the updating signal is different from the frequency of the distinctive defining signal.

19. (Currently Cancelled)

20. (Currently Cancelled

21. (Currently Cancelled)

22. (New) A method comprising:

wirelessly receiving in a radio communication defining device first information from a radio transmitting device;

the radio communication defining device using the first information to determine whether or not the radio communication defining device is in a predetermined environment; and

transmitting from the radio communication defining device to a mobile station a distinctive defining signal that defines a special area by its coverage, the distinctive defining signal including second information indicating whether or not the radio communication defining device is located in a predetermined environment.

23. (New) The method according to claim 22, further comprising storing in a database of the radio communication defining device identification data of the radio transmitting device.

24. (New) The method according to claim 22, wherein the distinctive defining signal is coded.

25. (New) A method comprising:

receiving first information in a radio communication defining device via communication with a fixed network to which the radio communication defining device is physically connected;

the radio communication defining device using the first information to determine whether or not the radio communication defining device is in a predetermined environment; and

transmitting from the radio communication defining device to a mobile station a distinctive defining signal that defines a special area by its coverage, the distinctive defining signal including second information indicating whether or not the radio communication defining device is located in a predetermined environment.

26. (New) The method according to claim 25, wherein the fixed network is an embedded system in a car.

27. (New) The method according to claim 25, further comprising storing in a memory of the radio communication defining device one or more parameters useable to authenticate the radio communication defining device in the fixed network.

REMARKS

Claim 14 has been amended. Claims 1, 7, 13 and 19-21 have been cancelled. Claims 22-27 have been added. Claims 14, 16-18 and 22-27 are pending in the application.

Claim Rejections – 35 USC §112

Claims 1 and 19 were rejected under 35 USC §112(a), first paragraph. The Office asserts the scope of the claims is not commensurate with the scope of the enabling disclosure.

The Examiner has misconstrued altogether what a 35 USC §112(a), first paragraph rejection is. The enablement requirement refers to the requirement that the specification describe how to make and how to use the invention. The invention that one skilled in the art must be enabled to make and use is that defined by the claim(s) of the particular application or patent.

The purpose of the requirement that the specification describe the invention in such terms that one skilled in the art can make and use the claimed invention is to ensure that the invention is communicated to the interested public in a meaningful way. The information contained in the disclosure of an application must be sufficient to inform those skilled in the relevant art how to both make and use the claimed invention. However, to comply with 35 USC §112(a), first paragraph, it is not necessary to "enable one of ordinary skill in the art to make and use a perfected, commercially viable embodiment absent a claim limitation to that effect." *CFMT, Inc. v. Yieldup Int'l Corp.,* 349 F.3d 1333, 1338, 68 USPQ2d 1940, 1944 (Fed. Cir. 2003) (an invention directed to a general system to improve the cleaning process for semiconductor wafers was enabled by a disclosure showing improvements in the overall system). Detailed procedures for making and using the invention may not be necessary if the description of the invention itself is sufficient to permit those skilled in the art to make and use the invention. A patent claim is invalid if it is not supported by an enabling disclosure.

The enablement requirement of 35 USC §112(a), first paragraph, is separate and distinct from the written description requirement. *Vas-Cath,Inc. v. Mahurkar,* 935 F.2d 1555, 1563, 19 USPQ2d 1111, 1116-17 (Fed. Cir. 1991) ("the purpose of the 'written description' requirement is broader than to merely explain how to 'make and use'"). See also MPEP § 2161. Therefore, the fact that an additional limitation to a claim may lack descriptive support in the disclosure as originally filed does not necessarily mean that the limitation is also not enabled. In other words, even if a new limitation is not described in the original disclosure, the addition of a new limitation in and of itself may not create an enablement problem provided that one skilled in the art could make and use the claimed invention with the new limitation. Consequently, such limitations must be analyzed for both enablement and description using their separate and distinct criteria.

Furthermore, when the limitation is not described in the specification portion of the application as filed but is in the claims, the limitation in and of itself may enable one skilled in the art to make and use the claimed invention.

Any analysis of whether a particular claim is supported by the disclosure in an application requires a determination of whether that disclosure, when filed, contained sufficient information regarding the subject matter of the claims as to enable one skilled in the pertinent art to make and use the claimed invention. The standard for determining whether the specification meets the enablement requirement was cast in the Supreme Court decision of *Minerals Separation Ltd. v. Hyde,* 242 U.S. 261, 270 (1916) which postured the question: is the experimentation needed to practice the invention undue or unreasonable? That standard is still the one to be applied. *In re Wands,* 858 F.2d 731, 737, 8 USPQ2d 1400, 1404 (Fed. Cir. 1988). Accordingly, even though the statute does not use the term "undue experimentation," it has been interpreted to require that the claimed invention be enabled so that any person skilled in the art can make and use the invention without undue experimentation. *In re Wands,* 858 F.2d at 737, 8 USPQ2d at 1404 (Fed. Cir. 1988). See also *United States v. Telectronics, Inc.,* 857 F.2d 778, 785, 8 USPQ2d 1217, 1223 (Fed. Cir. 1988) ("The test of enablement is whether one reasonably

skilled in the art could make or use the invention from the disclosures in the patent coupled with information known in the art without undue experimentation."). A patent need not teach, and preferably omits, what is well known in the art. *In re Buchner,* 929 F.2d 660, 661, 18 USPQ2d 1331, 1332 (Fed. Cir. 1991); *Hybritech, Inc. v. Monoclonal Antibodies, Inc.,* 802 F.2d 1367, 1384, 231 USPQ 81, 94 (Fed. Cir. 1986), *cert. denied,* 480 U.S. 947 (1987); and *Lindemann Maschinenfabrik GMBH v. American Hoist & Derrick Co.,* 730 F.2d 1452, 1463, 221 USPQ 481, 489 (Fed. Cir. 1984). Any part of the specification can support an enabling disclosure, even a background section that discusses, or even disparages, the subject matter disclosed therein. *Callicrate v. Wadsworth Mfg., Inc.,* 427 F.3d 1361, 77 USPQ2d 1041 (Fed. Cir. 2005)(discussion of problems with a prior art feature does not mean that one of ordinary skill in the art would not know how to make and use this feature). Determining enablement is a question of law based on underlying factual findings. *In reVaeck,* 947 F.2d 488, 495, 20 USPQ2d 1438, 1444 (Fed. Cir. 1991); *Atlas Powder Co.v.E.I. du Pont de Nemours & Co.,* 750 F.2d 1569, 1576, 224 USPQ 409, 413 (Fed. Cir. 1984).

In the context of the foregoing text taken from MPEP 2164, the Examiner's comments on page 4 of the Office Action are misguided since they fail to provide any analysis as to whether the disclosure, when filed, contained sufficient information regarding the subject matter of the claims 1 and 19 as to enable one skilled in the pertinent art to make and use the claimed invention.

On the basis alone, Applicant respectfully requests that the rejection be withdrawn.

Notwithstanding the foregoing, the Applicant provides the following additional comments.

First, Applicant draws attention to the non-final Office Action dated May 9, 2016. On page 3 of the Office Action the Office itself suggested that the term "a radio communication defining device" be replaced with the term "a transmitter". The Applicant has now amended the claims to replace "transmitter" with "radio communication defining device". In the May 9, 2016

non-final Office Action the Office asserted that the term "radio communication defining device" was pure function terms without describing the corresponding structure to perform. The Applicant disagrees. Claims must be interpreted "consistent with the specification." Phillips v. AWH Corp., 415 F.3d 1303, 75 USPQ2d 1321 (Fed. Cir. 2005). Throughout the entirety of the specification the term "radio communication defining device" is used consistently to denote a device that wirelessly transmits radio defining signals and radio distinctive defining signals. According to some embodiments the radio communication defining device also receives signals as expressed in the pending claims. According to some embodiments, the radio communicating defining device is a base station of a mobile telephone network, while in other embodiments the radio communication defining device is a short range radio transmitting device such as a WIFI, Bluetooth or DECT device. See, for example, paragraph [0008], lines 4-6; paragraph [0015], lines 1-4; paragraph [0016]; paragraph [0017]; paragraph [0022], lines 7-8; paragraph [0025]; paragraph [0038], lines 3-5; paragraph [0047], lines 1-7; paragraph [0066] and paragraph [0113], lines 1-2. One of ordinary skill in the art at the time of the present invention would have readily understood the structure of a radio communicating defining device as used in the claims by virtue of the structure and function attributed to it throughout the written description.

In addition, the inventor may act as his own lexicographer, and in this case has used the term "radio communication defining device" as the name of the device that at least wirelessly transmits radio distinctive defining signals that by their coverage define a special area. Because the term "radio communication defining device" is a name of a device that is well defined in the specification, the name itself is not subject to scrutiny under 35 USC §112, first paragraph, since the inventor could have just as well named the device a "watermelon".

On page 4 of the Office Action the Office states:

Since the transmitter of claims 1 and 19 is claimed in purely functional terms, the claims may encompass embodiments that are not enabled by the specification. In fact, it could lead to the claims which essentially cover not only the functions disclosed and enabled but also any structure that performs the functions.

The Examiner appears to believe that when a claim includes a functional limitation, it cannot cover devices that also perform other functions. This is, of course, wrong.

In the context of evaluating whether or not a prior art apparatus performs a claimed function, it is well established that in order to satisfy the functional limitations in an apparatus claim the prior art apparatus must be capable of performing the claimed function, *In re Schreiber*, 128 F.3d 1473, 1477-78 (Fed. Cir. 1997). The same rule applies when evaluating whether an apparatus infringes a claim. The infringement analysis only looks to whether the apparatus is capable of performing the claimed function. It makes no difference if the apparatus performs other functions. Any structure that performs the claimed function is deemed to infringe the claim. A person or entity cannot escape a finding of infringement by merely providing in an apparatus additional functions not claimed or disclosed in the alleged infringed patent.

The Office goes on to state:

> *Furthermore, the transmitter in the claim does not limit a scope to receive and transmit the information in accordance with any kind of wireless technologies including upcoming future technologies. But, yet specification, as described in par. 0059, 0061 of PG Pub, limits the scopes of transmitter to GSM, WiFi, Bluetooth or DECT, etc.*

As a first matter, paragraph [0047] of the specification states;

> *FIG. 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.*

First, nowhere in the specification is a radio communication defining device defined to be limited to GSM, WiFi, Bluetooth or DECT. As clearly stated in the specification, these are mere examples.

Second, it appears the Examiner believes that the claims of a patent cannot cover technologies that are developed in the future. This is, of course, wrong. There is absolutely no statutory or case law that limits patent claims only to those technologies that existed at the time of the invention.

For all the reasons above, Applicant requests that the rejection be withdrawn.

Claim Rejections – 35 USC §101

Claims 1, 14 and 19 were rejected under 35 USC §101 as assertively be directed to a judicial exception (i.e., a law of nature, a natural phenomenon, or an abstract idea) without significantly more.

Applicant respectfully traverses this rejection for the following reasons.

The test for determining subject matter eligibility consists of: 1) determining whether the claim is directed to a law of nature, a natural phenomenon, or an abstract idea and, if so; 2) determining whether any element or combination of elements in the claim is sufficient to ensure that the claim amounts to significantly more than the law of nature, natural phenomenon, or abstract idea. *See, Alice Corp. Pty. Ltd. v. CLS Bank Int'l et al.*, 134 S.Ct. 2347, 2355 (2014). Limitations recited in a claim that may be enough to qualify as significantly more than the law of nature, natural phenomenon, or abstract idea include: improvements to another technology (or technical field); and improvements to the functioning of a computer itself. *Id.* at 2358 and 2359.

In July 2015, the USPTO issued an Update to the Interim Guidance that substantially clarified for examiners how to go about assessing claims under 35 U.S.C. § 101 in view of the USPTO's comprehensive and up-to-date analysis of relevant case law. As explained below in detail, Applicant submits that these most recent guidelines help clarify that the claims of the subject application are patent eligible under 35 U.S.C. § 101.

The Claims Do Not Recite a Mere Abstract Idea Under the Present Guidelines

As noted above, the first part of the test for patent eligible subject matter is an analysis of the claim to determine the presence of an ineligible concept (e.g., a law of nature, a natural phenomenon, or an abstract idea). The July 2015 Update to the Interim Guidance specifies that a claimed concept is NOT an abstract idea unless it is similar to at least one concept the courts have identified as an abstract idea. The Updated Interim Guidance indicates that these concepts identified by the courts include: 1) a fundamental economic practice; 2) certain methods of organizing human activity; 3) an idea "of itself"; and 4) mathematical relationships/formulas.

According to the Updated Interim Guidance:

- a fundamental economic practice relates to the economy and commerce (i.e., agreements between people in the form of contracts, legal obligations and business relationships);
- certain methods of organizing human activities relate to interpersonal and intrapersonal activities (i.e., managing relationships or transactions between people, social activities and human behavior; satisfying or avoiding a legal obligation; advertising, marketing, and sales activities or behaviors; and managing human mental activity);
- an idea of itself relates to an idea standing alone (i.e., an uninstantiated concept, plan, or scheme; and a mental process that can be performed in the human mind or by pencil and paper); and

- a mathematical relationship/formula relates to mathematical concepts (i.e., mathematical algorithms, mathematical relationships, mathematical formulas, and calculations).

Claims 1 and 19 have been cancelled in order to expedite prosecution. In any event arguments related to the now cancelled claims are provided.

The Office Action does not meet the requirements of the July 2015 Update to the Interim Guidance for establishing that the claims are directed to an abstract idea. In regard to claim 1, the Office Action merely states without support that "Claim 1 is directed to an abstract idea as claim 1 recites merely transmitting, measuring and processing a signal, i.e., concerned with a mathematical equation or an algorithm for transmitting, measuring and processing" without any explanation of how such subject matter constitutes a mathematical equation or an algorithm for transmitting, measuring and processing. The rejection fails to take into account any of the claim language itself. Claim 1 did not merely recite the transmitting. measuring and processing of a signal but requires that the distinctive defining signal to contain data including information indicating whether or not the transmitter is located in a predetermined environment. In regard to claim 1, the Office states that the claim does not specifically recite how to define a special area. This is not true. The claim recites that the special area is defined by the coverage of the distinctive defining signal. Support in the specification is provided at least in paragraphs [0008], [0067], [0072], [0076], [0117]. [0118], [0123] and [0124].

In regard to claim 14, the Office merely states that "Similarly, claim 14 is ineligible as the claim fails to recite additional elements that amount to significantly more than conventional features [i.e., an abstract idea] commonly known in the related art for instance, intrinsic location updating procedure". The Office has failed to provide any analysis that involves the language of claim 14 itself. Nor has the Office provided any explanation as to what an "intrinsic location updating procedure" is, nor any rationale as to how it forms the basis of a 35 USC §101

rejection. Applicants submit that the mere generalities provided by the Office, in conjunction with a complete lack of an analysis that involves the language of claim 14, render the 35 USC §101 rejection of the claims improper.

In regard to claim 19, the Office has likewise failed to provide any analysis that involves the language of claim 19 itself. Nor has the Office provided any explanation as to what an "intrinsic location updating procedure" is, nor any rationale as to how it forms the basis of a 35 USC §101 rejection. Applicants submit that the mere generalities provided by the Office, in conjunction with a complete lack of an analysis that involves the language of claim 19, render the 35 USC §101 rejection of the claims improper.

The USPTO's July 2015 Update regarding Subject Matter Eligibility states "the initial burden is on the examiner to explain why a claim or claims are patentable clearly and specifically, so that applicant has sufficient notice and is able to effectively respond. For subject matter eligibility, the examiner's burden is met by clearly articulating the reason(s) why the claimed invention is not eligible, for example by providing a reasoned rational that identifies the judicial exception recited in the claim and why it is considered an exception, and that identifies the additional elements in the claim (if any) and explains why they do not amount to significantly more than the exception." The 35 USC §101 rejection is improper for having failed to comply with the USPTO's guideline.

A review of the claim requirements of the present Application reveals that the claims do not fall under any of these categories or concepts identified as an abstract idea; therefore, the claim requirements cannot be considered merely abstract ideas.

Independent claim 14 sets forth a method associated with the use of a mobile station and at least one radio communication defining device that transmits a distinctive defining signal that defines a special area by its coverage, the distinctive defining signal

including information indicating whether or not the radio communication defining device is in a predetermined environment, the method includes receiving and processing the distinctive defining signal in the mobile station; and sending from the mobile station via the mobile telephone network an updating signal to one or more servers of a provider of presence related services about the mobile station's presence in the special area, the updating signal comprising the information indicative of whether or not the radio communication defining device is located in a predetermined environment.

New independent claim 22 sets forth a method that includes wirelessly receiving in a radio communication defining device first information from a radio transmitting device; the radio communication defining device using the first information to determine whether or not the radio communication defining device is in a predetermined environment; and transmitting from the radio communication defining device to a mobile station a distinctive defining signal that defines a special area by its coverage, the distinctive defining signal including second information indicating whether or not the radio communication defining device is located in a predetermined environment.

New independent claim 25 sets forth a method that includes receiving first information in a radio communication defining device via communication with a fixed network to which the radio communication defining device is physically connected; the radio communication defining device using the first information to determine whether or not the radio communication defining device is in a predetermined environment; and transmitting from the radio communication defining device to a mobile station a distinctive defining signal that defines a special area by its coverage, the distinctive defining signal including second information indicating whether or not the radio communication defining device is located in a predetermined environment.

Considering the first of the four categories described in the July 2105 Update, the claims do not constitute a fundamental economic practice that relates to the economy and commerce (i.e., agreements between people in the form of contracts, legal obligations and business relationships). Claims 14, 22 and 25 have nothing to do with contracts, legal obligations and business relationships between people.

Likewise, such claim requirements clearly do not relate to the second category of abstract ideas, namely "certain methods of organizing human activities," which relate to interpersonal and intrapersonal activities, "i.e., managing relationships or transactions between people, social activities and human behavior; satisfying or avoiding a legal obligation; advertising, marketing, and sales activities or behaviors; and managing human mental activity." (*See, July 2015 Update to the Interim Guidance*).

Plainly, the claims are not directed to the third category of abstract ideas, "an idea of itself," which the July 2015 Update clarifies relates to an idea standing alone (i.e., an uninstantiated concept, plan, or scheme; and a mental process that can be performed in the human mind or by pencil and paper). The rationale set forth by the Office on pages 5 and 6 of the Office Action appears to be that for a 35 USC §102 rejection and not that of a 35 USC §101 rejection. In any event, in regard to claim 1, it should go without saying that a radio communication defining device that transmits a particular type of signal with particular types of data for the purpose of being processed in a mobile station by its very nature, cannot be performed in the human mind or by pencil or paper. The same applies to claim 22. In regard to claim 14, it should also go without saying that receiving and processing a distinctive defining signal in the mobile station; and sending from the mobile station via the mobile telephone network an updating signal to one or more servers of a provider of presence related services about the mobile station's presence in the special area, the updating signal comprising the data regarding a status of the radio communication defining device, by its very nature, cannot be performed in the human mind or by pencil or paper. The same applies to cancelled claim 19 and

new claim 25. Finally, the claims are not directed to the fourth category of abstract ideas, a mathematical relationship/formula (i.e., mathematical algorithms, mathematical relationships, mathematical formulas, and calculations).

In summary, because the July 2015 Update to the Interim Guidance specifies that a claimed concept is NOT an abstract idea unless it is similar to at least one concept the courts have identified as an abstract idea, and since the claims are not similar to any of these concepts identified by the courts, including *O'Reilly v. Morse* [U.S. Reissue Patent No. RE117], the claims cannot be considered to recite merely abstract ideas and thus comply with 35 U.S.C. § 101. If the Examiner disagrees, the Examiner is respectfully requested to provide a fact-based explanation why the actual claim limitations of each of claims 14-18 and 22-27 are considered abstract under the indicated category.

Notwithstanding the foregoing, to expedite prosecution of the present application Applicant has cancelled claims 1, 7, 13 and 19-21 and has provided new claims 22-27.

On page 7 of the Office Action the Office states that page 74622 of Vol. 79, No. 241 of the Federal Register makes reference to the Supreme Court having identified that electromagnetism to transmit is directed to a judicial exception. The Applicant is unable to find any such reference on page 74622. It appears that the Office is referring to *In re Nuijten*, No. 06-1371 (Fed. Cir. Sept. 20, 2007), where the Federal Circuit affirmed the decision of the Board in which the Board had rejected "signal" claims in Petrus A.C.M. Nuijten's application as unpatentable subject matter outside the scope of 35 U.S.C. § 101.

Nuijten's patent application disclosed a technique for reducing distortion induced by the introduction of "watermarks" into signals. In the context of signal processing, watermarking is a technique by which an original signal (such as a digital audio file) is manipulated so as to embed within it additional data. This ability to encode additional data into a signal is useful to publishers of sound and video recordings, who can use watermarks to embed in the media

information intended to protect that media against unauthorized copying. Mr. Nuijten's technique improves existing watermark technology by further modifying the watermarked signal in a way that partially compensates for distortion introduced by the watermark.

The Nuijten claims relate to a method of embedding supplemental data in a signal, an arrangement for embedding supplemental data in a signal, and a storage medium having stored thereon a signal with embedded supplemental data. The Federal Circuit determined that the Nuijten claims relate strictly to a signal product and not to a process that requires specific acts. As such, Nuitjen has no relevance to the claims in the present application that relate to processes involving specific acts that occur among tangible equipment. To reiterate, the claims in the present application are not signal product claims and are therefore not subject to a judicial exception as in Nuijten.

Claim Rejections – 35 USC §103

Claims 1, 7, 13, 14 and 16-19 were rejected under 35 USC §103(a) as being unpatentable over U.S. Publication No. 2010/0317371 (hereinafter "Westerinen") in view of U.S. Publication No. 2008/0242298 (hereinafter "Nylander").

As noted in the response to Office Action filed on May 24, 2016 and again in the response to Office Action filed on January 17, 2017, the earliest priority date of the present application is March 28, 2006. The earliest priority date of Westerinen is June 12, 2009. Because Westerinen does not predate the present application, Applicant respectfully submits that the rejection of the claims under 35 USC §103(a) is improper and should be withdrawn.

Conclusion

In view of the foregoing, Applicant respectfully requests the Examiner to find the application in condition for allowance with claims 1, 7 and 13-21. 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: July 5, 2017

Respectfully submitted by:

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Reg. No. 41,900

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Application No.	:	14/738,083
First Named Inventor	:	Carlos A. Pérez Lafuente
Confirmation No.	:	4555
Filed	:	June 12, 2015
TC/A.U.	:	2643
Examiner	:	San A. Htun
Customer No.	:	27896
Docket No.	:	0572.0001C5
Title	:	METHOD AND SYSTEM FOR MONITORING A MOBILE STATION PRESENCE IN A SPECIAL AREA

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

This is a request under the provisions of 37 CFR 1.136(a) to extend the period for filing a reply in the above identified application. The applicant herewith petitions the Director of the United States Patent and Trademark Office to extend the time for reply to the Office action dated March 15, 2017 for 1 month(s) from June 15, 2017 to July 15, 2017.

The requested extension and fee are as follows:

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

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

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

Dated: July 5, 2017

Respectfully submitted by:

/Tim L. Kitchen/

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Electronic Patent Application Fee Transmittal

Application Number:	14738083
Filing Date:	12-Jun-2015
Title of Invention:	METHOD AND SYSTEM FOR MONITORING A MOBILE STATION PRESENCE IN A SPECIAL AREA
First Named Inventor/Applicant Name:	Carlos A. Pérez LaFuente
Filer:	Tim L. Kitchen
Attorney Docket Number:	0572.0001C5

Filed as Small Entity

Filing Fees for Utility under 35 USC 111(a)

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

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

Electronic Acknowledgement Receipt	
EFS ID:	29690556
Application Number:	14738083
International Application Number:	
Confirmation Number:	4555
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:	0572.0001C5
Receipt Date:	05-JUL-2017
Filing Date:	12-JUN-2015
Time Stamp:	17:08:14
Application Type:	Utility under 35 USC 111(a)

Payment information:

Submitted with Payment	yes
Payment Type	CARD
Payment was successfully received in RAM	$100
RAM confirmation Number	070617INTEFSW17095200
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		2017-07-05_083-ResponseToNFOA-05720001C5.pdf	181631 9acbf2e8adac26463b686829c046deba42a17e0e	yes	19

Multipart Description/PDF files in .zip description

Document Description	Start	End
Amendment/Req. Reconsideration-After Non-Final Reject	1	1
Claims	2	5
Applicant Arguments/Remarks Made in an Amendment	6	19

Warnings:					
Information:					
2	Extension of Time	2017-07-05_EOT-1MnthXml-05720001C5.pdf	91602 789188b975571f12965a66ed2f4349e1a7f27a4e	no	1
Warnings:					
Information:					
3	Fee Worksheet (SB06)	fee-info.pdf	30629 a5cae20b8ef87d388724ef9e22a2563e46727187	no	2
Warnings:					
Information:					
		Total Files Size (in bytes):	303862		

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.

PTO/SB/06 (09-11)
Approved for use through 1/31/2014. OMB 0651-0032
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

PATENT APPLICATION FEE DETERMINATION RECORD Substitute for Form PTO-875	Application or Docket Number 14/738,083	Filing Date 06/12/2015	☐ To be Mailed

ENTITY: ☐ LARGE ☒ SMALL ☐ MICRO

APPLICATION AS FILED – PART I

FOR	(Column 1) NUMBER FILED	(Column 2) NUMBER EXTRA	RATE ($)	FEE ($)
☒ BASIC FEE (37 CFR 1.16(a), (b), or (c))	N/A	N/A	N/A	**140**
☐ 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	**140**

APPLICATION AS AMENDED – PART II

AMENDMENT **07/05/2017**

	(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))	* 10	Minus	** 20	= 0	X $40 =	0
Independent (37 CFR 1.16(h))	* 3	Minus	***3	= 0	X $210 =	0
☐ Application Size Fee (37 CFR 1.16(s))						
☐ FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))						
					TOTAL ADD'L FEE	**0**

AMENDMENT

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

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

LIE
GWENDOLYN MYERS

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Application Number	14738083
Filing Date	2015-06-12
First Named Inventor	Carlos A. Perez Lafuente
Art Unit	2643
Examiner Name	San A. Htun
Attorney Docket Number	0572.0001C5

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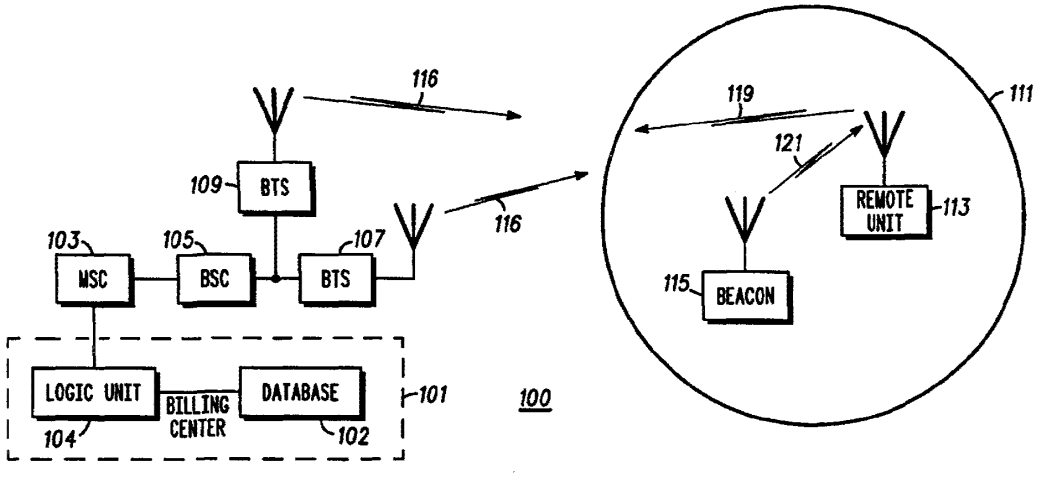
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(57) Abstract

A beacon (115) periodically transmits a beacon signal (121), identifiable from other beacon signals (not shown) by a remote unit (113). Upon call origination, the remote unit (113) searches for the beacon signal (121) transmitted by the beacon (115), and reports to base stations whether or not the beacon signal (121) is received by the remote unit (113). The beacon status is routed through infrastructure equipment to a billing center (101), which independently verifies that the remote unit (113) is communicating with base stations representative of the remote unit's home zone, and bills the call accordingly.

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METHOD AND APPARATUS FOR BILLING IN A WIRELESS COMMUNICATION SYSTEM

Field of the Invention

The present invention relates generally to wireless communication systems and, in particular, to a method and apparatus for billing within such wireless communication systems.

Background of the Invention

A telephone concept known as "One-Number" service that allows a person to be reached at any time, anywhere, by a single number is becoming quite popular. With the advent of One-Number services comes a need to provide billing based on a caller's location. For example, in order to make One-Number service more appealing to consumers, telephone calls are classified as residential or roaming, based on where the phone call originates, with residential and business telephone calls being billed at lower rates than roaming telephone calls. Thus, a need exists for a method and apparatus for billing in a wireless communication system that determines a location of a remote unit that is accessing the cellular system and bills the remote unit accordingly.

Brief Description of the Drawings

FIG. 1 is a block diagram of a cellular communication system in accordance with the preferred embodiment of the present invention.

FIG. 2 is a block diagram of a remote unit of FIG. 1 in accordance with the preferred embodiment of the present invention.

FIG. 3 is a flow chart showing operation of the communication system of FIG. 1 in accordance with the preferred embodiment of the present invention.

FIG. 4 is a flow chart showing a first method for establishment and storage of a base station configuration that is representative of the remote unit's home zone.

FIG. 5 is a flow chart showing a second method for establishment and storage of a base station configuration that is representative of the remote unit's home zone.

FIG. 6 is a flow chart showing operation of the billing center of FIG. 1 in accordance with the preferred embodiment of the present invention.

Detailed Description of the Drawings

In order to address this need and others, the present invention provides a method and an apparatus for billing in a wireless communication system. A beacon periodically transmits a beacon signal, identifiable from other beacon signals (not shown) by a remote unit. Upon call origination, the remote unit searches for the beacon signal transmitted by the beacon, and reports to base stations whether or not the beacon signal is received by the remote unit. The beacon status is routed through infrastructure equipment to a billing center, which independently verifies that the remote unit is communicating with base stations representative of the remote unit's home zone, and bills the call accordingly.

The preferred embodiment of the present invention encompasses a method of billing in a wireless communication system. The method comprises the steps of: receiving a message containing information on whether a remote detects a beacon, determining a location of a home zone

for the remote unit, determine a location of the remote unit, and billing a remote unit based on the steps of receiving and determining.

An alternate embodiment of the present invention encompasses a method of billing in a wireless communication system. The method comprises the steps of determining if a beacon signal can be detected. In the preferred embodiment, the beacon signal is a unique signal for utilization only by the remote unit for determining proximity to a home zone. Next, the determination is reported to cellular infrastructure equipment and the cellular infrastructure equipment utilizes the determination for billing.

In yet a further embodiment of the present invention, an apparatus for billing in a wireless communication system is provided. The apparatus comprises a logic unit having an input containing information on whether a remote detects a beacon, and determines a location of a home zone for the remote unit, determines a location of the remote unit, and bills a remote unit based on the location of the home zone and location of the remote unit.

FIG. 1 is a block diagram of a cellular communication system 100 in accordance with the preferred embodiment of the present invention. In the preferred embodiment of the present invention, communication system 100 utilizes a Code Division Multiple Access (CDMA) system protocol as described in "Personal Station-Base Station Compatibility Requirements for 1.8 to 2.0 GHz Code Division Multiple Access (CDMA) Personal Communication Systems" (American National Standards Institute (ANSI) J-STD-008), but in alternate embodiments, communication system 100 may utilize other analog or digital cellular communication system protocols such as, but not limited to, the Narrowband Advanced Mobile Phone Service (NAMPS) protocol, the Advanced Mobile Phone Service (AMPS) protocol, the Global System for

Mobile Communications (GSM) protocol, the Personal Digital Cellular (PDC) protocol, or the United States Digital Cellular (USDC) protocol. Communication system 100 comprises infrastructure equipment such as billing center 101, Mobile Switching Center (MSC) 103, Base Station Controller (BSC) 105, and Base Transceiver Stations (BTSs) 107-109.

As shown, remote unit 113 is communicating with base stations 107 and 109 via uplink communication signals 119 and base stations 107 and 109 are communicating with remote unit 113 via downlink communication signals 116. In the preferred embodiment of the present invention, base stations 107 and 109 are suitably coupled to BSC 105, and BSC 105 is suitably coupled to MSC 103. Additionally, in the preferred embodiment of the present invention, beacon 115 is communicating with remote unit 113 via transmitted beacon signal 121. Beacon 115 broadcasts only downlink beacon signal 121, that is a low-power, radio-frequency (RF) signal with limited range (e.g., less than 100 meters). In order to reduce interference between beacon signals, signal 121 may be sent over one of a plurality of channels, settable by the user. In the preferred embodiment, beacon signal 121 is a narrow-band signal such as an AMPS control channel or a heavily bandpass filtered CDMA signal, with a bandwidth on the order of 30-100 kilohertz (kHz), whereas signals 116 and 119 are wideband signals, typically having bandwidth on the order of 1.25 Megahertz (MHz). In alternate embodiments of the present invention, beacon signal 121 may be other forms of signaling, such as an overhead message (e.g., System Parameter Overhead Message) with a unique System Identification 1 (SID1) field indicating the home zone.

Operation of communication system 100 occurs as follows: Beacon 115 periodically transmits beacon signal 121, identifiable from other beacon signals (not shown) by remote unit 113. In the preferred embodiment of the present invention, beacon 115 continuously transmits

an Electronic Serial Number (ESN) of remote unit 113. More particularly, every remote unit 113 within communication system 100 has a unique identification number (ESN) that identifies the remote unit to communication system 100. Beacon 115 broadcasts the unique ESN for remote unit 113 (i.e., a unique beacon signal for utilization by remote unit 113 only) for identification purposes. Upon call origination, remote unit 113 searches for beacon signal 121 transmitted by beacon 115, and reports to infrastructure equipment whether or not beacon signal 121 is received (beacon status) by remote unit 113 to base stations 107 and 109 via a home zone message. Additionally, remote unit 113 reports if beacon signal 121 is received to the user of remote unit 113 via a beacon indicator (e.g., a light on remote unit 113).

The beacon status is received by base station(s) 107 and/or 109 and is routed through BSC 105, MSC 103, and to billing center 101, which independently verifies that remote unit 113 is communicating with base stations representative of the remote unit's home zone, and bills the call accordingly. More specifically, the reception of beacon signal 121 indicates to billing center 101 that remote unit 113 is placing a call from a first zone (home zone), which receives a lower billing rate (when independently verified by billing center 101). Conversely, the lack of reception of beacon signal 121 during call origination indicates to billing center 101 that remote unit 113 is placing a call from outside its home zone, and bills the call accordingly.

It should be noted that during a call from a home zone, if remote unit 113 wanders outside the limit of beacon coverage 111, billing center 101 continues to bill the user home zone rates. In the preferred embodiment of the present invention roaming rates are applied when remote unit 113 moves outside a second zone. In the preferred embodiment of the present invention, the second zone is identified by

remote unit 113 handing off to a base station configuration that is not representative (e.g., within a predetermined distance) of a location of remote unit's 113 home zone. The location of the home zone is stored in database 102 located in billing center 101. Thus, when remote unit 113 initiates a call, residential billing rates are applied to the call if: 1) remote unit 113 is within a first zone (beacon signal 121 is received by remote unit 113); and 2) remote unit 113 is within a second zone (in communication with base stations located within a predetermined distance from the home zone). Residential billing continues until remote unit 113 moves beyond the second zone (i.e., hands off to a base station outside the predetermined distance from the residential billing zone).

The above described method of billing has many benefits. Firstly, the home beacon is used to alert the subscriber that the mobile unit is inside the home zone prior to completing the call thus allowing the subscriber to have more control of the billing rates. Secondly, since the base stations representative of a remote unit's home zone are independently verified by the billing center prior to the call being billed at the lower residential rate, the beacon cannot be moved to other locations to receive a lower billing rate outside the home zone area. Thirdly, since the beacon signal has a small radius of coverage, multiple home zones can independently co-exist within a small region such as an apartment complex.

FIG. 2 is a block diagram of a remote unit of FIG. 1 in accordance with the preferred embodiment of the present invention. Remote unit 113 comprises transmit circuitry 200 and receive circuitry 201. While transmitting, signal 210 (traffic channel data bits or home zone message), is received by convolutional encoder 212 at a particular transmission rate (e.g., 9.6 kbit/second). Input traffic channel data bits 210 typically include voice converted to data by a vocoder, pure data, or a combination of the two

types of data, and is output at a particular data rate (i.e., full rate, 1/2 rate, 1/4 rate, 1/8 rate . . . etc.). Convolutional encoder 212 determines the transmission rate and encodes input data bits 210 into data symbols at a fixed encoding rate with an encoding algorithm which facilitates subsequent maximum likelihood decoding of the data symbols into data bits (e.g. convolutional or block coding algorithms). For example, convolutional encoder 212 encodes input data bits 210 (received at a rate of 9.6 kbit/second) at a fixed encoding rate of one data bit to three data symbols (i.e., rate 1/3) such that convolutional encoder 212 outputs data symbols 214 at a 28.8 ksymbol/second rate.

Data symbols 214 are then input into interleaver 217. Interleaver 217 interleaves the data symbols 214 at the symbol level. In interleaver 217, data symbols 214 are individually input into locations within a matrix so that the matrix is filled in a column by column manner. Data symbols 214 are individually output from locations within the matrix so that the matrix is emptied in a row by row manner. Typically, the matrix is a square matrix having a number of rows equal to the number of columns; however, other matrix forms can be chosen to increase the output interleaving distance between the consecutively input non-interleaved data symbols. Interleaved data symbols 218 are output by interleaver 217 at the same data symbol rate that they were input (e.g., 28.8 ksymbol/second). The predetermined size of the block of data symbols defined by the matrix is derived from the maximum number of data symbols which can be transmitted at a predetermined symbol rate within a predetermined length transmission block. For example, in a full rate transmission if the predetermined length of the transmission block is 20 milliseconds, then the predetermined size of the block of data symbols is 9.6 ksymbol/second times 20 milliseconds times three which equals 576 data symbols which defines a 24 by 24 matrix.

Interleaved data symbols 218 are input to orthogonal encoder 220. For IS-95-type transmission orthogonal encoder 220 M-ary modulates the interleaved data symbols 218. For example, in 64-ary orthogonal encoding, each sequence of six interleaved data symbols 218 are replaced by a 64 symbol orthogonal code. These 64 orthogonal codes preferably correspond to Walsh codes from a 64 by 64 Hadamard matrix wherein a Walsh code is a single row or column of the matrix.

A sequence of Walsh codes 242 is prepared for transmission over a communication channel by modulator 254. Spreader 252 provides a spreading code which is combined with the Walsh codes 242. The spreading code is a specific sequence of symbols which is output at a fixed chip rate (e.g., 1.228 Mchip/second). In practice, the code spread encoded chips are a pair of pseudorandom (PN) codes used to generate an I-channel and Q-channel code spread sequence. The I-channel and Q-channel code spread sequences are used to bi-phase modulate a quadrature pair of sinusoids by driving the power level controls of the pair of sinusoids. The sinusoids output signals are summed, bandpass filtered, translated to an RF frequency, amplified, filtered via upconverter 256 and radiated by antenna 258 to complete transmission.

Receiving circuitry 201 comprises CDMA receiver leg 260 having standard CDMA reception circuitry (e.g., despreader, decoder, de-interleaver . . . etc.), beacon receiver leg 262, and switch 264. Periodically (e.g., every 10 seconds), switch 264 is connected to beacon receiver leg 262 for reception of beacon signal 121. More particularly, beacon signal 121 (if present) is downconverted by down converter 268 and amplified by amplifier 266. The downconverted and amplified signal enters beacon receiver leg 262, which in the preferred embodiment comprises an IF filter, limiter, discriminator and a signal detector which transfers the detected signal to logic unit 270. After a predetermined time period (e.g., 0.1

seconds) logic unit 270 determines if beacon signal 121 is present or not, and transmits this information (via home zone message) to communication system 100 (via transmitting circuitry 200). Additionally, logic unit 270 notifies the caller via indicator 272 if beacon signal 121 is present. In the preferred embodiment of the present invention indicator 272 is an indicator light that is lit when beacon signal 121 is detected, however, in alternate embodiments of the present invention, indicator 272 may be other means of indication (e.g., text message, voice indication, . . ., etc.). After the predetermined time period has passed, switch 264 is connected to CDMA receiver leg 260 for standard CDMA reception. In an alternate embodiment of the present invention, CDMA receiver leg 260 is not disconnected and CDMA signal 116 is simultaneously demodulated along with beacon signal 121.

FIG. 3 is a flow chart showing operation of the communication system of FIG. 1 in accordance with the preferred embodiment of the present invention. In the description below, it is assumed that remote unit 113 has an entry within database 102 that identifies home zone information for remote unit 113. The logic flow begins at step 305 where remote unit 113 accesses communication system 100 by powering on and remaining in an idle state. While in the idle state remote unit 113 periodically searches for beacon signal 121 (e.g., every 10 seconds), making a determination if beacon signal 121 is present (step 310).

In an alternate embodiment of the present invention, at step 310 remote unit 113 senses when it is a predetermined distance from beacon 113 and either stops searching for beacon 113 or reduces the periodicity of connecting to receiver leg 262. There are a number of alternative methods for remote unit 113 to sense that it is a predetermined distance from beacon 115. Firstly, remote unit may remember a base station configuration with which it was communicating when last receiving

beacon signal 121, and if that configuration changes, the frequency of beacon searching decreases. For example, if remote unit 113 is presently receiving base stations 107 and 109 it maintains the frequency of connecting to receiver leg 262 until another base station is received, or either base station 107 or 109 is not received. Alternatively, remote unit 113 may reduce the frequency of connecting to receiver leg 262 when it does not receive signal 121. In yet another embodiment of the invention remote unit 113 may perform a crude location estimate based on the latitude and longitude of the base stations it is presently receiving and reduce the search frequency if it determines that it is greater than a predetermined distance (e.g., 500 meters) from home zone 111.

Continuing, at step 310, remote unit 113 reports if beacon signal 121 is received to the user of remote unit 113 via beacon indicator 272. At step 315, remote unit 113 initiates a call. As discussed below during part of the call initiation, remote unit 113 sends a home zone message to infrastructure equipment indicating if beacon signal 121 is received by remote unit 113. Remote unit 113 communicates its proximity to beacon 115 via a 1 bit reserved field within an access channel messages (e.g., *Registration Message*, *Origination Message*, or *Page Response Message*). A "1" in this field indicates that remote unit 113 has recently received beacon signal 121 and a "0" indicates that it has not.

At step 320, billing center 101 receives a message containing information on whether a remote detects beacon signal 121, and determines if remote unit 113 is currently receiving beacon signal 121, and if not the logic flow continues to step 325 where home zone billing is denied. Next at step 330 the call is established using non-home zone billing.

Returning to step 320, if it is determined that remote unit 113 is currently receiving beacon signal 121, the logic flow continues to step 335

where billing center 101 accesses database 102 and determines if the current base stations utilized by remote unit 113 are within a predetermined distance from the location stored in database 102. In the preferred embodiment, this is accomplished by firstly determining a location of a home zone for remote unit 113 by fetching this information from database 102, and secondly determining a location for remote unit 113 by analyzing the current base stations in communication with remote unit 113 (base station configuration). If at step 335 it is determined that the current base stations utilized by remote unit 113 are within a predetermined distance to the location stored in database 102, the logic flow continues to step 340, otherwise the logic flow continues to step 325 where home zone billing is denied. At step 340, home zone billing is allowed, and the call is established using home zone billing (step 345).

Three methods for establishing and storing a remote unit's home zone location are contemplated. Firstly, a system operator can simply provide beacon 115 to a user without creating any entry whatsoever in database 102. All entries will be created when the user first accesses the system. Secondly, a system operator can provide beacon 115 to a user and create an entry consisting of the user's ESN, without any location information on the user's home zone. Home zone information will be created when the user first accesses the system. Finally, a system operator can manually create a full entry representative of the user's home zone upon providing the beacon to the user. The first and the second methods will be described below with reference to FIG. 4 and FIG. 5, respectively.

Referring now to FIG. 4, the logic flow begins at step 401 where remote unit 113 accesses communication system 100 and indicates reception of beacon signal 121. At step 405, billing center 101 accesses database 102 and determines if the remote unit's ESN is within database 102. The inability to find the remote unit's ESN within database 102 may

be, *inter alia*, because remote unit 113 is reporting reception of beacon signal 121 for a first time, or because remote unit 113 has been removed from database 102. If, at step 405, it is determined that the remote unit's ESN is not within database 102, then the logic flow continues to step 407, where it is determined if the current base station configuration is allowed by the system operator. For example, a system operator may deny home zone billing for certain high-business traffic areas within communication system 100. If, at step 407, it is determined that the current base station configuration is not allowed, then the logic flow continues to step 325 (FIG. 3), where home zone billing is denied, otherwise the logic flow continues to step 410, where billing center 101 then creates an entry in database 102 for remote unit 113 comprising the remote unit's ESN along with the location in latitude and longitude of remote unit 113, and the current base station configuration. (The location of remote unit 113 is determined by known methods (e.g., GPS, Loran, Trilateration, . . . etc.)). The logic flow then continues to step 340 (FIG. 3) where home zone billing is allowed. Returning to step 405, if at step 405 it is determined that the remote unit's ESN is within database 102, the logic flow continues to step 335 (FIG. 3).

The creation of database 102 in such a way allows for quick updates of residential billing zone locations. For example, by simply deleting an entry for an individual remote unit within database 102, an updated location estimate of the residential billing zone will be automatically created the next time remote unit 113 accesses communication system 100.

Referring now to FIG. 5, the logic flow begins at step 501 where remote unit 113 accesses communication system 100 and indicates reception of beacon signal 121. At step 505, billing center 101 accesses database 102 and determines if the remote unit's ESN is within database 102. As discussed above, in this embodiment of the present invention, the

inability to find the remote unit's ESN within database 102 is because remote unit 113 because the ESN has not been entered by the service provider. If, at step 505, it is determined that the remote unit's ESN is not within database 102, then the logic flow continues to step 325 (FIG. 3) where residential zone billing is denied. If at step 505 the remote unit's ESN is found within database 102, then the logic flow continues to step 515 where billing center 101 determines if home zone information for the remote unit is within database 102. If, at step 515, it is determined that home zone information is not within database 102, the logic flow continues to step 520 where billing center 101 creates an entry in database 102 for remote unit 113 comprising the remote unit's ESN along with the location in latitude and longitude of remote unit 113, and the current base station configuration. (The location of remote unit 113 is determined by known methods (e.g., GPS, Loran, Trilateration, . . . etc.)). The logic flow then continues to step 340 (FIG. 3) where home zone billing is allowed. Returning to step 515, if at step 515 it is determined that the remote unit's home zone is within database 102, the logic flow continues to step 335 (FIG. 3).

FIG. 6 is a flow chart showing operation of billing center 101 in accordance with the preferred embodiment of the present invention. In the description below, it is assumed that remote unit 113 has an entry within database 102 that identifies home zone information for remote unit 113. The logic flow begins at step 601 where logic unit 104 receives a remote unit's ESN, home zone message, and a list of base stations in communication with the remote unit. This information is supplied by MSC 103. At step 605 logic unit 104 determines if remote unit 113 is currently receiving beacon signal 121, and if not the logic flow continues to step 610 where residential billing is denied. More particularly, logic unit 104 analyzes the home zone message transmitted from remote unit

113 and determines if remote unit 113 is receiving beacon signal 121, and if not, the logic flow continues to step 610.

If, at step 605, logic unit 104 determines that remote unit 113 is currently receiving beacon signal 121, then the logic flow continues to step 615 where logic unit 104 accesses database 102 and fetches location information regarding the remote unit's home zone. In a first embodiment of the present invention, location information is a base station configuration representative of the remote unit's home zone. In an alternate embodiment of the present invention, home zone location information comprises an actual physical location, represented in latitude and longitude. At step 623, in a first embodiment of the present invention, logic unit 104 determines if remote unit 113 is currently utilizing a base station configuration that is representative of the remote unit's home zone, and in a second embodiment of the present invention, logic unit 104 determines if remote unit 113 is within a predetermined distance (e.g., 500 meters) from the location of the remote unit's residential billing zone. If at step 623, remote unit 113 is not utilizing a base station configuration not representative of its home zone, or if remote unit 113 is greater than the predetermined distance from the home zone, the logic flow continues to step 610, where home zone billing is denied, otherwise the logic flow continues to step 625. At step 625 residential billing rates are applied to the call, and the logic flow returns to step 623.

While the invention has been particularly shown and described with reference to a particular embodiment, it will be understood by those skilled in the art that various changes in form and details may be made therein without departing from the spirit and scope of the invention.

CLAIMS

1. A method for billing in a wireless communication system, the method comprising the steps of:

receiving a message containing information on whether a remote detects a beacon;

determining a location of a home zone for the remote unit;

determining a location of the remote unit; and

billing the remote unit based on the received message, the location of the home zone, and the location of the remote unit.

2. The method of claim 1 wherein the step of determining the location of the remote unit comprises the step of determining a base station configuration utilized by the remote unit.

3. The method of claim 1 wherein the step of determining the location of the home zone comprises the step of fetching a home zone location for the remote unit from a database.

4. The method of claim 1 wherein the step of billing the remote unit comprises the steps of:

billing the remote unit a first rate if the remote unit is detecting the beacon and the location of the remote unit is within the home zone for the remote unit; and

billing the remote unit a second rate otherwise.

5. The method of claim 1 wherein the step of receiving the message containing information on whether the remote detects the beacon comprises the step of receiving a message containing information on

whether the remote unit detects a low-power, radio-frequency (RF) signal with a range of less than 100 meters.

6. An apparatus for billing in a wireless communication system, the apparatus comprising a logic unit having an input containing information on whether a remote detects a beacon, the logic unit additionally determines a location of a home zone for the remote unit, a location of the remote unit, and bills the remote unit based on the steps of receiving and determining.

7. The apparatus of claim 6 wherein the location of the remote unit is a base station configuration utilized by the remote unit.

8. The apparatus of claim 6 further comprising a database containing a home zone location for the remote unit.

9. The apparatus of claim 6 wherein the beacon comprises a low-power, radio-frequency (RF) signal with a range of less than 100 meters.

10. The apparatus of claim 6 wherein the beacon comprises a unique beacon signal for utilization only by the remote unit.

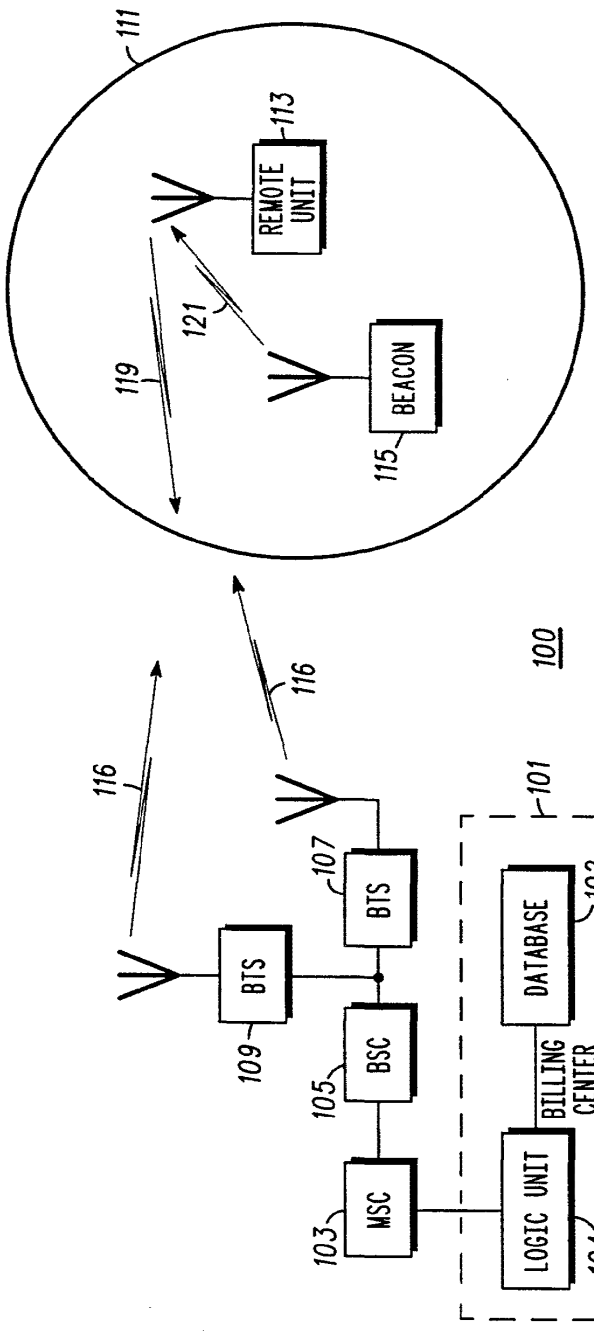

111
113
REMOTE UNIT
121
119
BEACON
115
116
116
100
107
BTS
101
102
DATABASE
109
BTS
105
BSC
BILLING CENTER
103
MSC
LOGIC UNIT
104

FIG. 1

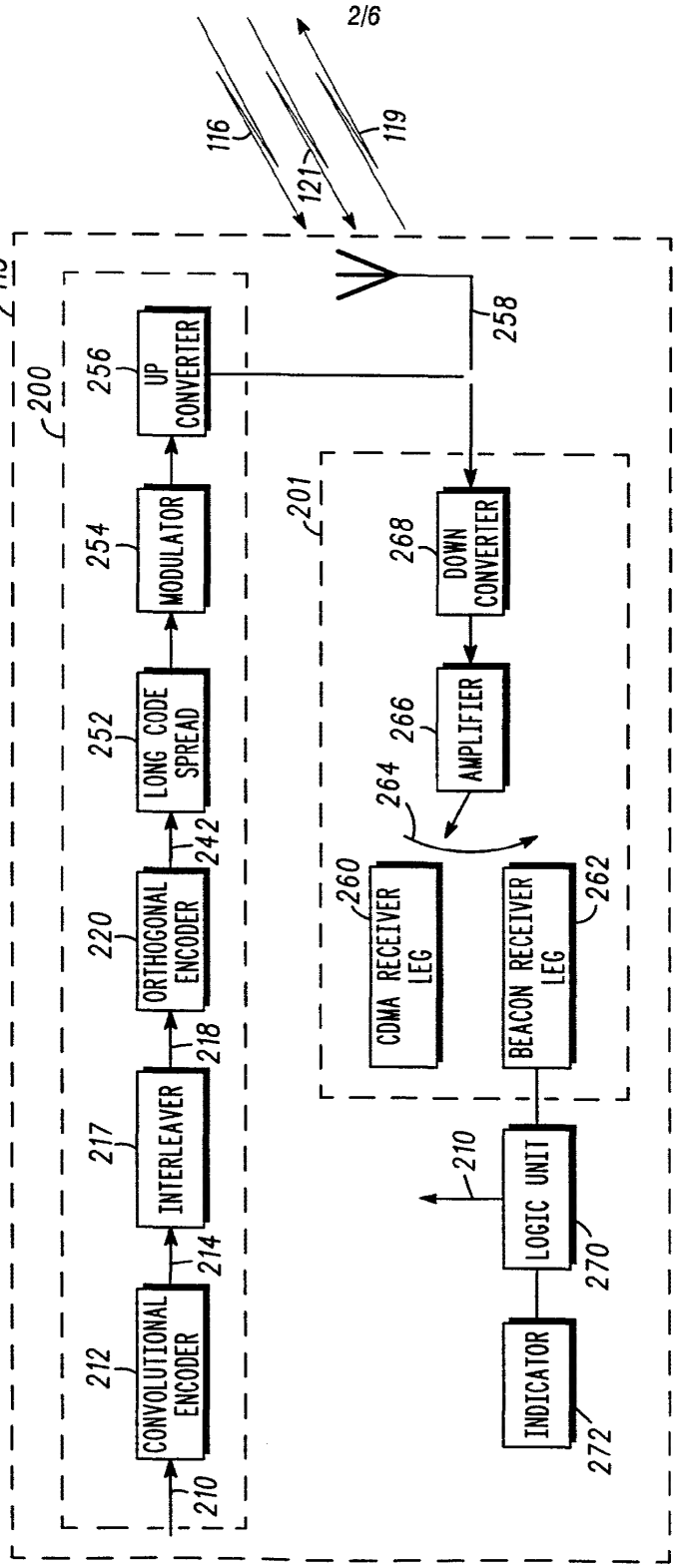

2/6
116
121
119
113
200
256
UP CONVERTER
258
254
MODULATOR
252
LONG CODE SPREAD
242
220
ORTHOGONAL ENCODER
218
217
INTERLEAVER
214
212
CONVOLUTIONAL ENCODER
210
201
268
DOWN CONVERTER
266
AMPLIFIER
264
260
CDMA RECEIVER LEG
262
BEACON RECEIVER LEG
210
LOGIC UNIT
270
INDICATOR
272

FIG. 2

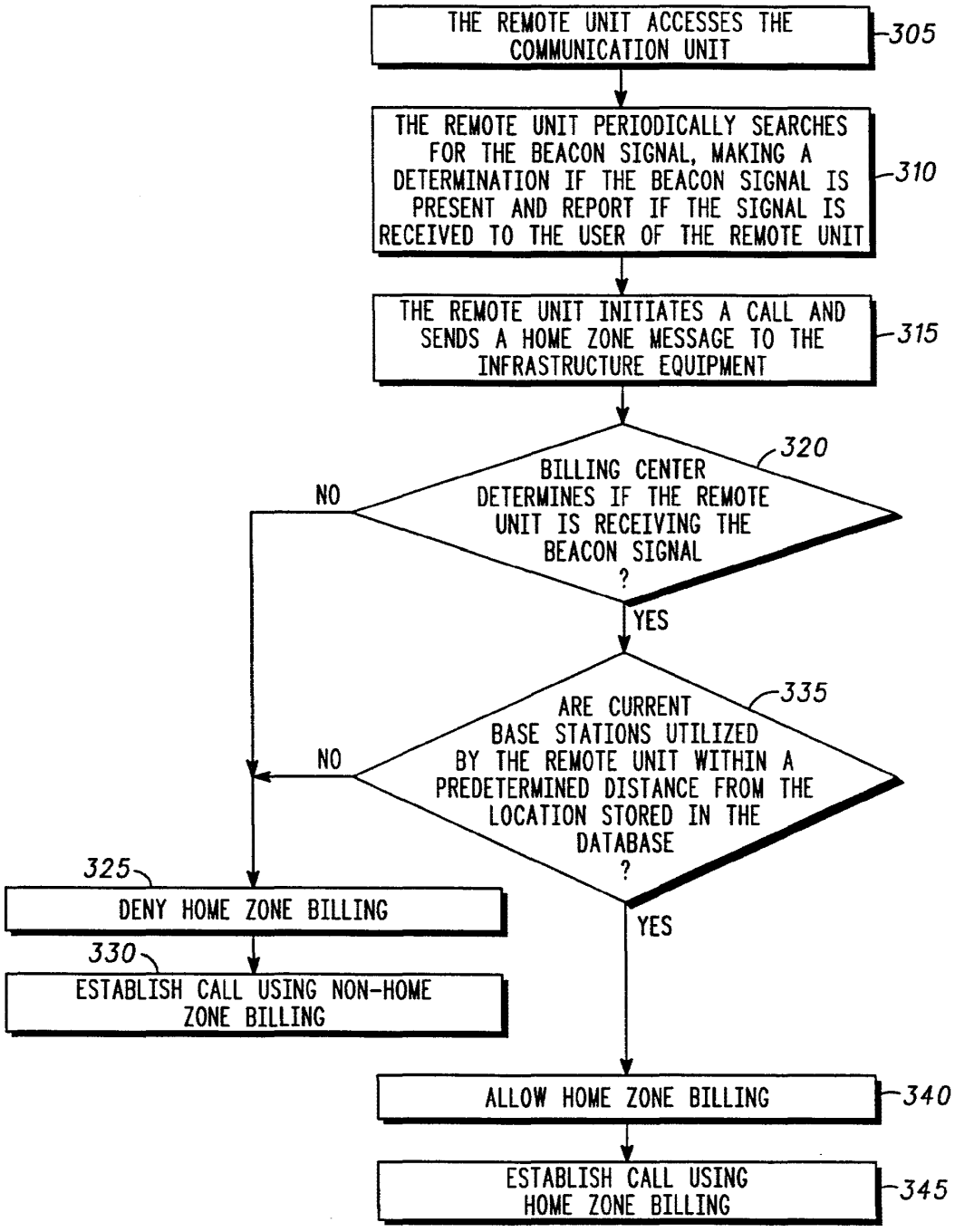

THE REMOTE UNIT ACCESSES THE COMMUNICATION UNIT
305
THE REMOTE UNIT PERIODICALLY SEARCHES FOR THE BEACON SIGNAL, MAKING A DETERMINATION IF THE BEACON SIGNAL IS PRESENT AND REPORT IF THE SIGNAL IS RECEIVED TO THE USER OF THE REMOTE UNIT
310
THE REMOTE UNIT INITIATES A CALL AND SENDS A HOME ZONE MESSAGE TO THE INFRASTRUCTURE EQUIPMENT
315
320
BILLING CENTER DETERMINES IF THE REMOTE UNIT IS RECEIVING THE BEACON SIGNAL ?
NO
YES
335
ARE CURRENT BASE STATIONS UTILIZED BY THE REMOTE UNIT WITHIN A PREDETERMINED DISTANCE FROM THE LOCATION STORED IN THE DATABASE ?
NO
YES
325
DENY HOME ZONE BILLING
330
ESTABLISH CALL USING NON-HOME ZONE BILLING
ALLOW HOME ZONE BILLING
340
ESTABLISH CALL USING HOME ZONE BILLING
345

FIG. 3

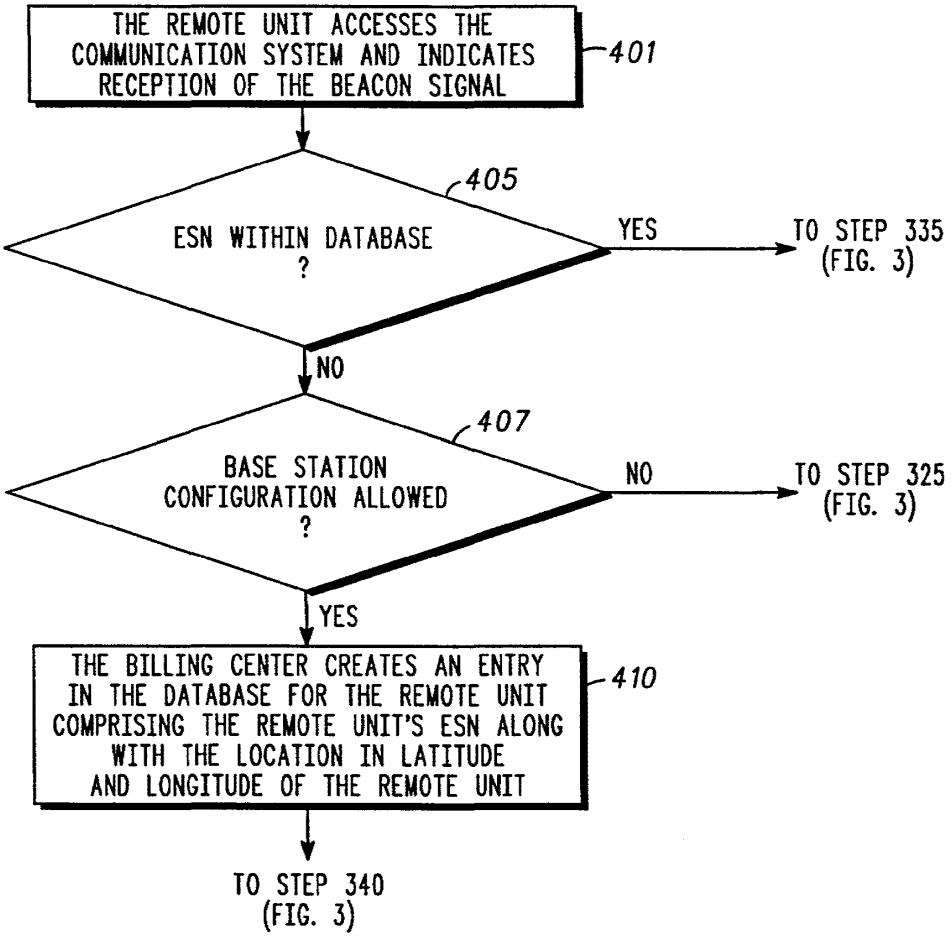

THE REMOTE UNIT ACCESSES THE COMMUNICATION SYSTEM AND INDICATES RECEPTION OF THE BEACON SIGNAL
401
405
ESN WITHIN DATABASE ?
YES
TO STEP 335 (FIG. 3)
NO
407
BASE STATION CONFIGURATION ALLOWED ?
NO
TO STEP 325 (FIG. 3)
YES
THE BILLING CENTER CREATES AN ENTRY IN THE DATABASE FOR THE REMOTE UNIT COMPRISING THE REMOTE UNIT'S ESN ALONG WITH THE LOCATION IN LATITUDE AND LONGITUDE OF THE REMOTE UNIT
410
TO STEP 340 (FIG. 3)

FIG. 4

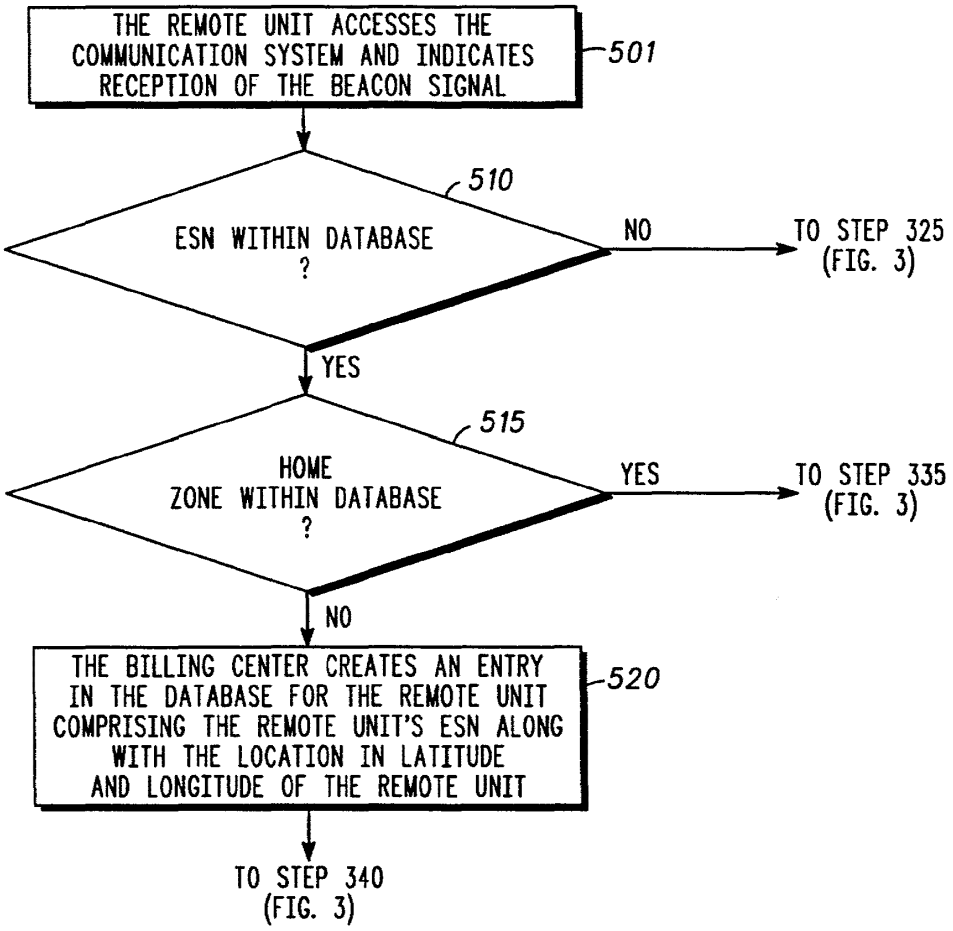

THE REMOTE UNIT ACCESSES THE COMMUNICATION SYSTEM AND INDICATES RECEPTION OF THE BEACON SIGNAL
501
ESN WITHIN DATABASE ?
510
NO
TO STEP 325 (FIG. 3)
YES
HOME ZONE WITHIN DATABASE ?
515
YES
TO STEP 335 (FIG. 3)
NO
THE BILLING CENTER CREATES AN ENTRY IN THE DATABASE FOR THE REMOTE UNIT COMPRISING THE REMOTE UNIT'S ESN ALONG WITH THE LOCATION IN LATITUDE AND LONGITUDE OF THE REMOTE UNIT
520
TO STEP 340 (FIG. 3)

FIG. 5

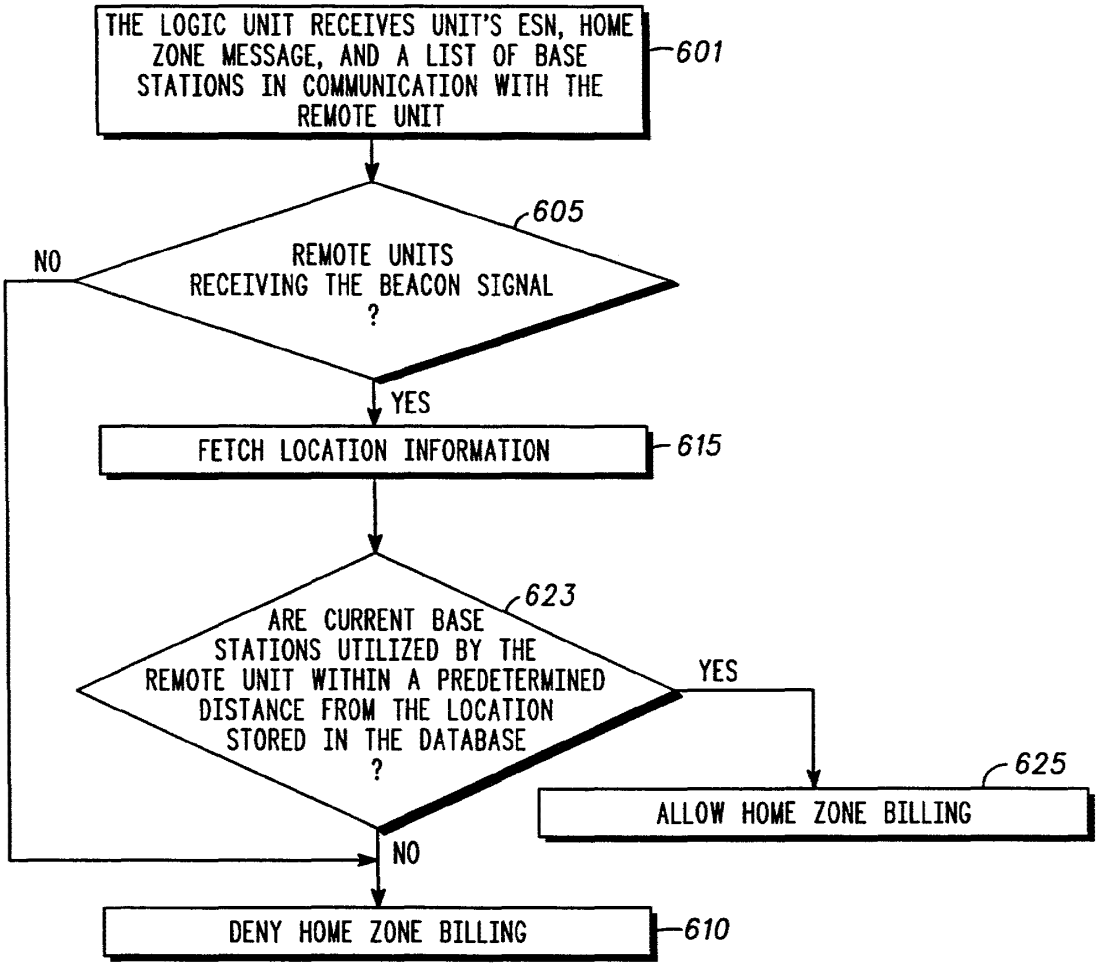

THE LOGIC UNIT RECEIVES UNIT'S ESN, HOME ZONE MESSAGE, AND A LIST OF BASE STATIONS IN COMMUNICATION WITH THE REMOTE UNIT
601
605
REMOTE UNITS RECEIVING THE BEACON SIGNAL ?
NO
YES
FETCH LOCATION INFORMATION
615
623
ARE CURRENT BASE STATIONS UTILIZED BY THE REMOTE UNIT WITHIN A PREDETERMINED DISTANCE FROM THE LOCATION STORED IN THE DATABASE ?
YES
625
ALLOW HOME ZONE BILLING
NO
DENY HOME ZONE BILLING
610

FIG. 6

INTERNATIONAL SEARCH REPORT

International application No.
PCT/US99/05337

A. CLASSIFICATION OF SUBJECT MATTER

IPC(6) :H04Q 7/20
US CL :455/406, 407, 408, 409, 422, 432, 435

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

U.S. : 455/406, 407, 408, 409, 422, 432, 435

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

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

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	US 5,592,535 A (KLOTZ) 07 JANUARY 1997, SEE ABSTRACT AND FIGURES 1-2B	1-10
Y	US 5,303,297 A (HILLIS) 12 APRIL 1994, SEE ABSTRACT AND FIGURE 1-3	1-10
Y	US 5,758,288 A (DUNN ET AL) 26 MAY 1998, SEE ABSTRACT AND FIGURES 1-9	1-10

☐ Further documents are listed in the continuation of Box C. ☐ See patent family annex.

*	Special categories of cited documents:	"T"	later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
"A"	document defining the general state of the art which is not considered to be of particular relevance	"X"	document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
"E"	earlier document published on or after the international filing date	"Y"	document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
"L"	document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)	"&"	document member of the same patent family
"O"	document referring to an oral disclosure, use, exhibition or other means		
"P"	document published prior to the international filing date but later than the priority date claimed		

Date of the actual completion of the international search 23 MAY 1999	Date of mailing of the international search report 07 JUL 1999
Name and mailing address of the ISA/US Commissioner of Patents and Trademarks Box PCT Washington, D.C. 20231 Facsimile No. (703) 305-3230	Authorized officer EDAN ORGAD Telephone No. 703-308-9322

Form PCT/ISA/210 (second sheet)(July 1992)★

Electronic Acknowledgement Receipt

EFS ID:	29414491
Application Number:	14738083
International Application Number:	
Confirmation Number:	4555
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:	0572.0001C5
Receipt Date:	06-JUN-2017
Filing Date:	12-JUN-2015
Time Stamp:	18:00:40
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	2017-06-06_SupplDSTransmittalLtr-0001C5.pdf	131581 eaf053a6f2604ddf34d50b40c95d68dd2cd6c16e	no	2

Warnings:

Information:					
2	Information Disclosure Statement (IDS) Form (SB08)	IDS-SB08a-05720001C5.pdf	664411 c040de89ae42477ac618ef56c79bf9f35fcfa7b9	no	4
Warnings:					
Information:					
3	Foreign Reference	WO0001171A1_d10b4_.pdf	946220 b5e72041c75a45e968787bc95c37d527fbcb2337	no	25
Warnings:					
Information:					
4	Other Reference-Patent/App/Search documents	2017-03-06_FinalOA_a9f9a_.pdf	700695 653902913589a183285c5eaff0ee3cd50712fbdc	no	14
Warnings:					
Information:					
		Total Files Size (in bytes):	2442907		

This Acknowledgement Receipt evidences receipt on the noted date by the USPTO of the indicated documents, characterized by the applicant, and including page counts, where applicable. It serves as evidence of receipt similar to a Post Card, as described in MPEP 503.

New Applications Under 35 U.S.C. 111

If a new application is being filed and the application includes the necessary components for a filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application.

National Stage of an International Application under 35 U.S.C. 371

If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course.

New International Application Filed with the USPTO as a Receiving Office

If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Application No.	:	14/738,083
First Named Inventor	:	Carlos A. Perez Lafuente
Confirmation No.	:	4555
Filed	:	June 12, 2015
TC/A.U.	:	2643
Examiner	:	Htun, San A
Customer No.	:	27896
Docket No.	:	0572.0001C5
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: June 6, 2017

Respectfully submitted by:

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

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Customer No. 27896
9801 Washingtonian Blvd., Suite 750
Gaithersburg, MD 20878
(301) 424-3640

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Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
14/738,083	06/12/2015	Carlos A. Pérez LaFuente	0572.0001C5	4555

27896 7590 03/15/2017

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

EXAMINER
HTUN, SAN A

ART UNIT	PAPER NUMBER
2643	

NOTIFICATION DATE	DELIVERY MODE
03/15/2017	ELECTRONIC

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

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

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

epatent@usiplaw.com

Office Action Summary	Application No. 14/738,083	Applicant(s) PÉREZ LAFUENTE, CARLOS A.	
	Examiner SAN HTUN	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 *01/17/2017*.

☐ 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) *1,7,13,14 and 16-21* 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, 7, 13, 14, and 16-21* 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. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 01/17/2017 has been entered.

2. In virtue of this communication, claims 1, 7, 13, 14, and 16-21 are currently pending in this Office Action.

Terminal Disclaimer

3. The terminal disclaimer filed on 05/24/2016 disclaiming the terminal portion of any patent granted on this application which would extend beyond the expiration date of Patent 8,934,922 and 9,119,030 has been reviewed and is accepted. The terminal disclaimer has been recorded.

Response to Arguments

4. Applicant’s arguments in Remarks regarding to claims are addressed in the claim rejection section under 35 USC 103 (a) set forth below. Regards to 35 U.S.C. 101 rejection, claims are determined whether if there is any element to amount significantly more than the abstract idea or the conventional features by considering all the relevant

factors, guidelines and Supreme Court's decisions. Amended claims 1 & 14, and newly added claim 19 are interpreted as merely reciting the conventional features at this point, which are transmitting a distinctive defining signal including first information and receiving second information. For instance, let's assume: someone dials examiner's telephone number, then it becomes a coded signal including numbers. But it can be said that the dialed signal defines USPTO campus in Washington DC out of all the regional offices. Even in the main campus, the dialed signal significantly defines examiner's name, TC, Workgroup and Art Unit. But, the signal is just including a telephone number. Similarly, in claims 1, 14 and 19, the recited defining signal might include merely 2 bits coded zero and ones, and therefore, instead of explaining what a distinctive defining signal is, it is strongly suggested to what the defining signal is made up such as format, field, flag or bit, in light of fig. 6-7 of specification so that claims could be given a patentable weight. Otherwise, how the public could know if they are infringing or not if the current claims are patented claims.

Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

35 USC § 112

5. The following is a quotation of 35 U.S.C. 112 (pre-AIA), first paragraph:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

6. Claims 1 and 19 are rejected under 35 U.S.C. 112(a) or 35 U.S.C. 112 (pre-AIA), first paragraph, because the scope of the claims is not commensurate with the scope of the enabling disclosure. To consider requirement and enablement of subject matter of Claim 3 under 35 USC 112, first paragraph, all of the relevant factors with respect to the claim as a whole were considered as follows.

Since the transmitter of claims 1 and 19 is claimed in purely functional terms, the claims may encompass embodiments that are not enabled by the specification. In fact, it could lead to the claims which essentially cover not only the functions disclosed and enabled but also any structure that performs the functions. For instance, the term “transmitter” is normally used for transmitting only and not capable for receiving. In the claims, transmitter is recited to transmit and receive without describing its structure or parts to perform transmitting and receiving functions. Furthermore, the transmitter in the claim does not limit a scope to receive and transmit the information in accordance with any kind of wireless technologies including upcoming future technologies. But, yet specification, as described in par. 0059, 0061 of PG. Pub, limits the scopes of transmitter to GSM, WiFi, Bluetooth or DECT, etc.

To avoid any ambiguity, it is suggested that applicant might want to explicitly recite the involvement of each structure or each part of the transmitter of claims 1 and 19 to perform each claimed functional terms so that the claimed transmitter is clearly enabled under 35 USC 112, First Paragraph. See MPEP 2164.08.

Claim Rejections - 35 USC § 101

7. 35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

8. Claims 1, and 14 are rejected under 35 U.S.C. 101 because the claimed invention is directed to a judicial exception (i.e., a law of nature, a natural phenomenon, or an abstract idea) without significantly more. In fact, the claim rejections are invoked by the broadly recited claims which will be addressed in details below. The dependent claims are not addressed at this time for the facts: 1) the independent claims are broadly recited; 2) analyzing the dependent claims might be indicating the incomplete message such that applicant might only think that the particular dependent claim must cooperate into the independent claims in order to overcome the claim rejections under 35 USC 101. See MPEP 2106(I) and *Alice Corporation Pty. Ltd. v. CLS Bank International, et al.*, 573 U.S. No. 13-298, June 19, 2014.

Initially, claim 1 could be reasonably interpreted to broadcast a signal with its location and available channel, i.e., communication status, by a radio communication defining device and the broadcasted signal is received and processed by a mobile station. It is important to note that if reasonable interpretation is given to the limitations in claim 1 in accordance with MPEP 2111, claim does not specifically recite how to define a special area, what involved in transmitting a distinctive signal and how a mobile station receives and what required processing the received signal. If so, conventionally, a base station or an access points in a wireless communications system would

broadcast a pilot or a beacon signal including its area code, [as to the claimed feature a special area by its coverage], available channel [as to communication status in the claim, transmit power information, etc.,. Additionally, a mobile station would conventionally receive the broadcasted pilot or beacon to process whether to join the base station or the network based on the pilot or beacon received. Claim 1 is directed to an abstract idea as claim 1 recites merely transmitting, measuring and processing a signal, i.e., concerned with a mathematical equation or an algorithm for transmitting, measuring and processing (see 74622 Federal Register / Vol. 79, No. 241 / Tuesday, December 16, 2014 / Rules and Regulations). Accordingly, claim 1 does not recite the eligible subject matter since the claim fails to recite additional elements that amount to significantly more than the conventional features [i.e., an abstract idea] commonly known in the related art for transmitting pilot signal and processing or measuring the pilot signal.

Similarly, claim 14 is ineligible as the claim fails to recite additional elements that amount to significantly more than the conventional features [i.e., an abstract idea] commonly known in the related art for instance, intrinsic location updating procedure.

Similarly, claim 19 is ineligible as the claim fails to recite additional elements that amount to significantly more than the conventional features [i.e., an abstract idea] commonly known in the related art for instance, intrinsic location updating procedure.

9. In response to applicant's arguments for 35 U.S.C. 101 rejection, please see the attached, Office Action Appendix, pages 74622, 74628, 74629 in Federal Register/Vol.

79, No. 241/ Tuesday, December 16, 2014/Rules and Regulations. On page 74622, Supreme Court has identified that electromagnetism to transmit signal is directed to a judicial exception and instant claims are directed to transmitting signals. Accordingly, claims are thoroughly determined if claims recite additional elements that amount to significantly more than the underlying abstract idea or conventional features.

Claim Interpretation and Analysis:

Claims 1, 14 and 19 are interpreted in light of specification but fig. 6-7 of specification are not read into the claims. Accordingly, if reasonable interpretation is given to the claims in light of MPEP 2111, claims are recited to transmit a signal and receive the information via a wireless network and a fixed or wired network. Unless claims recite how a defining signal is encoded such as using a specific format or such that a particular method is required for transmitting and receiving, claims are merely recited to claim for transmitting and receiving a signal which is conventional feature. Due to this reasonable claim interpretation, without concrete method or technique or format involving for receiving and transmitting signal, there is no additional element in the claims to amount significantly more than the abstract idea or the conventional features.

Initially, claims recite a distinctive defining signal including data for status and to indicate the information. When it comes to transmitting, there involves encoding or coding. When it comes to coding and encoding, it concerns with formula or algorithm or mathematic equations. Indeed, claims just explain merely what a distinctive defining

signal would include without recitation for what involved or what is comprised of a distinctive defining signal. If the current claims were a patent, what public could understand the claimed invention or how to identify when infringement occurs as there is not particular algorithm or technology or equations or coding or encoding method to be regarded as applicant's invention. Therefore, it needs more than a distinctive defining signal or any kind of transmitter for transmitting a distinctive defining signal, for instance, what might actually be required to be the claimed transmitter or the method for how to create "a distinctive defining signal" and what kind of format is required to be "a distinctive defining signal" or how the status, data and information are embedded in "a distinctive defining signal"; otherwise, the conventional signaling or existing transmission could include the claimed "a distinctive defining signal". In practice, a conventional base station transmits its cell ID, required frequency or channel map, i.e., information for broadcasting, scheduling and joining, and other additional information to use its service and similarly, a Wi-Fi access point AP transmits BSSID or its name, such as USPTO Guest and WEP or WAP code required to join in while attorney wants to use Wi-Fi services on USPTO Campus during visit (See evidence in fig. 2 of **Dalsgaard** et al. Pub. No.: US 2010/0298017 A1 and fig. 3 of **Meskanen** et al. Patent No.: US 6,434,389 B1). In transmission, it is conventional to be short and concrete words coded in the signal for relaying messages and information. In the above cell ID and BSSID represents its coverage area, i.e., a special area, if any device receives such signal, it could be said that the received device is in that cell ID coverage or that BSSID coverage and see the status of the BS and Wi-Fi AP. On page 74629, Supreme Court Decisions

could be found for eligible case: 3. Mackay Radio & Telegraph Co. v. Radio Corp. of America [U.S. Patent No. 1, 974, 387]; and for ineligible cases: 1. O'Reilly v. Morse [U.S. Reissue Patent No. RE 117]; 4. Gottschalk v. Benson. The current claims are similar to O'Reilly v. Morse.

In conclusion, a transmitter and a distinctive defining signal including first and second information are found ineligible as there is no additional element to amount significantly more than the abstract idea or the conventional features.

Claim Rejections - 35 USC § 103

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

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

11. 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 pre-AIA 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

12. Claims 1, 7, 13, 14 and 16-19 are rejected under pre-AIA 35 U.S.C. 103(a) as being unpatentable over **Westerinen** et al. Pub. No.: US 2010/0317371 A1 in view of **Sheynblat** et al. Pub. No. US 2004/0147221 A1.

Claim 1

Westerinen discloses a transmitter (EM radiation emitting devices in fig. 1-3) that is configured to transmit a distinctive defining signal that defines a special area by its coverage (see fig. 1-3 and par. 0040; par. 0098, the signal identifies information such as SSID and/or location is determined from the sensed signal; 1504 in fig. 15a & 15e), the distinctive defining signal capable of being received and processed by a mobile station (1106 of fig. 11 and 1206 of fig. 12; par. 0098, the mobile device processed the sensed EM signal to verify SSID and location).

Although **Westerinen** does not explicitly show: “the distinctive defining signal including first information indicating whether or not the transmitter is located in a predetermined environment; and the transmitter being configured to obtain second information to determine whether or not the transmitter is in the predetermined environment, the transmitter configured to receive the second information via a wireless communication with a radio transmitting device”, it is considered obvious by the rationales found in **Sheynblat**.

To consider the obviousness of the claim limitations, reasonable interpretation is given to the claim in accordance with MPEP 2111. If so, even transmitting a beacon or a pilot could be said that it includes a location information. Then, location information

could define whether or not the transmitter is located in a predetermined environment, or area or zone or city, for instance, location information defining Alexandria City would indicate whether it is located in Virginia. Therefore, exact location information reads on the claim limitation “whether or not the transmitter in a predetermined environment” unless claim recites a specific method or format involved or required in indicating. In particular, **Sheynblat** teaches the distinctive defining signal including first information (location of repeater 604 of fig. 6) indicating whether or not the transmitter is located in a predetermined environment (604 of fig. 6 and par. 0064, transmitting the repeater location meets the four corners of claim limitation to determine if the transmitter is located in a predetermined environment). Additionally, **Sheynblat** particularly teaches the transmitter (repeater 102 of fig. 1-3 & 5) being configured to obtain second information (assistance data to determine the location of repeater as explained in par. 0041) to determine whether or not the transmitter is in the predetermined environment (602 of fig. 6, as explained in par. 0039, , repeater uses radio-location signal from satellite or terrestrial transmitter and FM radio station, GPS to determine its location, i.e., it suggests to determine if it’s in a certain environment), the transmitter configured to receive the second information via a wireless communication with a radio transmitting device (600 of fig. 6 and see par. 0039, 0041 and 0062; radio transmitting device is interpreted as satellite or terrestrial transmitter, FM radio station, base station).

Therefore, it would have been obvious to one of ordinary skill in the art, at the time of this invention was made, to modify electromagnetic radiation emitting device of **Westerinen** by providing a repeater and the location of the repeater as taught in

Sheynblat to obtain the claimed invention as specified. Such a modification would have included a repeater for receiving various radio location signals to determine its location by having taken the propagation delay into account as suggested in par. 0008-0011of **Sheynblat**.

Claim 7

Westerinen, in view of **Sheynblat**, discloses the transmitter according to claim 1 comprising a database that includes identification data of the radio transmitting device (**Westerinen**, fig. 1-3 in view of fig. 5 & 15 for having database inside EM radiation emitting device; **Sheynblat**, memory 502 of fig. 5).

Claim 13

Westerinen, in view of **Sheynblat**, discloses the transmitter according to claim 1, wherein the distinctive defining signal is coded (**Westerinen**, coded is too broad and even GSM or 802.11 or Bluetooth or any transmission using any protocol could be said as coded; for instance, Wi-Fi transmission is coded by 802.11 standard as explained in par. 0043 and so does for GSM transmission coded by GSM standard; fig. 6 of **Sheynblat**).

Claim 14

Westerinen discloses a method associated with the use of a mobile station (MS 100 in fig. 1-3) and at least one transmitter (EM radiation emitting devices in fig. 1-3) that

transmits a distinctive defining signal that defines a special area by its coverage (see fig. 1-3 and par. 0040; par. 0098, the signal identifies information such as SSID and/or location is determined from the sensed signal; 1504 in fig. 15a & 15e), the method comprising:

receiving and processing the distinctive defining signal in the mobile station (1106 of fig. 11 and 1206 of fig. 12; par. 0098, the mobile device processed the sensed EM signal to verify SSID and location); and

sending from the mobile station via the mobile telephone network an updating signal to one or more servers of a provider of presence related services about the mobile station's presence in the special area (fig. 5 and par. 0078, EM signals at different locations can be stored either at the mobile device or at a remote location; the mobile device 100 may communicate via a mobile device server 504 and a backend server such as database server 502 via a network 500 to upload data from sensing EM signals such as location data, time data and UI data).

Although **Westerinen** does not explicitly show: “the distinctive defining signal including information indicating whether or not the transmitter is located in a predetermined environment; and the updating signal comprising the information indicative of whether or not the transmitter is in the predetermined environment”, it is considered obvious by the rationales found in **Sheynblat**.

In particular, **Sheynblat** teaches the distinctive defining signal including information indicating whether or not the transmitter is located in a predetermined environment (location of repeater 604 of fig. 6); and the updating signal (par. 0024 for

updating the location of the repeater) comprising the information indicative of whether or not the transmitter is in the predetermined environment (par. 0028, 604-606 of fig. 6, par. 0065-066 accordingly, updating base station due to location of repeater and thus, the transmitting the location of repeater could be updating the location of repeater which requires the base station to update its almanac as explained in par. 0076). Additionally, **Sheynblat** teaches position location device 206 of fig. 2 could be a mobile phone (206 in fig. 5 and par. 0042 & 0046), and the position location device transmits the location of repeater (par. 0053).

Therefore, it would have been obvious to one of ordinary skill in the art, at the time of this invention was made, to modify electromagnetic radiation emitting device of **Westerinen** by providing a repeater and the location of the repeater as taught in **Sheynblat** to obtain the claimed invention as specified. Such a modification would have included a repeater for receiving various radio location signals to determine its location by having taken the propagation delay into account as suggested in par. 0008-0011of **Sheynblat**.

Claim 16

Westerinen, in view of **Sheynblat**, discloses the method according to claim 14, wherein the sending of the updating signal is uncorrelated to any mobile station phone call establishment, the updating signal being sent 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 (**Westerinen**, see fig. 9 & 10 for storing EM signals by time or location; **Sheynblat**, fig. 2-8).

Claim 17

Westerinen, in view of **Sheynblat**, discloses the method according to claim 14, 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 (**Westerinen**, par. 0078 in view of fig. 9, 10 & 15; **Sheynblat**, fig. 2-8).

Claim 18

Westerinen, in view of **Sheynblat**, discloses the method according to claim 14, wherein the frequency of the updating signal is different from the frequency of the distinctive defining signal (**Westerinen**, as shown in fig. 1-3 & par. 0042-0058, EM radiation emitting devices could be communicating with Bluetooth or WLAN or IRDA and the mobile device in fig. 5 could uploading vis GSM network which uses different frequency from short range frequency such BT or WLAN or IRDA; **Sheynblat**, as described in par. 0039, 0052, 0059 & 0061, repeater or the position location device could receive radio-location signals from various system, for instance, Bluetooth or fixed wireline system, and might transmit the location of repeater in cellular system, such as GSM o CDMA or WAP which operates different frequencies from Bluetooth).

Claim 19

Westerinen discloses a transmitter (EM radiation emitting devices in fig. 1-3) that is configured to transmit a distinctive defining signal that defines a special area by its coverage (see fig. 1-3 and par. 0040; par. 0098, the signal identifies information such as SSID and/or location is determined from the sensed signal; 1504 in fig. 15a & 15e), the distinctive defining signal capable of being received and processed by a mobile station (1106 of fig. 11 and 1206 of fig. 12; par. 0098, the mobile device processed the sensed EM signal to verify SSID and location).

Although **Westerinen** does not explicitly show: "the distinctive defining signal including first information indicating whether or not the transmitter is located in a predetermined environment; and the transmitter being configured to obtain second information to determine whether or not the transmitter is in the predetermined environment, the transmitter configured to receive the second information via communication with a fixed network to which the radio communication defining device is physically connected", it is considered obvious by the rationales found in **Sheynblat**.

To consider the obviousness of the claim limitations, reasonable interpretation is given to the claim in accordance with MPEP 2111. If so, even transmitting a beacon or a pilot could be said that it includes a location information. Then, location information could define whether or not the transmitter is located in a predetermined environment, or area or zone or city, for instance, location information defining Alexandria City would indicate whether it is located in Virginia. Therefore, exact location information reads on the claim limitation "whether or not the transmitter in a predetermined environment"

unless claim recites a specific method or format involved or required in indicating. In particular, **Sheynblat** teaches the distinctive defining signal including first information (location of repeater 604 of fig. 6) indicating whether or not the transmitter is located in a predetermined environment (604 of fig. 6 and par. 0064, transmitting the repeater location meets the four corners of claim limitation to determine if the transmitter is located in a predetermined environment). Additionally, **Sheynblat** particularly teaches the transmitter (repeater 102 of fig. 1-3 & 5) being configured to obtain second information (assistance data to determine the location of repeater as explained in par. 0041) to determine whether or not the transmitter is in the predetermined environment (602 of fig. 6, as explained in par. 0039, , repeater uses radio-location signal from satellite or terrestrial transmitter and FM radio station, GPS to determine its location, i.e., it suggests to determine if it's in a certain environment), the transmitter configured to receive the second information via communication with a fixed network to which the radio communication defining device is physically connected (600 of fig. 6 and see par. 0052 and 0059; radio transmitting device is interpreted as satellite or terrestrial transmitter, FM radio station, base station).

Therefore, it would have been obvious to one of ordinary skill in the art, at the time of this invention was made, to modify electromagnetic radiation emitting device of **Westerinen** by providing a repeater and the location of the repeater as taught in **Sheynblat** to obtain the claimed invention as specified. Such a modification would have included a repeater for receiving various radio location signals to determine its location

by having taken the propagation delay into account as suggested in par. 0008-0011of **Sheynblat**.

13. Claim 20 is rejected under pre-AIA 35 U.S.C. 103(a) as being unpatentable over **Westerinen** in view of **Sheynblat** and **Howell** et al. Pub. No. US 2002/015436 A1.

Claim 20

Although **Westerinen**, in view of **Sheynblat**, does not disclose "the transmitter according to claim 19, wherein the fixed network is an embedded system in a car", claim 20 is considered obvious by the rationales found in **Howell**.

In fact, a wireless system in a car could be widely found as mobile router or mobile base station used by a wireless provider or TV broadcasting companies. In particular, **Howell** teaches an embedded system in a car (fig. 1B).

Therefore, it would have been obvious to one of ordinary skill in the art, at the time of this invention was made, to modify electromagnetic radiation emitting device of **Westerinen** and **Sheynblat** by providing a telematics system in a car as taught in **Howell**. Such a modification would have included telematics system in a car to provide location and other information of a cell phone to a base station upon occurrence of certain conditions without being polled by the base station as suggested in par. 0003-0004 of **Howell**.

14. Claim 20 is rejected under pre-AIA 35 U.S.C. 103(a) as being unpatentable over **Westerinen** in view of **Sheynblat** and **Kummetz** Patent No.: US 8,400,292 B1.

Claim 21

Although **Westerinen**, in view of **Sheynblat**, does not disclose "the transmitter according to claim 19, wherein the transmitter, further comprises a memory that stores one or more parameters useable to authenticate the transmitter in the fixed network", claim 21 is considered obvious by the rationales found in **Kummetz**.

In particular, **Kummetz** teaches a memory that stores one or more parameters useable to authenticate the transmitter (Location Capture Processing Unit LCPU 30 in fig. 1-3) in the fixed network (col. 9, lines 30-67, LCPU auto-registers at the MLC of one operator included detected CGS of the network of that operator, i.e., a fixed network; without storing the CGIs and other parameters, MCC, MNC, LAI and CI, LCPU could not register properly to the network; thus LCPU stores the parameters to authenticate itself in the GSM network, i.e., a fixed network).

Therefore, it would have been obvious to one of ordinary skill in the art, at the time of this invention was made, to modify electromagnetic radiation emitting device of **Westerinen** and **Sheynblat** by providing location capture processing unit as taught in **Kummetz**. Such a modification would have included a sensor for receiving RF signals in order to provide accurate geolocation of mobile devices served by both base stations and repeater stations as suggested in lines 23-42 of col. 2 of **Kummetz**.

Election/Restriction

15. There are 3 independent claims having different scopes of the claimed invention. To avoid the restriction requirement, it is suggested to keep them in the same scope if should further amendment be required to make.

Contact Information

16. Any inquiry concerning this communication or earlier communications from the examiner should be directed to SAN HTUN whose telephone number is (571)270-3190. The examiner can normally be reached on MON-THU 7:00-5:30.

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

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

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

/SAN HTUN/

Primary Examiner, Art Unit 2643

Notice of References Cited	Application/Control No. 14/738,083	Applicant(s)/Patent Under Reexamination PÉREZ LAFUENTE, CARLOS A	
	Examiner SAN HTUN	Art Unit 2643	Page 1 of 1

U.S. PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Name	CPC Classification	US Classification
*	A	US-2002/0115436 A1	08-2002	Howell, Robert M.	B60R25/102	455/426.1
*	B	US-2004/0147221 A1	07-2004	Sheynblat, Leonid	H04B7/155	455/12.1
*	C	US-8,400,292 B2	03-2013	Kummetz; Thomas	G01S5/0289	340/517
	D	US-				
	E	US-				
	F	US-				
	G	US-				
	H	US-				
	I	US-				
	J	US-				
	K	US-				
	L	US-				
	M	US-				

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*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Country	Name	CPC Classification
	N					
	O					
	P					
	Q					
	R					
	S					
	T					

NON-PATENT DOCUMENTS

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

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

Search Notes	Application/Control No.	Applicant(s)/Patent Under Reexamination
	14738083	PÉREZ LAFUENTE, CARLOS A.
	Examiner	Art Unit
	JEAN CHANG	2643

CPC- SEARCHED		
Symbol	Date	Examiner
H04W4/00-206.H04W8/$.H04W12/$.H04W16/$.H04W28/$.H04W36/$.H04W48/$.H04W60/$.H04W64/$.H04W72/$.H04W74/$.H04M1/7253.H04B5/00. H04B3/$.H04B2203/$.	04/21/2016	/S.H./

CPC COMBINATION SETS - SEARCHED		
Symbol	Date	Examiner

US CLASSIFICATION SEARCHED			
Class	Subclass	Date	Examiner
455	456.4, 555, 408, 432.2, 406, 458, 414.1, 446, 456.1, 433	8/10/2015	jc
455	456.4, 555, 408, 432.2, 406, 458, 414.1, 446, 456.1, 433	1/20/2016	jc

SEARCH NOTES		
Search Notes	Date	Examiner
inventor search and text search on East for transmitting device location monitor wireless fixed location	8/10/2015	jc
update inventor search and text search on East	1/20/2016	jc
Searched in EAST attached.	04/21/2016	/S.H./
Conducted inventor and assignee search in EAST.	04/21/2016	/S.H./
Consulted with Danieal Swerdlow (QAS) for 112, sencond and enablement.	04/25/2016	/S.H./
Searched updated in EAST.	08/19/2016	/S.H./
Updated search in EAST.	03/6-7/2017	/S.H./

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
S1	34	("6529491" | "20080220782" | "20080102896" | "20080132225" | "20060084443" | "20080280604" | "20080085703" | "20070037577" | "20020032032" | "6434389" | "20090047968" | "20080207195" | "20110269460" | "20070171871").PN.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2016/04/21 17:18
S2	72	("20050075124" | "20100167725" | "6516190" | "7634255" | "6920317" | "6836653" | "6526267" | "7266366" | "20030092450" | "20050148297" | "20080004045" | "20080261604" | "6122520" | "7778652" | "7848765" | "6516193" | "6552648" | "5642303" | "6671506" | "7171189" | "6920317" | "20030176197" | "6526267" | "20020094801" | "6826414" | "6920317" | "6625442" | "8723664" | "6826414" | "20040192267" | "20040224682" | "6334052" | "6516193" | "6785536" | "7142869" | "20020094801" | "6516193" | "6826414").PN.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2016/04/21 17:24
S3	2	"7548731".pn.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2016/04/21 17:41
S4	2	US-20100317371-A1.did.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2016/04/21 17:44
S5	2	("20150281895").PN.	US-PGPUB; USPAT; USOCR; DERWENT	ADJ	ON	2016/04/21 17:51
S6	0	(("PÃ‰ REZ") near3 ("LAFUENTE") near3 ("Carlos")).INV.	EPO; JPO; DERWENT	ADJ	ON	2016/04/21 17:51
S7	0	(("PÃ‰ REZ") near3 ("LAFUENTE") near3 ("Carlos")).INV.	US-PGPUB; USPAT; USOCR	ADJ	ON	2016/04/21 17:51
S8	3	"7324824".pn.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO;	ADJ	ON	2016/04/21 17:54

			DERWENT; IBM_TDB			
S9	0	(AFIRMA near CONSULTING near TECHNOLOGIES).as.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2016/04/21 17:56
S10	16	(AFIRMA near CONSULTING near TECHNOLOGIES).as. or afirma.as.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2016/04/21 17:56
S11	691018	(H04W4/00-206 or H04W8/$ or H04W12/$ or H04W16/$ or H04W28/$ or H04W36/$ or H04W48/$ or H04W60/$ or H04W64/$ or H04W72/$ or H04W74/$ or H04M1/7253 or H04B5/00 or H04B3/$ or H04B2203/$).CPC.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2016/04/21 18:03
S12	11923	(location or area or boundary or position or zone or region or geographic$3) and (special or private or home or specific or environment) and (wirless or mobile or cell$4) and (wi?fi or bluetooth or wlan or nfc) and (network near7 (identity or code or id or identif$7)) and (connect$3 or status or communicat$3) and (power? line or (power near3 line) or plc or adsl or pstn) and (detect$3 or measur$5 or report$3 or monitor$3 or track$3) and ((identif$7 or location or position) near7 (code or id or identity or identif$7)) and (bs or (base station) or (access point) or ap or enb or hnb) and GSM	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2016/04/21 18:09
S13	4373	S11 and S12	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2016/04/21 18:11
S14	545	S13 and (power line)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2016/04/21 18:11
S15	540	S14 and (server or controller)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2016/04/21 18:11
S16	456	S15 and database	US-PGPUB; USPAT;	ADJ	ON	2016/04/21 18:12

			USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB			
S17	2	"7756485".pn.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2016/04/21 18:20
S18	2	("20080242299").PN.	US-PGPUB; USPAT; USOCR; DERWENT	ADJ	ON	2016/04/21 18:22
S19	44	("20060234762" | "7133669" | "7756485" | "20030119454" | "20070042777" | "5903832" | "7245913" | "20040076177" | "20040215845" | "20070255797" | "20050079863" | "20040266426" | "20050152304" | "20070067734" | "6438390" | "20030119454" | "20080113692" | "20040076177" | "6546263" | "7072468").PN.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2016/04/21 18:23
S20	2	"7466986".pn.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2016/04/21 18:32
S21	4	"8014776".pn.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2016/04/21 18:34
S22	2	("20140295813").PN.	US-PGPUB; USPAT; USOCR; DERWENT	ADJ	ON	2016/04/25 13:29
S23	21	("20100020710" | "20110059744" | "20110086652" | "20100291929" | "20100317351" | "20140073304" | "20130040640" | "20110274097").PN.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2016/04/25 13:29
S24	2	us-20080242298-a1.did.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2016/04/25 17:35
S25	2	US-20090061914-A1.did.	US-PGPUB; USPAT; USOCR;	ADJ	ON	2016/04/26 15:49

			FPRS; EPO; JPO; DERWENT; IBM_TDB			
S26	2	US-20150036494-A1.did.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2016/04/26 15:50
S27	10445	(location or area or boundary or position or zone or region or geographic$3) and (special or private or home or specific or environment) and (wirless or mobile or cell$4) and (wi?fi or bluetooth or wlan or nfc) and (network near7 (identity or code or id or identif$7)) and (connect$3 or status or communicat$3) and (power? line or (power near3 line) or plc or adsl or pstn) and (detect$3 or measur$5 or report$3 or monitor$3 or track$3) and ((identif$7 or location or position) near7 (code or id or identity or identif$7)) and (bs or (base station) or (access point) or ap or enb or hnb) and GSM and (Wi?fi or wlan or femtocell or (private network))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2016/08/19 16:21
S28	242	htun.xp. or htun.xa.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2016/08/19 16:22
S29	0	S28 and (special cell)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2016/08/19 16:22
S30	125	S28 and cell	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2016/08/19 16:22
S31	2	("20100298017").PN.	US-PGPUB; USPAT; USOCR; DERWENT	ADJ	ON	2016/08/19 17:05
S32	34	("6529491" | "20080220782" | "20080102896" | "20080132225" | "20060084443" | "20080280604" | "20080085703" | "20070037577" | "20020032032" | "6434389" | "20090047968" | "20080207195" | "20110269460" | "20070171871").PN.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2016/08/19 17:10
S33	10431	S27 and (bs or (base station))	US-PGPUB; USPAT;	ADJ	ON	2016/08/19 17:27

			USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB			
S34	8872	S33 and (pstn or (telephone network))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2016/08/19 17:28
S35	39	S34 and (periodically or periodic) and (special near5 area)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2016/08/19 17:31
S36	6	us-20020097852-a1.did. or us-20020126691-a1.did. or us-20040038688-a1.did.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2016/11/07 16:24
S37	4284	(transmitter and (area or location or code or (cell ID)) and signal and (presen$4 or active) and (radio or wireless or cell$4 or mobile)).clm.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2016/11/07 16:30
S38	13	S37 and (special near (area or environment))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2016/11/07 16:31
S39	23	S37 and (scan$4 same channel same (cell or transmitter or (access point) or (base station) or ap or bs) same (detect$3 or determin$5) same presen$4)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2016/11/07 16:34
S40	460	(transmitter and (area or location or code or (cell ID)) and signal and (presen$4 or active) and (radio or wireless or cell$4 or mobile) and (format or filed or flag or bit) and (parameter or service or id or identity or identif$7 or tariff)).clm.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2017/03/06 12:24
S41	288	S40 and (timer or periodic or periodical$3)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2017/03/06 12:33

S42	172	S40 not S41	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2017/03/06 12:34
S43	4	"7831263".pn.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2017/03/06 14:40
S44	2	US-20040147221-A1.did.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2017/03/06 14:40
S45	112	("20130157640" | "20150054934" | "6138041" | "8270933" | "8880047" | "20090029675" | "20110153367" | "20120214408" | "7555378" | "8774842" | "8884750" | "8971927" | "20110093161" | "20070072616" | "20090002147" | "20130303143" | "7505784" | "8280438" | "8761821" | "20030096593" | "20100087137" | "6690940" | "6771946" | "8204649" | "9185526" | "20060286930" | "20120268235" | "7697917" | "8527013" | "8787936" | "20010050614" | "20060148490" | "20090128286" | "20130084847" | "8626121" | "20100216509" | "20110294520" | "20050255874" | "20090085728" | "9094533" | "8036839").PN.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2017/03/07 16:08
S46	54	S45 and (location or position or area or zone) and (car or vehicle or automobile or truck)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2017/03/07 16:09
S47	4	US-20070072553-A1.did. or US20090085728-A1.did. or us-20110294520-a1.did.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2017/03/07 16:15
S48	2	US-20090085728-A1.did.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2017/03/07 16:16
S49	2	US-20020115436-A1.did.	US-PGPUB; USPAT;	ADJ	ON	2017/03/07 16:59

			USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB			
S50	1	"8400292".pn. and location	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2017/03/07 17:36
S51	74	("20030117281" | "20040100930" | "20060014548" | "20060046664" | "20060276201" | "20060281913" | "20070129085" | "20070159388" | "20070229350" | "20080085439" | "20080085440" | "20080113672" | "20080132244" | "20080160953" | "20080167049" | "20080174502" | "20080175175" | "20080186955" | "20080191941" | "20080198955" | "20080200117" | "20080232305" | "20080248744" | "20080248811" | "20080261615" | "20080284647" | "20090021345" | "20090045939" | "20090138336" | "20090295639" | "6184829" | "6249252" | "6674403" | "6873852" | "6952181" | "6961367" | "6996392" | "7194275" | "7245925" | "7257387" | "7298327" | "7321777" | "7327258" | "7427952" | "7440762" | "7525425" | "7525484" | "7528723" | "7529236" | "7539161" | "7546084" | "7570615" | "7616155" | "7665263" | "7732088" | "7738836" | "7837774" | "7848733" | "7852262").PN. OR ("8400292").URPN.	US-PGPUB; USPAT; USOCR	ADJ	ON	2017/03/07 17:37

3/7/2017 7:14:30 PM
C:\Users\shtun\Documents\EAST\Workspaces\14738083.wsp

Index of Claims	Application/Control No.	Applicant(s)/Patent Under Reexamination
	14738083	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	08/10/2015	01/20/2016	04/30/2016	08/19/2016	03/07/2017				
	1	✓	✓	✓	✓	✓				
	2	✓	✓	✓	-	-				
	3	✓	✓	✓	✓	-				
	4	✓	✓	✓	✓	-				
	5	✓	✓	✓	✓	-				
	6	✓	✓	✓	✓	-				
	7	✓	✓	✓	✓	✓				
	8	✓	✓	✓	✓	-				
	9	✓	✓	✓	✓	-				
	10	✓	✓	✓	✓	-				
	11	✓	✓	✓	✓	-				
	12	✓	✓	✓	✓	-				
	13	✓	✓	✓	✓	✓				
	14	✓	✓	✓	✓	✓				
	15	✓	✓	✓	-	-				
	16	✓	✓	✓	✓	✓				
	17	✓	✓	✓	✓	✓				
	18	✓	✓	✓	✓	✓				
	19					✓				
	20					✓				
	21					✓				

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

PTO/SB/30EFS (07-14)
Approved for use through 07/31/2016. 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	14738083	Filing Date	2015-06-12	Docket Number (if applicable)	0572.0001C5	Art Unit	2643
First Named Inventor	Carlos A. Pérez Lafuente			Examiner Name	San A. Htun		

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, to any international application that does not comply with the requirements of 35 U.S.C. 371, 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 (07-14)
Approved for use through 07/31/2016. 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)	2017-01-17
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.	:	14/738,083
First Named Inventor	:	Carlos A. Pérez Lafuente
Confirmation No.	:	4555
Filed	:	June 12, 2015
TC/A.U.	:	2643
Examiner	:	San A. Htun
Customer No.	:	27896
Docket No.	:	0572.0001C5
Title	:	METHOD AND SYSTEM FOR MONITORING A MOBILE STATION PRESENCE IN A SPECIAL AREA

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

This is a request under the provisions of 37 CFR 1.136(a) to extend the period for filing a reply in the above identified application. The applicant herewith petitions the Director of the United States Patent and Trademark Office to extend the time for reply to the Office action dated August 25, 2016 for 2 month(s) from November 25, 2016 to January 25, 2017.

The requested extension and fee are as follows:

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

Total Fee Due: $300.00. Credit card payment has been submitted concurrently with the filing of this transmittal.

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

Dated: January 17, 2017

Respectfully submitted by:

/Tim L. Kitchen/

Tim L. Kitchen

Reg. No. 41,900

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Electronic Patent Application Fee Transmittal

Application Number:	14738083
Filing Date:	12-Jun-2015
Title of Invention:	METHOD AND SYSTEM FOR MONITORING A MOBILE STATION PRESENCE IN A SPECIAL AREA
First Named Inventor/Applicant Name:	Carlos A. Pérez LaFuente
Filer:	Tim L. Kitchen
Attorney Docket Number:	0572.0001C5

Filed as Small Entity

Filing Fees for Utility under 35 USC 111(a)

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

Description	Fee Code	Quantity	Amount	Sub-Total in USD($)
Extension - 2 months with $0 paid	2252	1	300	300
Miscellaneous:				
RCE- 2ND AND SUBSEQUENT REQUEST	2820	1	850	850
		Total in USD ($)		**1150**

Electronic Acknowledgement Receipt	
EFS ID:	28075207
Application Number:	14738083
International Application Number:	
Confirmation Number:	4555
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:	0572.0001C5
Receipt Date:	17-JAN-2017
Filing Date:	12-JUN-2015
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Application Type:	Utility under 35 USC 111(a)

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Submitted with Payment	yes
Payment Type	CARD
Payment was successfully received in RAM	$1150
RAM confirmation Number	011817INTEFSW15515200
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		2017-01-17_ResponseToFinalOA-05720001C5.pdf	156171 c46523a9b76d94eb00a37076603d70addc5aee5f	yes	12
	Multipart Description/PDF files in .zip description				
	Document Description		**Start**	**End**	
	Amendment Submitted/Entered with Filing of CPA/RCE		1	1	
	Claims		2	5	
	Applicant Arguments/Remarks Made in an Amendment		6	12	
Warnings:					
Information:					
2	Request for Continued Examination (RCE)	2017-01-17_RCE-05720001C5.pdf	1376000 fbc23bef1c0ab696c26e566c2e904155fc7ffd11	no	3
Warnings:					
Information:					
3	Extension of Time	2017-01-17_EOT2MnthXML-05720001C5.pdf	91614 2ddc63434d89c8ac150fde24359c694c6b4cc9ad	no	1
Warnings:					
Information:					
4	Fee Worksheet (SB06)	fee-info.pdf	32336 de7ed2250be4437ee0031450afd34c8d9dbe4683	no	2
Warnings:					
Information:					
		Total Files Size (in bytes):	1656121		

This Acknowledgement Receipt evidences receipt on the noted date by the USPTO of the indicated documents, characterized by the applicant, and including page counts, where applicable. It serves as evidence of receipt similar to a Post Card, as described in MPEP 503.

New Applications Under 35 U.S.C. 111

If a new application is being filed and the application includes the necessary components for a filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application.

National Stage of an International Application under 35 U.S.C. 371

If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course.

New International Application Filed with the USPTO as a Receiving Office

If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Application No.	:	14/738,083
First Named Inventor	:	Carlos A. Perez Lafuente
Confirmation No.	:	4555
Filed	:	June 12, 2015
TC/A.U.	:	2643
Examiner	:	San A. Htun
Customer No.	:	27896
Docket No.	:	0572.0001C5
Title	:	METHOD AND SYSTEM FOR MONITORING A MOBILE STATION PRESENCE IN A SPECIAL AREA

MS After Final
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 August 25, 2016, Applicant herewith petitions the Director of the United States Patent and Trademark Office for a Two Month Extension of Time to extend the time for reply from November 25, 2016 to January 25, 2017. The fee for this extension is submitted herewith. Please enter the attached RCE pursuant to 37 CFR 1.114, and consider the response as follows:

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

Remarks begin on page 6 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 the Claims

1. (Currently Amended) A [[a]] transmitter that is configured to transmit a distinctive defining signal that defines a special area by its coverage, the distinctive defining signal capable of being received and processed by a mobile station, the distinctive defining signal ~~including data regarding a status of the radio communication defining device, the data~~ including first information indicating whether or not the transmitter is located in a predetermined environment, the transmitter being configured to obtain second information to determine whether or not the transmitter is in the predetermined environment, the transmitter configured to receive the second information via a wireless communication with a radio transmitting device.

2. (Previously Cancelled)

3. (Currently Cancelled)

4. (Currently Cancelled)

5. (Currently Cancelled)

6. (Currently Cancelled)

7. (Currently Amended) The transmitter according to claim [[5]]1 comprising a database that includes identification data of the radio transmitting device.

8. (Currently Cancelled)

9. (Currently Cancelled)

10. (Currently Cancelled)

11. (Currently Cancelled)

12. (Currently Cancelled).

13. (Previously Presented) The transmitter according to claim 1, wherein the distinctive defining signal is coded.

14. (Currently Amended) A method associated with the use of a mobile station and at least one transmitter that transmits a distinctive defining signal that defines a special area by its coverage, the distinctive defining signal including ~~data regarding a status of the radio communication defining device~~ information indicating whether or not the transmitter is in a predetermined environment, the method comprising:

receiving and processing the distinctive defining signal in the mobile station; and

sending from the mobile station via the mobile telephone network an updating signal to one or more servers of a provider of presence related services about the mobile station's presence in the special area, the updating signal comprising the ~~data regarding a status of the radio communication defining device, the data including~~ information indicative of whether or not the transmitter is located in a predetermined environment.

15. (Previously Cancelled)

16. (Original) The method according to claim 14, wherein the sending of the updating signal is uncorrelated to any mobile station phone call establishment, the updating signal being sent 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.

17. (Original) The method according to claim 14, 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.

18. (Original) The method according to claim 14, wherein the frequency of the updating signal is different from the frequency of the distinctive defining signal.

19. (New) A transmitter that is configured to transmit a distinctive defining signal that defines a special area by its coverage, the distinctive defining signal capable of being received and processed by a mobile station, the distinctive defining signal including first information indicating whether or not the transmitter is in a predetermined environment, the transmitter being configured to obtain second information to determine whether or not the transmitter is in the predetermined environment, the transmitter configured to receive the second information via communication with a fixed network to which the radio communication defining device is physically connected.

20. (New) The transmitter according to claim 19, wherein the fixed network is an embedded system in a car.

21. (New) The transmitter according to claim 19, wherein the transmitter, further comprises a memory that stores one or more parameters useable to authenticate the transmitter in the fixed network.

REMARKS

Claims 1, 7 and 14 have been amended. Claims 3-6 and 8-12 have been cancelled. Claims 19-21 have been added. Claims 1, 7 and 13-21 are pending in the application.

Claim Objections

Claim 1 has been amended to correct for the typographical error.

Claim Rejections – 35 USC §112

Claims 1, 3, 4, 8, 12 and 14 were rejected under 35 USC §112, second paragraph. Claims 3, 4, 8 and 12 have been cancelled. Claims 1 and 14 have been amended to replace "radio communication defining device" with "transmitter".

Claim Rejections – 35 USC §101

Claims 1 and 14 were rejected under 35 USC §101 as assertively be directed to a judicial exception (i.e., a law of nature, a natural phenomenon, or an abstract idea) without significantly more.

Applicant respectfully traverses this rejection for the following reasons.

The test for determining subject matter eligibility consists of: 1) determining whether the claim is directed to a law of nature, a natural phenomenon, or an abstract idea and, if so; 2) determining whether any element or combination of elements in the claim is sufficient to ensure that the claim amounts to significantly more than the law of nature, natural phenomenon, or abstract idea. *See, Alice Corp. Pty. Ltd. v. CLS Bank Int'l et al.*, 134 S.Ct. 2347, 2355 (2014). Limitations recited in a claim that may be enough to qualify as significantly more than the law of

nature, natural phenomenon, or abstract idea include: improvements to another technology (or technical field); and improvements to the functioning of a computer itself. *Id.* at 2358 and 2359.

In July 2015, the USPTO issued an Update to the Interim Guidance that substantially clarified for examiners how to go about assessing claims under 35 U.S.C. § 101 in view of the USPTO's comprehensive and up-to-date analysis of relevant case law. As explained below in detail, Applicant submits that these most recent guidelines help clarify that the claims of the subject application are patent eligible under 35 U.S.C. § 101.

The Claims Do Not Recite a Mere Abstract Idea Under the Present Guidelines

As noted above, the first part of the test for patent eligible subject matter is an analysis of the claim to determine the presence of an ineligible concept (e.g., a law of nature, a natural phenomenon, or an abstract idea). The July 2015 Update to the Interim Guidance specifies that a claimed concept is NOT an abstract idea unless it is similar to at least one concept the courts have identified as an abstract idea. The Updated Interim Guidance indicates that these concepts identified by the courts include: 1) a fundamental economic practice; 2) certain methods of organizing human activity; 3) an idea "of itself"; and 4) mathematical relationships/formulas.

According to the Updated Interim Guidance:

- a fundamental economic practice relates to the economy and commerce (i.e., agreements between people in the form of contracts, legal obligations and business relationships);
- certain methods of organizing human activities relate to interpersonal and intrapersonal activities (i.e., managing relationships or transactions between people, social activities and human behavior; satisfying or avoiding a legal obligation; advertising, marketing, and sales activities or behaviors; and managing human mental activity);

- an idea of itself relates to an idea standing alone (i.e., an uninstantiated concept, plan, or scheme; and a mental process that can be performed in the human mind or by pencil and paper); and
- a mathematical relationship/formula relates to mathematical concepts (i.e., mathematical algorithms, mathematical relationships, mathematical formulas, and calculations).

The Office Action does not meet the requirements of the July 2015 Update to the Interim Guidance for establishing that the claims are directed to an abstract idea. In regard to claim 1, the Office Action merely states without support that "Claim 1 is directed to an abstract idea as claim 1 recites merely transmitting. measuring and processing a signal, i.e., concerned with a mathematical equation or an algorithm for transmitting, measuring and processing" without any explanation of how such subject matter constitutes a mathematical equation or an algorithm for transmitting, measuring and processing. The rejection fails to take into account any of the claim language itself. Claim 1 as originally filed does not merely recite the transmitting. measuring and processing of a signal but requires that the distinctive defining signal to contain data including information indicating whether or not the transmitter is located in a predetermined environment. In regard to claim 1, the Office states on page 4 of the Office Action that the claim does not specifically recite how to define a special area. This is not true. The claim recites that the special area is defined by the coverage of the distinctive defining signal.

In regard to claim 14, the Office merely states that "Similarly, claim 14 is ineligible as the claim fails to recite additional elements that amount to significantly more than conventional features [i.e., an abstract idea] commonly known in the related art for instance, intrinsic location updating procedure". The Office has failed to provide any analysis that involves the language of claim 14 itself. Nor has the Office provided any explanation as to what an "intrinsic location updating procedure" is, nor any rationale as to how it forms the basis of a 35 USC §101 rejection. Applicants submit that the mere generalities provided by the Office, in conjunction

with a complete lack of an analysis that involves the language of claim 14, render the 35 USC §101 rejection of the claims improper.

The USPTO's July 2015 Update regarding Subject Matter Eligibility states "the initial burden is on the examiner to explain why a claim or claims are patentable clearly and specifically, so that applicant has sufficient notice and is able to effectively respond. For subject matter eligibility, the examiner's burden is met by clearly articulating the reason(s) why the claimed invention is not eligible, for example by providing a reasoned rational that identifies the judicial exception recited in the claim and why it is considered an exception, and that identifies the additional elements in the claim (if any) and explains whey they do not amount to significantly more than the exception." The 35 USC §101 rejection is improper for having failed to comply with the USPTO's guideline.

A review of the claim requirements of the present Application reveals that the claims do not fall under any of these categories or concepts identified as an abstract idea; therefore, the claim requirements cannot be considered merely abstract ideas.

Rejected claim 1 set forth a transmitter configured to transmit a distinctive defining signal that at least partly defines a special area by its coverage, the distinctive defining signal capable of being received and processed by a mobile station, the distinctive defining signal including data regarding a status of the transmitter.

Rejected claim 14 set forth a method associated with the use of a mobile station and at least one transmitter that transmits a distinctive defining signal that at least partly defines a special area by its coverage, the distinctive defining signal including data regarding a status of the transmitter, the method comprising: receiving and processing the distinctive defining signal in the mobile station; and sending from the mobile station via the mobile telephone network an updating signal to one or more servers of a provider of presence related services

about the mobile station's presence in the special area, the updating signal comprising the data regarding a status of the transmitter.

Considering the first of the four categories described in the July 2105 Update, the claims do not constitute a fundamental economic practice that relates to the economy and commerce (i.e., agreements between people in the form of contracts, legal obligations and business relationships). Claims 1 and 14 have nothing to do with contracts, legal obligations and business relationships between people.

Likewise, such claim requirements clearly do not relate to the second category of abstract ideas, namely "certain methods of organizing human activities," which relate to interpersonal and intrapersonal activities, "i.e., managing relationships or transactions between people, social activities and human behavior; satisfying or avoiding a legal obligation; advertising, marketing, and sales activities or behaviors; and managing human mental activity." (*See, July 2015 Update to the Interim Guidance*).

Plainly, the claims are not directed to the third category of abstract ideas, "an idea of itself," which the July 2015 Update clarifies relates to an idea standing alone (i.e., an uninstantiated concept, plan, or scheme; and a mental process that can be performed in the human mind or by pencil and paper). The rationale set forth by the Office on pages 4 and 5 of the Office Action appears to be that for a 35 USC §102 rejection and not that of a 35 USC §101 rejection. In any event, in regard to claim 1, it should go without saying that a radio communication defining device that transmits a particular type of signal with particular types of data for the purpose of being processed in a mobile station by its very nature, cannot be performed in the human mind or by pencil or paper. In regard to claim 14, it should also go without saying that receiving and processing a distinctive defining signal in the mobile station; and sending from the mobile station via the mobile telephone network an updating signal to one or more servers of a provider of presence related services about the mobile station's

presence in the special area, the updating signal comprising the data regarding a status of the radio communication defining device, by its very nature, cannot be performed in the human mind or by pencil or paper. Note, for example, in the figures the extensive use of network devices required to implement the system. Finally, the claims are not directed to the fourth category of abstract ideas, a mathematical relationship/formula (i.e., mathematical algorithms, mathematical relationships, mathematical formulas, and calculations).

In summary, because the July 2015 Update to the Interim Guidance specifies that a claimed concept is NOT an abstract idea unless it is similar to at least one concept the courts have identified as an abstract idea, and since the claims are not similar to any of these concepts identified by the courts, including *O'Reilly v. Morse* [U.S. Reissue Patent No. RE117], the claims cannot be considered to recite merely abstract ideas and thus comply with 35 U.S.C. § 101. If the Examiner disagrees, the Examiner is respectfully requested to provide a fact-based explanation why the actual claim limitations of each of claims 1 and 14 are considered abstract under the indicated category.

Notwithstanding the foregoing, to expedite prosecution of the present application Applicant has amended claim 1 to incorporate the limitations of now cancelled claims 3 and 4.

Double Patenting

Claims 1 and 14 were rejected on the ground of nonstatutory double patenting as being unpatentable over claim 1 of U.S. Patent No. 8,934,922 and over claim 1 of U.S. Patent No. 9,119,030. In response to the same rejection recited in the non-final Office Action dated May 9, 2016, the Applicant has previously submitted terminal disclaimers to overcome the rejections on May 24, 2016.

Claim Rejections – 35 USC §103

Claims 1, 3-14 and 16-18 were rejected under 35 USC §103(a) as being unpatentable over U.S. Publication No. 2010/0317371 (hereinafter "Westerinen") in view of U.S. Publication No. 2008/0242298 (hereinafter "Nylander").

As noted in the response to Office Action filed on May 24, 2016, the earliest priority date of the present application is March 28, 2006. The earliest priority date of Westerinen is June 12, 2009. Because Westerinen does not predate the present application, Applicant respectfully submits that the rejection of each of claims 1, 7 and 13-18 is improper and should be withdrawn.

Conclusion

In view of the foregoing, Applicant respectfully requests the Examiner to find the application in condition for allowance with claims 1, 7 and 13-21. 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: January 17, 2017

Respectfully submitted by:

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

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UNITED STATES PATENT AND TRADEMARK OFFICE

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

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
14/738,083	06/12/2015	Carlos A. Pérez LaFuente	0572.0001C5	4555

27896 7590 11/14/2016

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Suite 750
Gaithersburg, MD 20878

EXAMINER
HTUN, SAN A

ART UNIT	PAPER NUMBER
2643	

NOTIFICATION DATE	DELIVERY MODE
11/14/2016	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

Advisory Action Before the Filing of an Appeal Brief	**Application No.** *14/738,083*	**Applicant(s)** PÉREZ LAFUENTE, CARLOS A.	
	Examiner SAN HTUN	**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 --

THE REPLY FILED on 01 November 2016 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE.

NO NOTICE OF APPEAL FILED

1. ☒ The reply was filed after a final rejection. No Notice of Appeal has been filed. To avoid abandonment of this application, applicant must timely file one of the following replies: (1) an amendment, affidavit, or other evidence, which places the application in condition for allowance; (2) a Notice of Appeal (with appeal fee) in compliance with 37 CFR 41.31; or (3) a Request for Continued Examination (RCE) in compliance with 37 CFR 1.114 if this is a utility or plant application. Note that RCEs are not permitted in design applications. The reply must be filed within one of the following time periods:
   a) ☒ The period for reply expires *3* months from the mailing date of the final rejection.
   b) ☐ The period for reply expires on: (1) the mailing date of this Advisory Action; or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.
   c) ☐ A prior Advisory Action was mailed more than 3 months after the mailing date of the final rejection in response to a first after-final reply filed within 2 months of the mailing date of the final rejection. The current period for reply expires months from the mailing date of *the prior Advisory Action* or SIX MONTHS from the mailing date of the final rejection, whichever is earlier.
   Examiner Note: If box 1 is checked, check either box (a), (b) or (c). ONLY CHECK BOX (b) WHEN THIS ADVISORY ACTION IS THE FIRST RESPONSE TO APPLICANT'S FIRST AFTER-FINAL REPLY WHICH WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. ONLY CHECK BOX (c) IN THE LIMITED SITUATION SET FORTH UNDER BOX (c). See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) or (c) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

NOTICE OF APPEAL

2. ☐ The Notice of Appeal was filed on _____. A brief in compliance with 37 CFR 41.37 must be filed within two months of the date of filing the Notice of Appeal (37 CFR 41.37(a)), or any extension thereof (37 CFR 41.37(e)), to avoid dismissal of the appeal. Since a Notice of Appeal has been filed, any reply must be filed within the time period set forth in 37 CFR 41.37(a).

AMENDMENTS

3. ☒ The proposed amendments filed after a final rejection, but prior to the date of filing a brief, will not be entered because
   a) ☒ They raise new issues that would require further consideration and/or search (see NOTE below);
   b) ☐ They raise the issue of new matter (see NOTE below);
   c) ☐ They are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or
   d) ☐ They present additional claims without canceling a corresponding number of finally rejected claims.
   NOTE: _____. (See 37 CFR 1.116 and 41.33(a)).
4. ☐ The amendments are not in compliance with 37 CFR 1.121. See attached Notice of Non-Compliant Amendment (PTOL-324).
5. ☐ Applicant's reply has overcome the following rejection(s): _____.
6. ☐ Newly proposed or amended claim(s) _____ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).
7. ☒ For purposes of appeal, the proposed amendment(s): (a) ☒ will not be entered, or (b) ☐ will be entered, and an explanation of how the new or amended claims would be rejected is provided below or appended.

AFFIDAVIT OR OTHER EVIDENCE

8. ☐ A declaration(s)/affidavit(s) under **37 CFR 1.130(b)** was/were filed on _____.
9. ☐ The affidavit or other evidence filed after final action, but before or on the date of filing a Notice of Appeal will not be entered because applicant failed to provide a showing of good and sufficient reasons why the affidavit or other evidence is necessary and was not earlier presented. See 37 CFR 1.116(e).
10. ☐ The affidavit or other evidence filed after the date of filing the Notice of Appeal, but prior to the date of filing a brief, will not be entered because the affidavit or other evidence failed to overcome all rejections under appeal and/or appellant fails to provide a showing of good and sufficient reasons why it is necessary and was not earlier presented. See 37 CFR 41.33(d)(1).
11. ☐ The affidavit or other evidence is entered. An explanation of the status of the claims after entry is below or attached.

REQUEST FOR RECONSIDERATION/OTHER

12. ☒ The request for reconsideration has been considered but does NOT place the application in condition for allowance because: further consideration is required to consider the abstract idea in view of applicant's response and claims could be considered obvious by Meskanen US 6434389 B1 and Ajadeff US 2005/0207381 A1 as claims does not define: what is in a status of transmitter and what invovled in determination wherether the transmitter is in a predetermined environment.
13. ☒ Note the attached Information *Disclosure Statement*(s). (PTO/SB/08) Paper No(s). _____
14. ☒ Other: PTOL 2323.

STATUS OF CLAIMS

15. The status of the claim(s) is (or will be) as follows:
    Claim(s) allowed: .
    Claim(s) objected to: .
    Claim(s) rejected: 1,3-14 and 16-18.

/SAN HTUN/
Primary Examiner, Art Unit 2643

AFCP 2.0 Decision	Application No.	Applicant(s)
	14/738,083	PÉREZ LAFUENTE, CARLOS A.
	Examiner	Art Unit
	SAN HTUN	2643

This is in response to the After Final Consideration Pilot request filed on 01 November 2016.

1. **Improper Request** – The AFCP 2.0 request is improper for the following reason(s) and the after final amendment submitted with the request will be treated under pre-pilot procedure.

   ☐ An AFCP 2.0 request form PTO/SB/434 (or equivalent document) was not submitted.

   ☐ A non-broadening amendment to at least one independent claim was not submitted.

   ☐ A proper AFCP 2.0 request was submitted in response to the most recent final rejection.

   ☐ Other:

2. **Proper Request**

   A. After final amendment submitted with the request will not be treated under AFCP 2.0.
   The after final amendment cannot be reviewed and a search conducted within the guidelines of the pilot program.

   ☐ The after final amendment will be treated under pre-pilot procedure.

   B. Updated search and/or completed additional consideration.
   The examiner performed an updated search and/or completed additional consideration of the after final amendment within the time authorized for the pilot program. The result(s) of the updated search and/or completed additional consideration are:

   ☐ 1. All of the rejections in the most recent final Office action are overcome and a Notice of Allowance is issued herewith.

   ☐ 2. The after final amendment would not overcome all of the rejections in the most recent final Office action. See attached interview summary for further details.

   ☐ 3. The after final amendment was reviewed, and it raises a new issue(s). See attached interview summary for further details.

   ☐ 4. The after final amendment raises new issues, but would overcome all of the rejections in the most recent final Office action. A decision on determining allowability could not be made within the guidelines of the pilot. See attached interview summary for further details, including any newly discovered prior art.

   ☒ 5. Other: After final amendment was treated under AFCP 2.0. After a quick search, the amended claims are considered obvious and the allowable subject could not be indicated within the guidelines of the pilot program.

Examiner Note: Please attach an interview summary when necessary as described above.

EAST Search History

EAST Search History (Prior Art)

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
S1	34	("6529491" | "20080220782" | "20080102896" | "20080132225" | "20060084443" | "20080280604" | "20080085703" | "20070037577" | "20020032032" | "6434389" | "20090047968" | "20080207195" | "20110269460" | "20070171871").PN.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2016/04/21 17:18
S2	72	("20050075124" | "20100167725" | "6516190" | "7634255" | "6920317" | "6836653" | "6526267" | "7266366" | "20030092450" | "20050148297" | "20080004045" | "20080261604" | "6122520" | "7778652" | "7848765" | "6516193" | "6552648" | "5642303" | "6671506" | "7171189" | "6920317" | "20030176197" | "6526267" | "20020094801" | "6826414" | "6920317" | "6625442" | "8723664" | "6826414" | "20040192267" | "20040224682" | "6334052" | "6516193" | "6785536" | "7142869" | "20020094801" | "6516193" | "6826414").PN.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2016/04/21 17:24
S3	2	"7548731".pn.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2016/04/21 17:41
S4	2	US-20100317371-A1.did.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2016/04/21 17:44
S5	2	("20150281895").PN.	US-PGPUB; USPAT; USOCR; DERWENT	ADJ	ON	2016/04/21 17:51
S6	0	(("PÃ‰ REZ") near3 ("LAFUENTE") near3 ("Carlos")).INV.	EPO; JPO; DERWENT	ADJ	ON	2016/04/21 17:51
S7	0	(("PÃ‰ REZ") near3 ("LAFUENTE") near3 ("Carlos")).INV.	US-PGPUB; USPAT; USOCR	ADJ	ON	2016/04/21 17:51
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S12	11923	(location or area or boundary or position or zone or region or geographic$3) and (special or private or home or specific or environment) and (wirless or mobile or cell$4) and (wi?fi or bluetooth or wlan or nfc) and (network near7 (identity or code or id or identif$7)) and (connect$3 or status or communicat$3) and (power? line or (power near3 line) or plc or adsl or pstn) and (detect$3 or measur$5 or report$3 or monitor$3 or track$3) and ((identif$7 or location or position) near7 (code or id or identity or identif$7)) and (bs or (base station) or (access point) or ap or enb or hnb) and GSM	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2016/04/21 18:09
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S14	545	S13 and (power line)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2016/04/21 18:11
S15	540	S14 and (server or controller)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2016/04/21 18:11
S16	456	S15 and database	US-PGPUB; USPAT;	ADJ	ON	2016/04/21 18:12

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S23	21	("20100020710" | "20110059744" | "20110086652" | "20100291929" | "20100317351" | "20140073304" | "20130040640" | "20110274097").PN.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2016/04/25 13:29
S24	2	us-20080242298-a1.did.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2016/04/25 17:35
S25	2	US-20090061914-A1.did.	US-PGPUB; USPAT; USOCR;	ADJ	ON	2016/04/26 15:49

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S26	2	US-20150036494-A1.did.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2016/04/26 15:50
S27	10445	(location or area or boundary or position or zone or region or geographic$3) and (special or private or home or specific or environment) and (wirless or mobile or cell$4) and (wi?fi or bluetooth or wlan or nfc) and (network near7 (identity or code or id or identif$7)) and (connect$3 or status or communicat$3) and (power? line or (power near3 line) or plc or adsl or pstn) and (detect$3 or measur$5 or report$3 or monitor$3 or track$3) and ((identif$7 or location or position) near7 (code or id or identity or identif$7)) and (bs or (base station) or (access point) or ap or enb or hnb) and GSM and (Wi?fi or wlan or femtocell or (private network))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2016/08/19 16:21
S28	242	htun.xp. or htun.xa.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2016/08/19 16:22
S29	0	S28 and (special cell)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2016/08/19 16:22
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S34	8872	S33 and (pstn or (telephone network))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2016/08/19 17:28
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S36	6	us-20020097852-a1.did. or us-20020126691-a1.did. or us-20040038688-a1.did.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2016/11/07 16:24
S37	4284	(transmitter and (area or location or code or (cell ID)) and signal and (presen$4 or active) and (radio or wireless or cell$4 or mobile)).clm.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2016/11/07 16:30
S38	13	S37 and (special near (area or environment))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2016/11/07 16:31
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11/7/2016 5:46:16 PM
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INFORMATION DISCLOSURE STATEMENT BY APPLICANT
(Not for submission under 37 CFR 1.99)

Application Number	14738083
Filing Date	2015-06-12
First Named Inventor	Carlos A. PEREZ LAFUENTE
Art Unit	2643
Examiner Name	San A. Htun
Attorney Docket Number	0572.0001C5

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /S.H./

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
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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	20020097852	A1	2002-07-25	HUYGUE et al.	
	2	20020126691	A1	2002-09-12	STRONG	
	3	20040038688	A1	2004-02-26	ZABAWSHYJ et al.	

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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	0027152	WO	A1	2000-05-11	VAMPARI et al.		

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Receipt date: 11/01/2016	Application Number	14738083
INFORMATION DISCLOSURE STATEMENT BY APPLICANT	Filing Date	2015-06-12
(Not for submission under 37 CFR 1.99)	First Named Inventor	Carlos A. PEREZ LAFUENTE
	Art Unit	2643 14738083 - GAU: 2643
	Examiner Name	San A. Htun
	Attorney Docket Number	0572.0001C5

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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		

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EXAMINER SIGNATURE

Examiner Signature	/SAN HTUN/	Date Considered	11/07/2016

*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.

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11/07/2016

DO NOT ENTER: /S.H./

11/07/2016

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Application No.	:	14/738,083
First Named Inventor	:	Carlos A. Perez Lafuente
Confirmation No.	:	4555
Filed	:	June 12, 2015
TC/A.U.	:	2643
Examiner	:	San A. Htun
Customer No.	:	27896
Docket No.	:	0572.0001C5
Title	:	METHOD AND SYSTEM FOR MONITORING A MOBILE STATION PRESENCE IN A SPECIAL AREA

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

AMENDMENT AND RESPONSE AFTER FINAL UNDER 37 C.F.R. § 1.116

Dear Sir:

In response to the Final Office Action dated August 25, 2016, for which a response is due November 25, 2016, please consider the following amendments and remarks. Applicants submit concurrently herewith a Certification and Request for Consideration under the After Final Consideration Pilot Program 2.0 (PTO/SB/434).

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

Remarks begin on page 6 of this paper.

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Application No.	:	14/738,083
First Named Inventor	:	Carlos A. Perez Lafuente
Confirmation No.	:	4555
Filed	:	June 12, 2015
TC/A.U.	:	2643
Examiner	:	San A. Htun
Customer No.	:	27896
Docket No.	:	0572.0001C5
Title	:	METHOD AND SYSTEM FOR MONITORING A MOBILE STATION PRESENCE IN A SPECIAL AREA

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

Remarks begin on page 6 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 the Claims

1. (Currently Amended) A [[a]] transmitter that is configured to transmit a distinctive defining signal that defines a special area by its coverage, the distinctive defining signal capable of being received and processed by a mobile station, the distinctive defining signal including data regarding a status of the ~~radio communication defining device~~ transmitter, the data including information indicating whether or not the transmitter is located in a predetermined environment, the transmitter being configured to obtain information to determine whether or not the transmitter is in the predetermined environment, the transmitter configured to receive the information via a wireless communication with a radio transmitting device.

2. (Previously Cancelled)

3. (Currently Cancelled)

4. (Currently Cancelled)

5. (Currently Cancelled)

6. (Currently Cancelled)

7. (Currently Amended) The transmitter according to claim [[5]]1 comprising a database that includes identification data of the radio transmitting device.

8. (Currently Cancelled)

9. (Currently Cancelled)

10. (Currently Cancelled)

11. (Currently Cancelled)

12. (Currently Cancelled).

13. (Previously Presented) The transmitter according to claim 1, wherein the distinctive defining signal is coded.

14. (Currently Amended) A method associated with the use of a mobile station and at least one transmitter that transmits a distinctive defining signal that defines a special area by its coverage, the distinctive defining signal including data regarding a status of the ~~radio communication defining device~~ transmitter, the method comprising:

receiving and processing the distinctive defining signal in the mobile station; and

sending from the mobile station via the mobile telephone network an updating signal to one or more servers of a provider of presence related services about the mobile station's presence in the special area, the updating signal comprising the data regarding a status of the ~~radio communication defining device~~ transmitter, the data including information indicative of whether or not the transmitter is located in a predetermined environment.

15. (Previously Cancelled)

16. (Original) The method according to claim 14, wherein the sending of the updating signal is uncorrelated to any mobile station phone call establishment, the updating signal being sent 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.

17. (Original) The method according to claim 14, 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.

18. (Original) The method according to claim 14, wherein the frequency of the updating signal is different from the frequency of the distinctive defining signal.

19. (New) A transmitter that is configured to transmit a distinctive defining signal that defines a special area by its coverage, the distinctive defining signal capable of being received and processed by a mobile station, the distinctive defining signal including data regarding a status of the transmitter, the data including information indicating whether or not the transmitter is located in a predetermined environment, the transmitter being configured to obtain information to determine whether or not the transmitter is in the predetermined environment, the transmitter configured to receive the information via communication with a fixed network to which the radio communication defining device is physically connected.

20. (New) The transmitter according to claim 19, wherein the fixed network is an embedded system in a car.

21. (New) The transmitter according to claim 19, wherein the transmitter, further comprises a memory that stores one or more parameters useable to authenticate the transmitter in the fixed network.

REMARKS

Claims 1, 7 and 14 have been amended. Claims 3-6 and 8-12 have been cancelled. Claims 19-21 have been added. Claims 1, 7 and 13-21 are pending in the application.

Amended claim 1 incorporates the limitations of previously presented claims 4 and 5 (now cancelled). New claim 19 includes the limitations of previously present claims 1 and 8. New claim 20 corresponds to previously presented claim 11 (now cancelled). New claim 21 corresponds to previously presented claim 12 (now cancelled).

Therefore, the scope of the amended and new claims have been previously fully searched and Examined by the USPTO.

Claim Objections

Claim 1 has been amended to correct for the typographical error.

Claim Rejections – 35 USC §112

Claims 1, 3, 4, 8, 12 and 14 were rejected under 35 USC §112, second paragraph. Claims 3, 4, 8 and 12 have been cancelled. Claims 1 and 14 have been amended to replace "radio communication defining device" with "transmitter".

Claim Rejections – 35 USC §101

Claims 1 and 14 were rejected under 35 USC §101 as assertively be directed to a judicial exception (i.e., a law of nature, a natural phenomenon, or an abstract idea) without significantly more.

Applicant respectfully traverses this rejection for the following reasons.

The test for determining subject matter eligibility consists of: 1) determining whether the claim is directed to a law of nature, a natural phenomenon, or an abstract idea and, if so; 2) determining whether any element or combination of elements in the claim is sufficient to ensure that the claim amounts to significantly more than the law of nature, natural phenomenon, or abstract idea. *See, Alice Corp. Pty. Ltd. v. CLS Bank Int'l et al.*, 134 S.Ct. 2347, 2355 (2014). Limitations recited in a claim that may be enough to qualify as significantly more than the law of nature, natural phenomenon, or abstract idea include: improvements to another technology (or technical field); and improvements to the functioning of a computer itself. *Id.* at 2358 and 2359.

In July 2015, the USPTO issued an Update to the Interim Guidance that substantially clarified for examiners how to go about assessing claims under 35 U.S.C. § 101 in view of the USPTO's comprehensive and up-to-date analysis of relevant case law. As explained below in detail, Applicant submits that these most recent guidelines help clarify that the claims of the subject application are patent eligible under 35 U.S.C. § 101.

The Claims Do Not Recite a Mere Abstract Idea Under the Present Guidelines

As noted above, the first part of the test for patent eligible subject matter is an analysis of the claim to determine the presence of an ineligible concept (e.g., a law of nature, a natural phenomenon, or an abstract idea). The July 2015 Update to the Interim Guidance specifies that a claimed concept is NOT an abstract idea unless it is similar to at least one concept the courts have identified as an abstract idea. The Updated Interim Guidance indicates that these concepts identified by the courts include: 1) a fundamental economic practice; 2) certain methods of organizing human activity; 3) an idea "of itself"; and 4) mathematical relationships/formulas.

According to the Updated Interim Guidance:

- a fundamental economic practice relates to the economy and commerce (i.e., agreements between people in the form of contracts, legal obligations and business relationships);

- certain methods of organizing human activities relate to interpersonal and intrapersonal activities (i.e., managing relationships or transactions between people, social activities and human behavior; satisfying or avoiding a legal obligation; advertising, marketing, and sales activities or behaviors; and managing human mental activity);
- an idea of itself relates to an idea standing alone (i.e., an uninstantiated concept, plan, or scheme; and a mental process that can be performed in the human mind or by pencil and paper); and
- a mathematical relationship/formula relates to mathematical concepts (i.e., mathematical algorithms, mathematical relationships, mathematical formulas, and calculations).

The Office Action does not meet the requirements of the July 2015 Update to the Interim Guidance for establishing that the claims are directed to an abstract idea. In regard to claim 1, the Office Action merely states without support that "Claim 1 is directed to an abstract idea as claim 1 recites merely transmitting. measuring and processing a signal, i.e., concerned with a mathematical equation or an algorithm for transmitting, measuring and processing" without any explanation of how such subject matter constitutes a mathematical equation or an algorithm for transmitting, measuring and processing. The rejection fails to take into account any of the claim language itself. Claim 1 as originally filed does not merely recite the transmitting. measuring and processing of a signal but requires that the distinctive defining signal to contain data including information indicating whether or not the transmitter is located in a predetermined environment. In regard to claim 1, the Office states on page 4 of the Office Action that the claim does not specifically recite how to define a special area. This is not true. The claim recites that the special area is defined by the coverage of the distinctive defining signal.

In regard to claim 14, the Office merely states that "Similarly, claim 14 is ineligible as the claim fails to recite additional elements that amount to significantly more than conventional features [i.e., an abstract idea] commonly known in the related art for instance, intrinsic location updating procedure". The Office has failed to provide any analysis that involves the language of claim 14 itself. Nor has the Office provided any explanation as to what an "intrinsic location updating procedure" is, nor any rationale as to how it forms the basis of a 35 USC §101 rejection. Applicants submit that the mere generalities provided by the Office, in conjunction with a complete lack of an analysis that involves the language of claim 14, render the 35 USC §101 rejection of the claims improper.

The USPTO's July 2015 Update regarding Subject Matter Eligibility states "the initial burden is on the examiner to explain why a claim or claims are patentable clearly and specifically, so that applicant has sufficient notice and is able to effectively respond. For subject matter eligibility, the examiner's burden is met by clearly articulating the reason(s) why the claimed invention is not eligible, for example by providing a reasoned rational that identifies the judicial exception recited in the claim and why it is considered an exception, and that identifies the additional elements in the claim (if any) and explains whey they do not amount to significantly more than the exception." The 35 USC §101 rejection is improper for having failed to comply with the USPTO's guideline.

A review of the claim requirements of the present Application reveals that the claims do not fall under any of these categories or concepts identified as an abstract idea; therefore, the claim requirements cannot be considered merely abstract ideas.

Rejected claim 1 set forth a transmitter configured to transmit a distinctive defining signal that at least partly defines a special area by its coverage, the distinctive defining signal

capable of being received and processed by a mobile station, the distinctive defining signal including data regarding a status of the transmitter.

Rejected claim 14 set forth a method associated with the use of a mobile station and at least one transmitter that transmits a distinctive defining signal that at least partly defines a special area by its coverage, the distinctive defining signal including data regarding a status of the transmitter, the method comprising: receiving and processing the distinctive defining signal in the mobile station; and sending from the mobile station via the mobile telephone network an updating signal to one or more servers of a provider of presence related services about the mobile station's presence in the special area, the updating signal comprising the data regarding a status of the transmitter.

Considering the first of the four categories described in the July 2105 Update, the claims do not constitute a fundamental economic practice that relates to the economy and commerce (i.e., agreements between people in the form of contracts, legal obligations and business relationships). Claims 1 and 14 have nothing to do with contracts, legal obligations and business relationships between people.

Likewise, such claim requirements clearly do not relate to the second category of abstract ideas, namely "certain methods of organizing human activities," which relate to interpersonal and intrapersonal activities, "i.e., managing relationships or transactions between people, social activities and human behavior; satisfying or avoiding a legal obligation; advertising, marketing, and sales activities or behaviors; and managing human mental activity." (*See, July 2015 Update to the Interim Guidance*).

Plainly, the claims are not directed to the third category of abstract ideas, "an idea of itself," which the July 2015 Update clarifies relates to an idea standing alone (i.e., an

uninstantiated concept, plan, or scheme; and a mental process that can be performed in the human mind or by pencil and paper). The rationale set forth by the Office on pages 4 and 5 of the Office Action appears to be that for a 35 USC §102 rejection and not that of a 35 USC §101 rejection. In any event, in regard to claim 1, it should go without saying that a radio communication defining device that transmits a particular type of signal with particular types of data for the purpose of being processed in a mobile station by its very nature, cannot be performed in the human mind or by pencil or paper. In regard to claim 14, it should also go without saying that receiving and processing a distinctive defining signal in the mobile station; and sending from the mobile station via the mobile telephone network an updating signal to one or more servers of a provider of presence related services about the mobile station's presence in the special area, the updating signal comprising the data regarding a status of the radio communication defining device, by its very nature, cannot be performed in the human mind or by pencil or paper. Note, for example, in the figures the extensive use of network devices required to implement the system. Finally, the claims are not directed to the fourth category of abstract ideas, a mathematical relationship/formula (i.e., mathematical algorithms, mathematical relationships, mathematical formulas, and calculations).

In summary, because the July 2015 Update to the Interim Guidance specifies that a claimed concept is NOT an abstract idea unless it is similar to at least one concept the courts have identified as an abstract idea, and since the claims are not similar to any of these concepts identified by the courts, including *O'Reilly v. Morse* [U.S. Reissue Patent No. RE117], the claims cannot be considered to recite merely abstract ideas and thus comply with 35 U.S.C. § 101. If the Examiner disagrees, the Examiner is respectfully requested to provide a fact-based explanation why the actual claim limitations of each of claims 1 and 14 are considered abstract under the indicated category.

Notwithstanding the foregoing, to expedite prosecution of the present application Applicant has amended claim 1 to incorporate the limitations of now cancelled claims 3 and 4.

Double Patenting

Claims 1 and 14 were rejected on the ground of nonstatutory double patenting as being unpatentable over claim 1 of U.S. Patent No. 8,934,922 and over claim 1 of U.S. Patent No. 9,119,030. In response to the same rejection recited in the non-final Office Action dated May 9, 2016, the Applicant has previously submitted terminal disclaimers to overcome the rejections on May 24, 2016.

Claim Rejections – 35 USC §103

Claims 1, 3-14 and 16-18 were rejected under 35 USC §103(a) as being unpatentable over U.S. Publication No. 2010/0317371 (hereinafter "Westerinen") in view of U.S. Publication No. 2008/0242298 (hereinafter "Nylander").

As noted in the response to Office Action filed on May 24, 2016, the earliest priority date of the present application is March 28, 2006. The earliest priority date of Westerinen is June 12, 2009. Because Westerinen does not predate the present application, Applicant respectfully submits that the rejection of each of claims 1, 7 and 13-18 is improper and should be withdrawn.

Conclusion

In view of the foregoing, Applicant respectfully requests the Examiner to find the application in condition for allowance with claims 1, 7 and 13-21. However, if for any reason the Examiner feels that the application is not now in condition for allowance, the Examiner is respectfully

requested to call the undersigned attorney to discuss any unresolved issues and to expedite the disposition of the application.

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

Dated: November 1, 2016

Respectfully submitted by:

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/Tim L. Kitchen/

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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Application No.	:	14/738,083
First Named Inventor	:	Carlos A. Perez Lafuente
Confirmation No.	:	4555
Filed	:	June 12, 2015
TC/A.U.	:	2643
Examiner	:	San A. Htun
Customer No.	:	27896
Docket No.	:	0572.0001C5
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: (1) 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 (2) 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: November 1, 2016

Respectfully submitted by:

/Tim L. Kitchen/

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

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(Not for submission under 37 CFR 1.99)

Application Number	14738083
Filing Date	2015-06-12
First Named Inventor	Carlos A. PEREZ LAFUENTE
Art Unit	2643
Examiner Name	San A. Htun
Attorney Docket Number	0572.0001C5

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	2	20020126691	A1	2002-09-12	STRONG	
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	1	0027152	WO	A1	2000-05-11	VAMPARI et al.		

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	Application Number	14738083
	Filing Date	2015-06-12
	First Named Inventor	Carlos A. PEREZ LAFUENTE
	Art Unit	2643
	Examiner Name	San A. Htun
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[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	14738083
	Filing Date	2015-06-12
	First Named Inventor	Carlos A. PEREZ LAFUENTE
	Art Unit	2643
	Examiner Name	San A. Htun
	Attorney Docket Number	0572.0001C5

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.

☒ The fee set forth in 37 CFR 1.17 (p) has been submitted herewith.

☒ A certification statement is not submitted herewith.

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)	2016-11-01
Name/Print	Tim L. Kitchen	Registration Number	41900

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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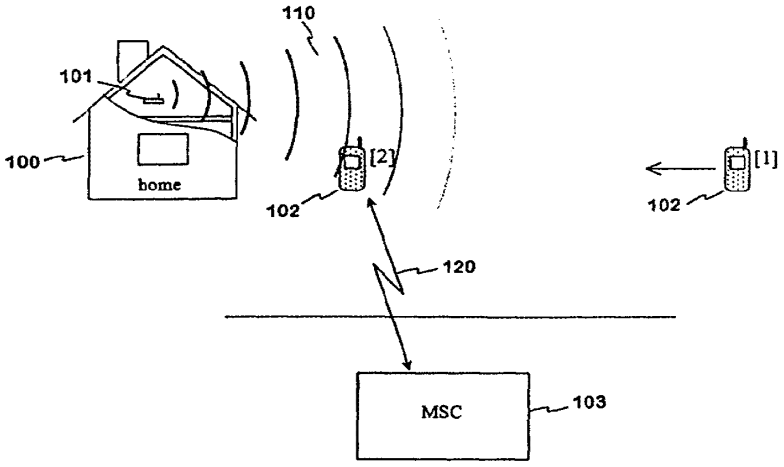
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(54) Title: METHOD AND ARRANGEMENT FOR LOCATING A MOBILE STATION



(57) Abstract

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

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Method and arrangement for locating a mobile station

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

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

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

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

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

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

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

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

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

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

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

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

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

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

- said mobile station monitors the guide channel,

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Claims

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

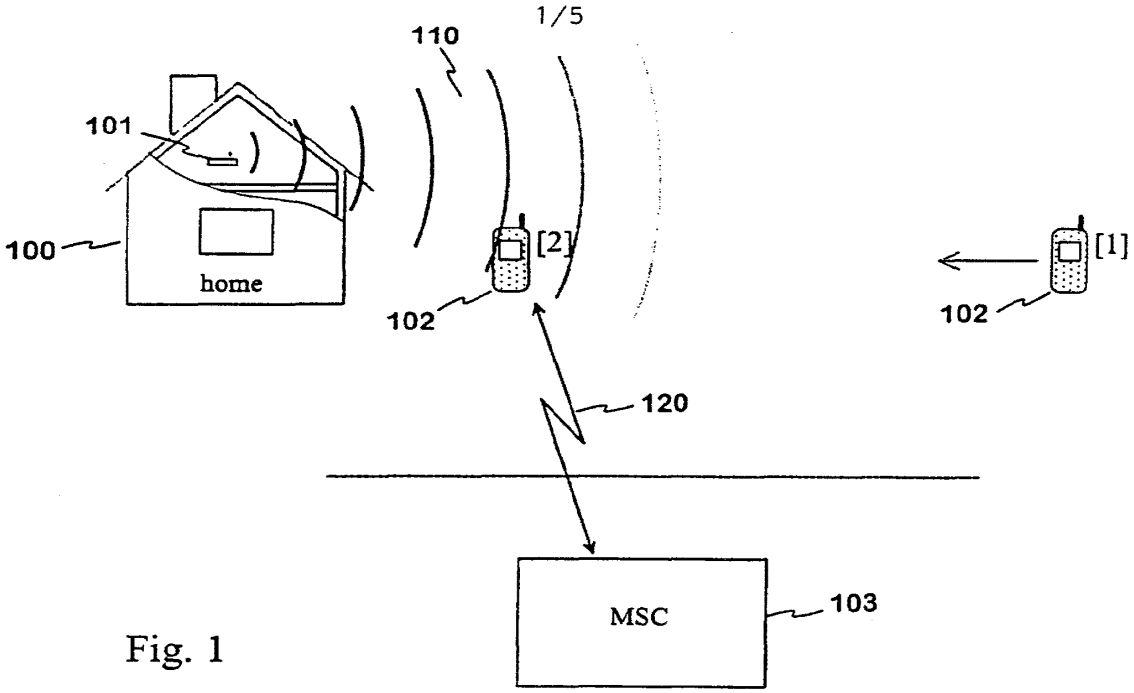


Fig. 1

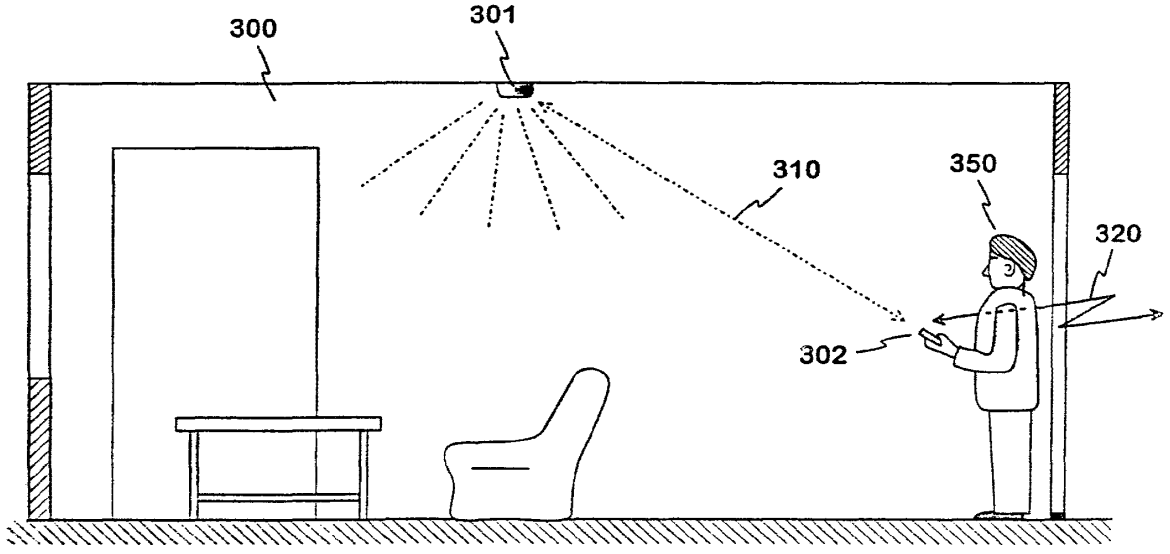


Fig. 3

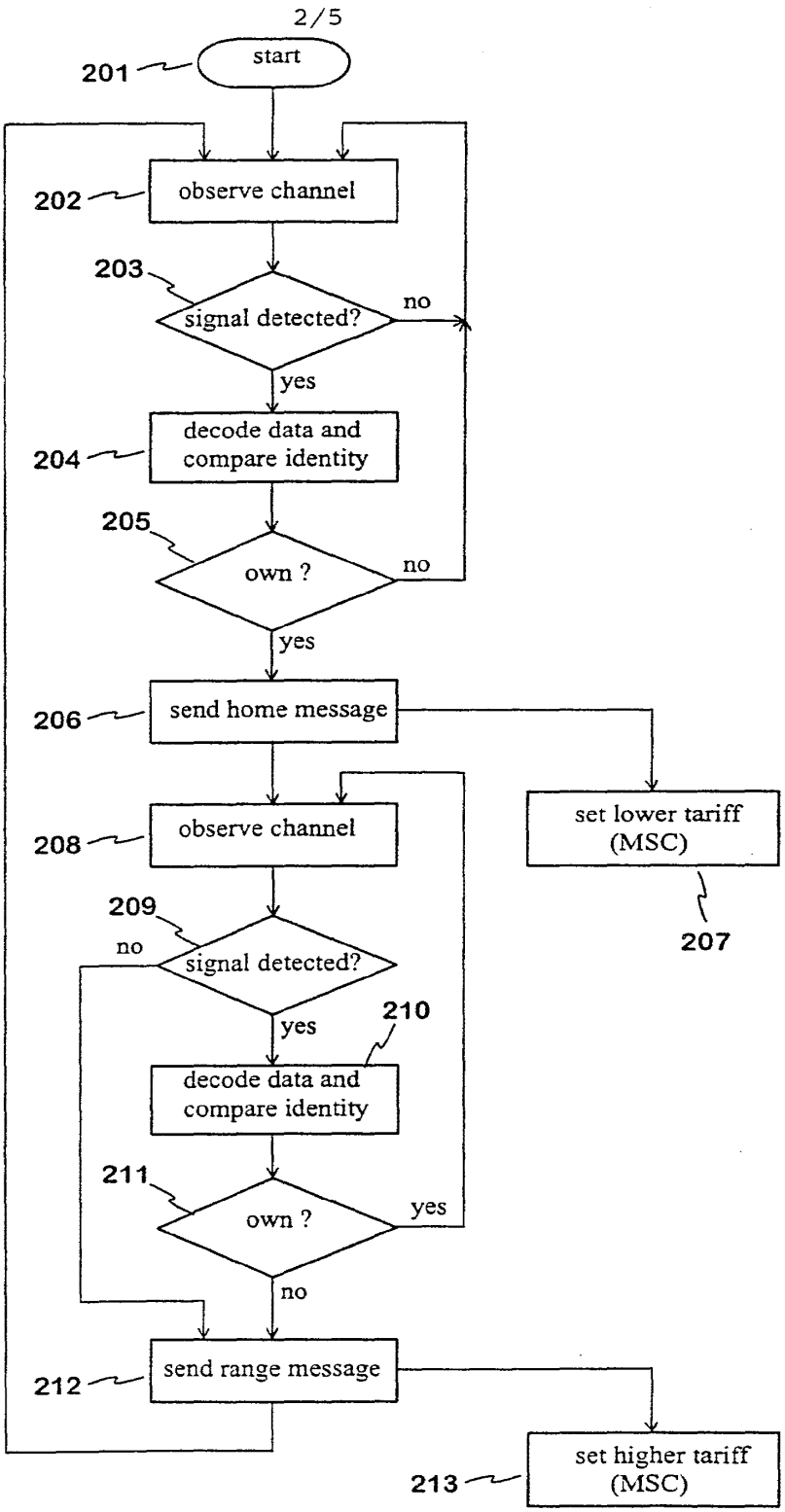

201
start
202
observe channel
203
signal detected?
no
yes
204
decode data and compare identity
205
own ?
no
yes
206
send home message
set lower tariff (MSC)
207
208
observe channel
209
no
signal detected?
yes
210
decode data and compare identity
211
own ?
yes
no
212
send range message
213
set higher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

Fig. 2

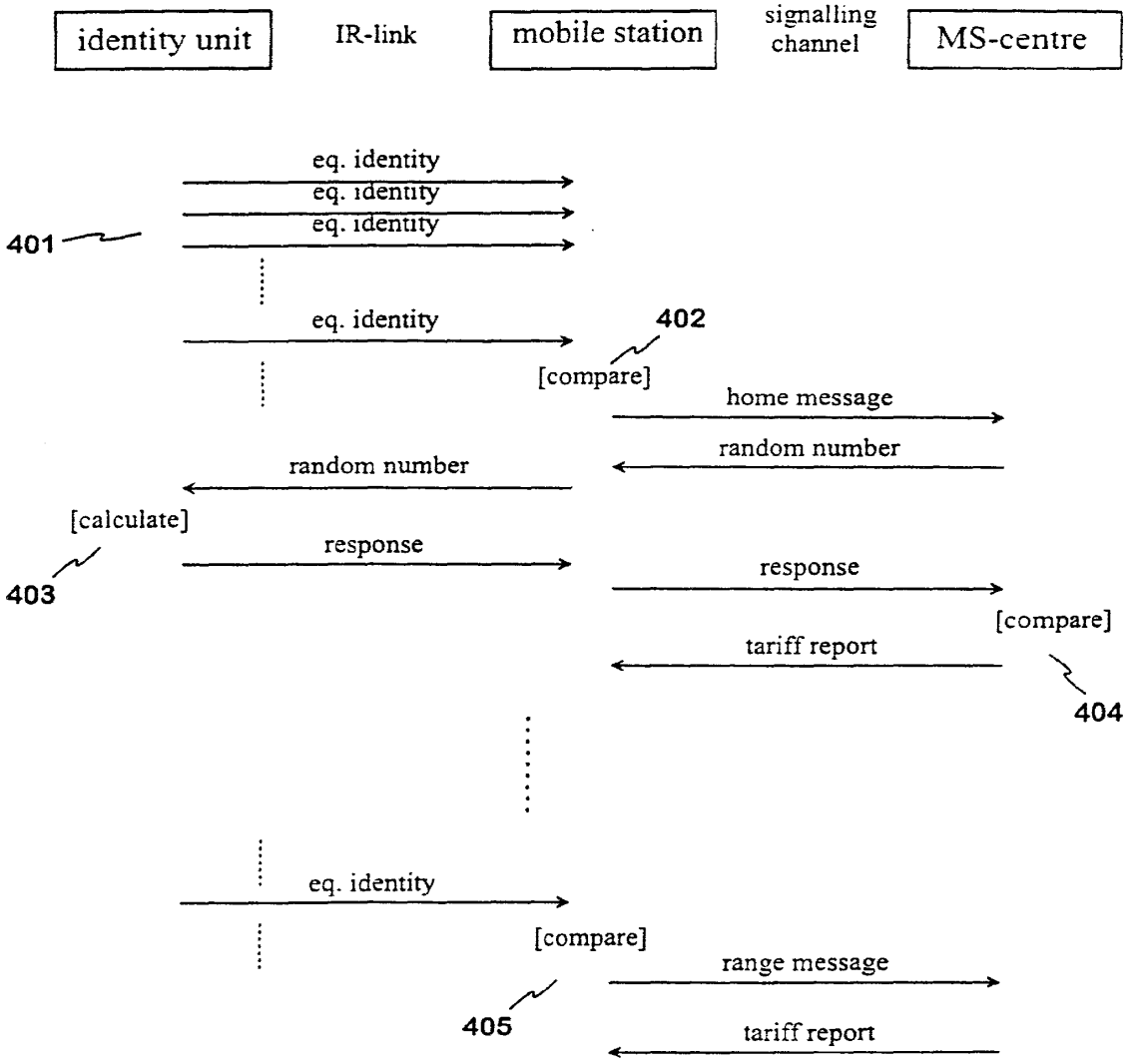

identity unit
IR-link
mobile station
signalling channel
MS-centre
eq. identity
eq. identity
eq. identity
401
eq. identity
402
[compare]
home message
random number
random number
[calculate]
response
response
403
[compare]
tariff report
404
eq. identity
[compare]
range message
405
tariff report

Fig. 4

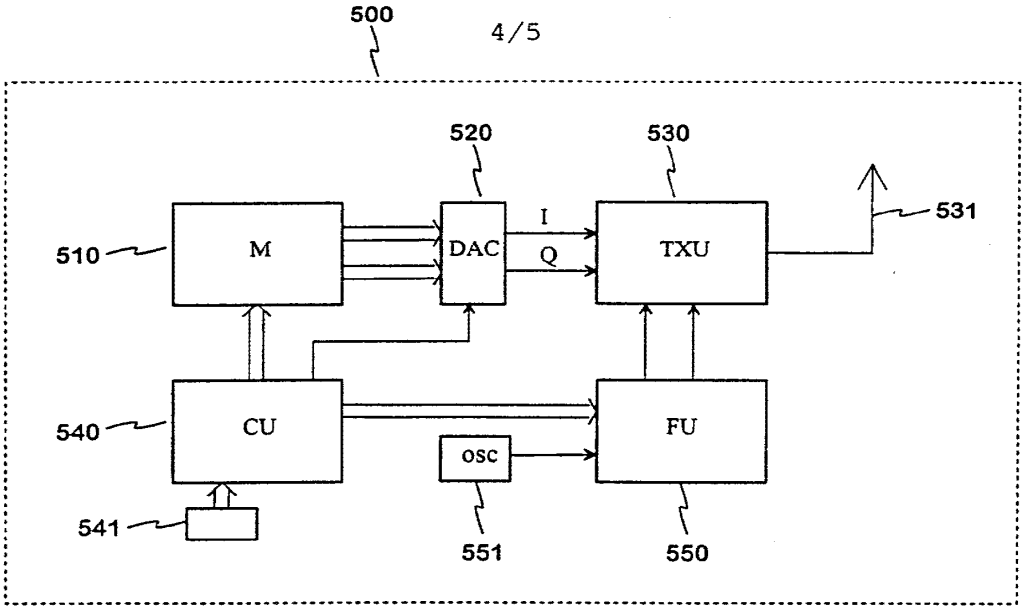

500
520
530
531
510
M
DAC
I
Q
TXU
540
CU
FU
osc
541
551
550

Fig. 5

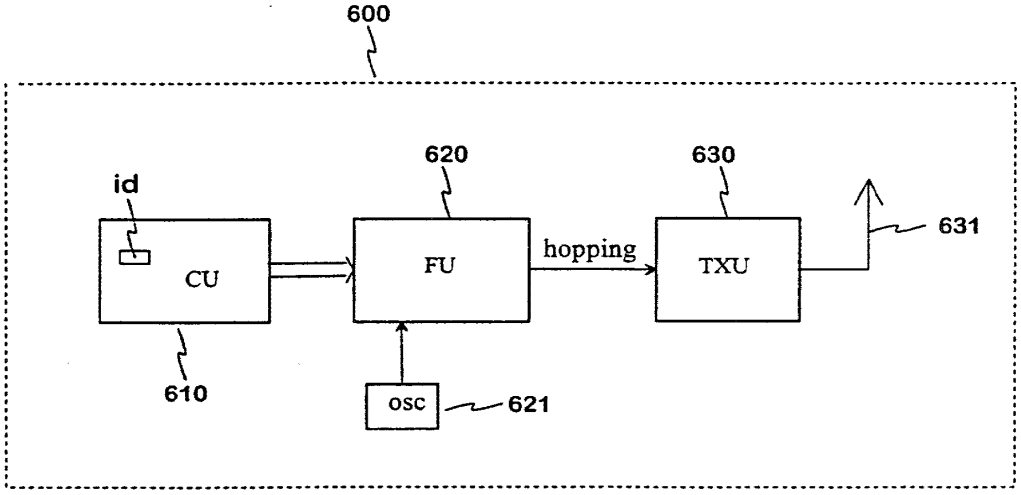

600
620
630
id
631
CU
FU
hopping
TXU
610
osc
621

Fig. 6

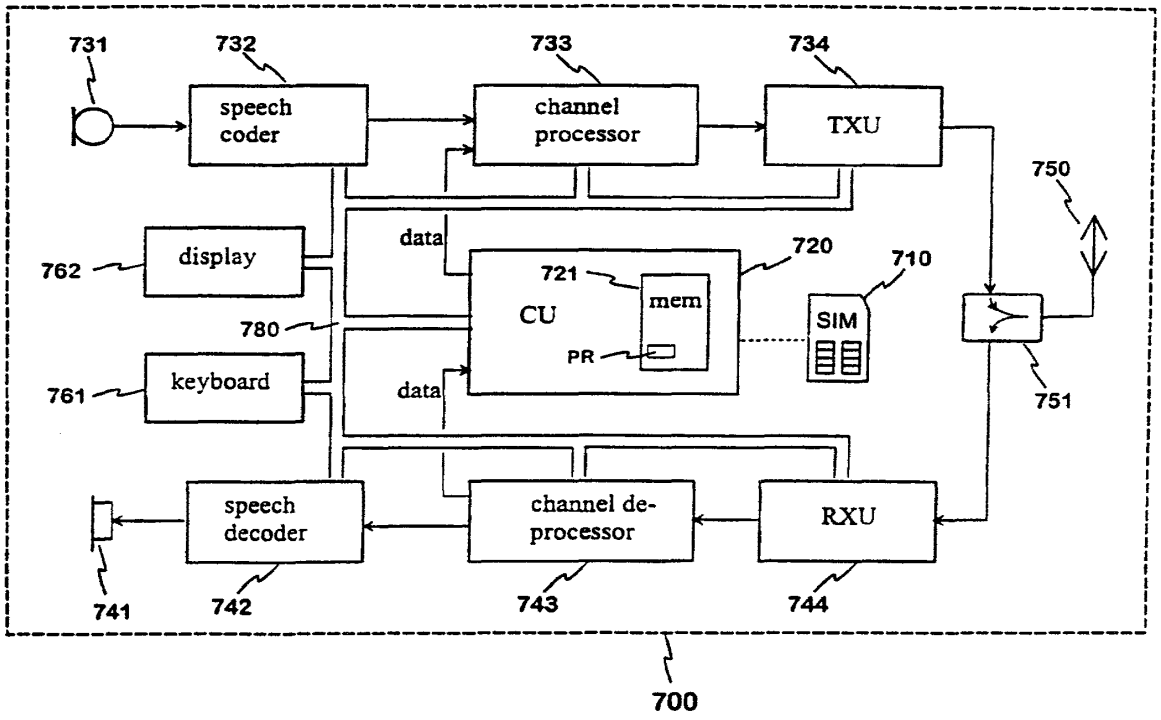

731
732
733
734
speech coder
channel processor
TXU
750
762
display
data
720
721
mem
CU
710
780
PR
SIM
761
keyboard
data
751
speech decoder
channel de-processor
RXU
741
742
743
744
700

Fig. 7

INTERNATIONAL SEARCH REPORT

International application No.
PCT/FI 99/00908

A. CLASSIFICATION OF SUBJECT MATTER

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

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC7: H04Q

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

SE,DK,FI,NO classes as above

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

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P,A	WO 9952316 A1 (NOKIA TELECOMMUNICATIONS OY), 14 October 1999 (14.10.99)	1-21
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X	CA 2195487 A (BUHRMANN, M.), 21 August 1997 (21.08.97), page 2, line 21 - line 28; page 6, line 17 - line 21, abstract	1,13,14,21
A		2-12,15-20
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* Special categories of cited documents:
"A" document defining the general state of the art which is not considered to be of particular relevance
"E" erlier document but published on or after the international filing date
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"P" document published prior to the international filing date but later than the priority date claimed
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"X" document of particular relevance: the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
"Y" document of particular relevance: the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
"&" document member of the same patent family

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

Form PCT/ISA/210 (second sheet) (July 1992)

INTERNATIONAL SEARCH REPORT

International application No.
PCT/FI 99/00908

C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

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Information on patent family members

02/12/99

International application No.
PCT/FI 99/00908

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

Doc Code: A.NE.AFCP
Document Description: After Final Consideration Pilot Program Request

PTO/SB/434 (05-13)

CERTIFICATION AND REQUEST FOR CONSIDERATION UNDER THE AFTER FINAL CONSIDERATION PILOT PROGRAM 2.0

Practitioner Docket No.:	Application No.:	Filing Date:
0572.0001C5	14/738,083	June 12, 2015
First Named Inventor:	**Title:**	
Carlos A. Perez Lafuente	METHOD AND SYSTEM FOR MONITORING A MOBILE STATION PRESENCE IN A SPECIAL AREA	

APPLICANT HEREBY CERTIFIES THE FOLLOWING AND REQUESTS CONSIDERATION UNDER THE AFTER FINAL CONSIDERATION PILOT PROGRAM 2.0 (AFCP 2.0) OF THE ACCOMPANYING RESPONSE UNDER 37 CFR 1.116.

1. The above-identified application is (i) an original utility, plant, or design nonprovisional application filed under 35 U.S.C. 111(a) [a continuing application (*e.g.*, a continuation or divisional application) is filed under 35 U.S.C. 111(a) and is eligible under (i)], or (ii) an international application that has entered the national stage in compliance with 35 U.S.C. 371(c).
2. The above-identified application contains an outstanding final rejection.
3. Submitted herewith is a response under 37 CFR 1.116 to the outstanding final rejection. The response includes an amendment to at least one independent claim, and the amendment does not broaden the scope of the independent claim in any aspect.
4. This certification and request for consideration under AFCP 2.0 is the only AFCP 2.0 certification and request filed in response to the outstanding final rejection.
5. Applicant is willing and available to participate in any interview requested by the examiner concerning the present response.
6. This certification and request is being filed electronically using the Office's electronic filing system (EFS-Web).
7. Any fees that would be necessary consistent with current practice concerning responses after final rejection under 37 CFR 1.116, *e.g.*, extension of time fees, are being concurrently filed herewith. [There is no additional fee required to request consideration under AFCP 2.0.]
8. By filing this certification and request, applicant acknowledges the following:
   - Reissue applications and reexamination proceedings are not eligible to participate in AFCP 2.0.
   - The examiner will verify that the AFCP 2.0 submission is compliant, *i.e.*, that the requirements of the program have been met (see items 1 to 7 above). For compliant submissions:
     - The examiner will review the response under 37 CFR 1.116 to determine if additional search and/or consideration (i) is necessitated by the amendment and (ii) could be completed within the time allotted under AFCP 2.0. If additional search and/or consideration is required but cannot be completed within the allotted time, the examiner will process the submission consistent with current practice concerning responses after final rejection under 37 CFR 1.116, *e.g.*, by mailing an advisory action.
     - If the examiner determines that the amendment does not necessitate additional search and/or consideration, or if the examiner determines that additional search and/or consideration is required and could be completed within the allotted time, then the examiner will consider whether the amendment places the application in condition for allowance (after completing the additional search and/or consideration, if required). If the examiner determines that the amendment does not place the application in condition for allowance, then the examiner will contact the applicant and request an interview.
       - The interview will be conducted by the examiner, and if the examiner does not have negotiation authority, a primary examiner and/or supervisory patent examiner will also participate.
       - If the applicant declines the interview, or if the interview cannot be scheduled within ten (10) calendar days from the date that the examiner first contacts the applicant, then the examiner will proceed consistent with current practice concerning responses after final rejection under 37 CFR 1.116.

Signature	Date
/Tim L. Kitchen/	November 1, 2016
Name (Print/Typed) Tim. L. Kitchen	**Practitioner Registration No.** 41900

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

☐ * Total of _____ forms are submitted.

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:	14738083
Filing Date:	12-Jun-2015
Title of Invention:	METHOD AND SYSTEM FOR MONITORING A MOBILE STATION PRESENCE IN A SPECIAL AREA
First Named Inventor/Applicant Name:	Carlos A. Pérez LaFuente
Filer:	Tim L. Kitchen
Attorney Docket Number:	0572.0001C5

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($)
Miscellaneous:				
SUBMISSION- INFORMATION DISCLOSURE STMT	2806	1	90	90
		Total in USD ($)		**90**

Electronic Acknowledgement Receipt	
EFS ID:	27382463
Application Number:	14738083
International Application Number:	
Confirmation Number:	4555
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:	0572.0001C5
Receipt Date:	01-NOV-2016
Filing Date:	12-JUN-2015
Time Stamp:	16:37:21
Application Type:	Utility under 35 USC 111(a)

Payment information:

Submitted with Payment	yes
Payment Type	CARD
Payment was successfully received in RAM	$90
RAM confirmation Number	110216INTEFSW16415200
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		2016-11-01_ResponseToFinalOfficeAction-0001C5.pdf	184797 26180f4167042643be87fed62a7d4529b8d45a4a	yes	13
	Multipart Description/PDF files in .zip description				
	Document Description		**Start**	**End**	
	Response After Final Action		1	1	
	Claims		2	5	
	Applicant Arguments/Remarks Made in an Amendment		6	13	
Warnings:					
Information:					
2	Transmittal Letter	2016-11-01_IDSTransmittalLtr-0001C5.pdf	128848 ac7a8b1382dd348969cfecb2eaef1804594bde59	no	2
Warnings:					
Information:					
3	Information Disclosure Statement (IDS) Form (SB08)	2016-11-01_IDS-SB08a-0001C15.pdf	664325 6a8d28923a74e2969726831ff6846e074afa937a	no	4
Warnings:					
Information:					
4	Foreign Reference	WO0027152A1-Vimpari.pdf	1089925 96cd168fabb1190063f0b6e2872ee72481439917	no	24
Warnings:					
Information:					
5	After Final Consideration Program Request	2016-11-01_AfterFinalConsiderationP_2_0-0001C5.pdf	231751 9df4cc88fd5d9fdad312270f4d86c8ff2ae3b37b	no	2

Warnings:					
Information:					
6	Fee Worksheet (SB06)	fee-info.pdf	30567 7db79dbd87a1bd71ec154946f216d32e8d9cbe9b	no	2
Warnings:					
Information:					
		Total Files Size (in bytes):	2330213		

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.

PTO/SB/06 (09-11)
Approved for use through 1/31/2014. OMB 0651-0032
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
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PATENT APPLICATION FEE DETERMINATION RECORD Substitute for Form PTO-875	Application or Docket Number 14/738,083	Filing Date 06/12/2015	☐ To be Mailed

ENTITY: ☐ LARGE ☒ SMALL ☐ MICRO

APPLICATION AS FILED – PART I

FOR	(Column 1) NUMBER FILED	(Column 2) NUMBER EXTRA	RATE ($)	FEE ($)
☐ BASIC FEE (37 CFR 1.16(a), (b), or (c))	N/A	N/A	N/A	
☐ SEARCH FEE (37 CFR 1.16(k), (i), or (m))	N/A	N/A	N/A	
☐ EXAMINATION FEE (37 CFR 1.16(o), (p), or (q))	N/A	N/A	N/A	
TOTAL CLAIMS (37 CFR 1.16(i))	minus 20 =	*	X $ =	
INDEPENDENT CLAIMS (37 CFR 1.16(h))	minus 3 =	*	X $ =	
☐ APPLICATION SIZE FEE (37 CFR 1.16(s))	If the specification and drawings exceed 100 sheets of paper, the application size fee due is $310 ($155 for small entity) for each additional 50 sheets or fraction thereof. See 35 U.S.C. 41(a)(1)(G) and 37 CFR 1.16(s).			
☐ MULTIPLE DEPENDENT CLAIM PRESENT (37 CFR 1.16(j))				
* If the difference in column 1 is less than zero, enter "0" in column 2.			TOTAL	

APPLICATION AS AMENDED – PART II

AMENDMENT **11/01/2016**

	(Column 1) CLAIMS REMAINING AFTER AMENDMENT		(Column 2) HIGHEST NUMBER PREVIOUSLY PAID FOR	(Column 3) PRESENT EXTRA	RATE ($)	ADDITIONAL FEE ($)
Total (37 CFR 1.16(i))	* 10	Minus	** 20	= 0	X $40 =	0
Independent (37 CFR 1.16(h))	* 3	Minus	***3	= 0	X $210 =	0
☐ Application Size Fee (37 CFR 1.16(s))						
☐ FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))						
					TOTAL ADD'L FEE	0

AMENDMENT

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

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

LIE
ALLYSON PURNELL

This collection of information is required by 37 CFR 1.16. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**
If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
14/738,083	06/12/2015	Carlos A. Pérez LaFuente	0572.0001C5	4555

27896 7590 08/25/2016

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

EXAMINER
HTUN, SAN A

ART UNIT	PAPER NUMBER
2643	

NOTIFICATION DATE	DELIVERY MODE
08/25/2016	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. 14/738,083	Applicant(s) PÉREZ LAFUENTE, CARLOS A.	
	Examiner SAN HTUN	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 *05/24/2016*.

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

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

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

4)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims*

5)☒ Claim(s) *1,3-14 and 16-18* 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) *1,3-14 and 16-18* 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: *2014-29414-abstract, Federal Register for transmitting signals*.

Detailed Action

1. This Office Action is in response to the Applicants' communication filed on 05/24/2016. In virtue of this communication, claims 1, 3-14 and 16-18 are currently pending in this Office Action.

Claim Objections

2. Claim 1 is objected to because of the following informalities: there is a typographic error and accordingly, "A a transmitter" should be revived as "A transmitter". Appropriate correction is required.

Response to Arguments

3. Claim rejections under 35 U.S.C. 112 are hereby withdrawn based on the amendment but a new rejection is necessitated by amendment. Regarding to Claim Rejections under 35 U.S.C. 101, the rejection is sustained and response to arguments are addressed in the 35 U.S.C. 101 rejection section 8 on page 5-6 set forth below. Moreover, the amended claims are still considered obvious by the rationales explained in the claim rejections section set forth below.

Claim Rejections - 35 USC § 112

4. 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, 3, 4, 8, 12 and 14 recite the limitation "a transmitter" and “the radio communication defining device” in claims. Claim does not clearly define the relationship between “a transmitter” and “the radio communication defining device" and therefore, there is insufficient antecedent basis for this limitation in the claim. Alternatively, "a status of the radio communication defining device" should be revived as "a status of a radio communication defining device"; or "the radio communication defining device" should be replaced with "the transmitter".

Claim Rejections - 35 USC § 101

6. 35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

7. Claims 1, and 14 are rejected under 35 U.S.C. 101 because the claimed invention is directed to a judicial exception (i.e., a law of nature, a natural phenomenon, or an abstract idea) without significantly more. In fact, the claim rejections are invoked by the broadly recited claims which will be addressed in details below. The dependent claims are not addressed at this time for the facts: 1) the independent claims are broadly recited; 2) analyzing the dependent claims might be indicating the incomplete message such that applicant might only think that the particular dependent claim must cooperate into the independent claims in order to overcome the claim rejections under 35 USC 101. See MPEP 2106(I) and *Alice Corporation Pty. Ltd. v. CLS Bank International, et al.*, 573 U.S. No. 13-298, June 19, 2014.

Initially, claim 1 could be reasonably interpreted to broadcast a signal with its location and available channel, i.e., communication status, by a radio communication defining device and the broadcasted signal is received and processed by a mobile station. It is important to note that if reasonable interpretation is given to the limitations in claim 1 in accordance with MPEP 2111, claim does not specifically recite how to define a special area, what involved in transmitting a distinctive signal and how a mobile station receives and what required processing the received signal. If so, conventionally, a base station or an access points in a wireless communications system would broadcast a pilot or a beacon signal including its area code, [as to the claimed feature a special area by its coverage], available channel [as to communication status in the claim, transmit power information, etc.,. Additionally, a mobile station would conventionally receive the broadcasted pilot or beacon to process whether to join the base station or the network based on the pilot or beacon received. Claim 1 is directed to an abstract idea as claim 1 recites merely transmitting, measuring and processing a signal, i.e., concerned with a mathematical equation or an algorithm for transmitting, measuring and processing (see 74622 Federal Register / Vol. 79, No. 241 / Tuesday, December 16, 2014 / Rules and Regulations). Accordingly, claim 1 does not recite the eligible subject matter since the claim fails to recite additional elements that amount to significantly more than the conventional features [i.e., an abstract idea] commonly known in the related art for transmitting pilot signal and processing or measuring the pilot signal.

Similarly, claim 14 is ineligible as the claim fails to recite additional elements that amount to significantly more than the conventional features [i.e., an abstract idea] commonly known in the related art for instance, intrinsic location updating procedure.

8. In response to applicant's arguments for 35 U.S.C. 101 rejection, please see the attached, Office Action Appendix, pages 74622, 74628, 74629 in Federal Register/Vol. 79, No. 241/ Tuesday, December 16, 2014/Rules and Regulations. On page 74622, Supreme Court has identified that electromagnetism to transmit signal is directed to a judicial exception and instant claims are directed to transmitting signals. Accordingly, claims are thoroughly determined if claims recite additional elements that amount to significantly more than the underlying abstract idea or conventional features.

Initially, claims recite a distinctive defining signal including data for status and to indicate the information. When it comes to transmitting, there involves encoding or coding. When it comes to coding and encoding, it concerns with formula or algorithm or mathematic equations. Indeed, claims just explain merely what a distinctive defining signal would include without recitation for what involved or what is comprised of a distinctive defining signal. If the current claims were a patent, what public could understand the claimed invention or how to identify when infringement occurs as there is not particular algorithm or technology or equations or coding or encoding method to be regarded as applicant's invention. Therefore, it needs more than a distinctive defining signal or any kind of transmitter for transmitting a distinctive defining signal, for instance, what might actually be required to be the claimed transmitter or the method for

how to create "a distinctive defining signal" and what kind of format is required to be "a distinctive defining signal" or how the status, data and information are embedded in "a distinctive defining signal"; otherwise, the conventional signaling or existing transmission could include the claimed "a distinctive defining signal". In practice, a conventional base station transmits its cell ID, required frequency or channel map, i.e., information for broadcasting, scheduling and joining, and other additional information to use its service and similarly, a Wi-Fi access point AP transmits BSSID or its name, such as USPTO Guest and WEP or WAP code required to join in while attorney wants to use Wi-Fi services on USPTO Campus during visit (See evidence in fig. 2 of **Dalsgaard** et al. Pub. No.: US 2010/0298017 A1 and fig. 3 of **Meskanen** et al. Patent No.: US 6,434,389 B1). In transmission, it is conventional to be short and concrete words coded in the signal for relaying messages and information. In the above cell ID and BSSID represents its coverage area, i.e., a special area, if any device receives such signal, it could be said that the received device is in that cell ID coverage or that BSSID coverage and see the status of the BS and Wi-Fi AP. On page 74629, Supreme Court Decisions could be found for eligible case: 3. Mackay Radio & Telegraph Co. v. Radio Corp. of America [U.S. Patent No. 1, 974, 387]; and for ineligible cases: 1. O'Reilly v. Morse [U.S. Reissue Patent No. RE 117]; 4. Gottschalk v. Benson. The current claims are similar to O'Reilly v. Morse.

In conclusion, a transmitter and a distinctive defining signal including data, status and definition are found ineligible as there is no additional element to amount significantly more than the abstract idea or the conventional features.

Double Patenting

9. 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.

10. Claims 1 and 14 are rejected on the ground of nonstatutory double patenting as being unpatentable over claim 1 of U.S. Patent No. 8,934,922 B2, respectively. Although the claims at issue are not identical, they are not patentably distinct from each other by the following reasons:

Initially, the instant limitations of the instant claims 1 and 14 are compared to the patented claim 1 such that: the instant limitations of "…to transmit ..."; "… received and processed by a mobile station"; and "… a status of …" in instant claim 1 are compared to the patent limitations "preamble in the claim"; "transmitting via a mobile telephone network to the mobile station …"; and "receiving …" of claim 1, respectively; and the instant limitations " receiving and processing ..."; and "sending ..." in instant claim 14 are compared to the patent limitations "preamble in the claim"; "transmitting via a mobile telephone network to the mobile station …"; and "receiving …" of claim 1, respectively.

Indeed, from the comparison, the patent claim 1 includes many more elements and more specific, and thereby, the patent claims encompass the broader scope of the instant claims 1 and 14. Accordingly, allowing the broader instant claims 1 and 14 could cause unjustified or improper timewise extension of the "right to exclude" granted by a patent and possible harassment by multiple assignees.

11. Claims 1 and 14 are rejected on the ground of nonstatutory double patenting as being unpatentable over claim 1 of U.S. Patent No. 9,119,030 B2, respectively. Although the claims at issue are not identical, they are not patentably distinct from each other by the following reasons:

Initially, the instant limitations of the instant claims 1 and 14 are compared to the patented claim 1 such that: the instant limitations of "…to transmit ..."; "… received and processed by a mobile station"; and "… a status of …" in instant claim 1 are compared to the patent limitations "preamble in the claim"; "transmitting via a mobile telephone

network to the mobile station …"; "receiving …"; and "deriving …" of claim 1, respectively; and the instant limitations " receiving and processing ..."; and "sending ..." in instant claim 14 are compared to the patent limitations "preamble in the claim"; "transmitting via a mobile telephone network to the mobile station …"; "receiving …"; and "deriving …" of claim 1, respectively.

Indeed, from the comparison, the patent claim 1 includes many more elements and more specific, and thereby, the patent claims encompass the broader scope of the instant claims 1 and 14. Accordingly, allowing the broader instant claims 1 and 14 could cause unjustified or improper timewise extension of the "right to exclude" granted by a patent and possible harassment by multiple assignees.

Claim Rejections - 35 USC § 103

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

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

13. 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 pre-AIA 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

14. Claims 1, 3-14 and 16-18 are rejected under pre-AIA 35 U.S.C. 103(a) as being unpatentable over **Westerinen** et al. Pub. No.: US 2010/0317371 A1 in view of **Nylander** et al. Pub. No.: US 2008/0242298 A1.

Claim 1

Westerinen discloses a radio communication defining device (EM radiation emitting devices in fig. 1-3) that is configured to transmit a distinctive defining signal that at least partly defines a special area by its coverage (see fig. 1-3 and par. 0040; par. 0098, the signal identifies information such as SSID and/or location is determined from the sensed signal; 1504 in fig. 15a & 15e), the distinctive defining signal capable of being received and processed by a mobile station (1106 of fig. 11 and 1206 of fig. 12; par. 0098, the mobile device processed the sensed EM signal to verify SSID and location).

Although **Westerinen** does not explicitly show: “the distinctive defining signal including data regarding a status of the radio communication defining device; and the data including information indicating whether or not the radio communication defining device is located in a predetermined environment”, it is considered obvious by the following rationales.

Initially, if reasonable interpretation is given to the claim limitation “a status of the radio communication defining device” in accordance with MPEP 2111, beacon signal or electron magnetic signal of **Westerinen** could be carrying a status of the EM radiation emitting device as depicted in fig. 1-3. Based the prosecution history, to advance the

prosecution, evidence is provided here. Typically, the beacon or pilot signal would include the identifier of the transmitter, location code or network code for cellular base stations, regulator information such as transmit power, and available channel information and one of these parameters could be interpreted as a status of the radio communication defining device. The evidence of these parameters from beacon or pilot or control signal from the base station could be seen in **Nylander**. In particular, **Nylander** teaches the distinctive defining signal including data regarding a status of the radio communication defining device (see par. 0033 & 0034 for signal including CGI, LAC or MCC and MNC and ARFCN; one of them could be reasonably interpreted as the status of communication). Furthermore, **Nylander** teaches the data including information indicating whether or not the radio communication defining device is located in a predetermined environment (40 in fig. 4 and par. 0033,0034 & 0040, LAI or LAC or location code and CGI would indicate the corresponding location such as a predetermined environment).

Therefore, it would have been obvious to one of ordinary skill in the art, at the time of this invention was made, to modify electromagnetic radiation emitting device of **Westerinen** by providing unlicensed-radio access networks as taught in **Nylander**. Such a modification would have managed the access points of an unlicensed-radio network to greatly simplify the handover between a conventional public licensed mobile network and an unlicensed-radio access network connected to the conventional network as suggested in par. 0006 of **Nylander**.

Claim 3

Westerinen, in view of **Nylander**, discloses the transmitter according to claim 1, wherein the distinctive defining signal includes identification data of the radio communication defining device (**Westerinen**, see fig. 3a and par. 0043-0044, 50-55 for SSID; **Nylander**, CGI in fig. 5 and see par. 0039-0041).

Claim 4

Westerinen, in view of **Nylander**, discloses the transmitter according to claim 1 being configured to obtain information to determine whether or not the radio communication defining device is in the predetermined environment (**Westerinen**, 1002 of fig. 10, 1106-1108 of fig. 11 and 1204-1206 of fig. 12).

Claim 5

Westerinen, in view of **Nylander**, discloses the transmitter according to claim 1 being configured to receive the information via wireless communication with a radio transmitting device (**Westerinen**, as depicted in fig. 1-3, the EM radiation emitting device could receive the transmission from mobile devices or the other backbone network devices).

Claim 6

Westerinen, in view of **Nylander**, discloses the transmitter according to claim 5, wherein the radio transmitting device is a base station of a mobile telephone network

(**Westerinen**, par. 0049 or assume: EM emitting devices in fig. 1 are microcells or picocells of GSM which is conventionally link to the macro base station as described in par. 0040 & 0041 or fig. 2b for receiving a signal from BS of GSM; **Nylander**, par. 0028, HBSC connected to HBSC and MSC is able to receive a base station of mobile telephone network such as GSM, GPRS and CDMA 2000).

Claim 7

Westerinen, in view of **Nylander**, discloses the transmitter according to claim 5 comprising a database that includes identification data of the radio transmitting device (**Westerinen**, fig. 1-3 in view of fig. 5 & 15 for having database inside EM radiation emitting device; **Nylander**, 40 in fig. 4).

Claim 8

Westerinen, in view of **Nylander**, discloses the transmitter according to claim 4 configured to receive the information via communication with a fixed network to which the radio communication defining device is physically connected (**Westerinen**, par. 0057 & 0058, EM signals may be detected by the mobile device via a wired path).

Claim 9

Westerinen, in view of **Nylander**, discloses the transmitter according to claim 8, wherein the fixed network is a telephone network (**Westerinen**, fig. 3b and par. 0049 for communicating a landline telephone network in view of par. 0057).

Claim 10

Westerinen, in view of **Nylander**, discloses the transmitter according to claim 8, wherein the fixed network is a power line communication network (**Westerinen**, power line communication in par. 0057).

Claim 11

Westerinen, in view of **Nylander**, discloses the transmitter according to claim 8, wherein the fixed network is an embedded system in a car (**Westerinen**, par. 0074 & 0112, car).

Claim 12

Westerinen, in view of **Nylander**, discloses the transmitter according to claim 8, further comprising a memory that stores one or more parameters useable to authenticate the radio communication defining device in the fixed network (**Westerinen**, as claim does not define what required or involved in authentication, as show in fig. 15, the EM radiation emitting devices in fig. 1-3 are authenticated based on the identifier as performed in 1208 of fig. 12; for instance, in fig. 15a, as shown in column 1504, based on ID1 or ID2 or ID#, the EM emitting devices in fixed network are identified or authenticated; alternatively, it is intrinsic feature for Wi-Fi access points that device are conventionally joined after authentication and so does for Bluetooth Devices as shown in fig. 3 or see par. 0042 & 0044 for using IEEE 802.11 standard).

Claim 13

Westerinen, in view of **Nylander**, discloses the transmitter according to claim 1, wherein the distinctive defining signal is coded (**Westerinen**, coded is too broad and even GSM or 802.11 or Bluetooth or any transmission using any protocol could be said as coded; for instance, Wi-Fi transmission is coded by 802.11 standard as explained in par. 0043 and so does for GSM transmission coded by GSM standard).

Claim 14

Westerinen discloses a method associated with the use of a mobile station (MS 100 in fig. 1-3) and at least one transmitter (EM radiation emitting devices in fig. 1-3) that transmits a distinctive defining signal that at least partly defines a special area by its coverage (see fig. 1-3 and par. 0040; par. 0098, the signal identifies information such as SSID and/or location is determined from the sensed signal; 1504 in fig. 15a & 15e), the method comprising:

receiving and processing the distinctive defining signal in the mobile station (1106 of fig. 11 and 1206 of fig. 12; par. 0098, the mobile device processed the sensed EM signal to verify SSID and location); and

sending from the mobile station via the mobile telephone network an updating signal to one or more servers of a provider of presence related services about the mobile station's presence in the special area (fig. 5 and par. 0078, EM signals at different locations can be stored either at the mobile device or at a remote location; the mobile device 100 may communicate via a mobile device server 504 and a backend

server such as database server 502 via a network 500 to upload data from sensing EM signals such as location data, time data and UI data).

Although **Westerinen** does not disclose "the distinctive defining signal including data regarding a status of the radio communication defining device, the updating signal comprising the data regarding a status of the radio communication defining device; and the data including information indicating whether or not the radio communication defining device is located in a predetermined environment", the claim limitations are considered obvious by the following rationales.

Initially, if reasonable interpretation is given to the claim limitation "a status of the radio communication defining device" in accordance with MPEP 2111, beacon signal or electron magnetic signal of **Westerinen** could be carrying a status of the EM radiation emitting device as depicted in fig. 1-3. Based the prosecution history, to advance the prosecution, evidence is provided here. Typically, the beacon or pilot signal would include the identifier of the transmitter, location code or network code for cellular base stations, regulator information such as transmit power, and available channel information and one of these parameters could be interpreted as a status of the radio communication defining device. The evidence of these parameters from beacon or pilot or control signal from the base station could be seen in **Nylander**. In particular, **Nylander** teaches the distinctive defining signal including data regarding a status of the radio communication defining device, the updating signal comprising the data regarding a status of the radio communication defining device (see par. 0033 & 0034 for signal including CGI, LAC or MCC and MNC and ARFCN; one of them could be reasonably

interpreted as the status of communication). Furthermore, **Nylander** teaches the data including information indicating whether or not the radio communication defining device is located in a predetermined environment (40 in fig. 4 and par. 0033,0034 & 0040, LAI or LAC or location code and CGI would indicate the corresponding location such as a predetermined environment).

Therefore, it would have been obvious to one of ordinary skill in the art, at the time of this invention was made, to modify electromagnetic radiation emitting device of **Westerinen** by providing unlicensed-radio access networks as taught in **Nylander**. Such a modification would have managed the access points of an unlicensed-radio network to greatly simplify the handover between a conventional public licensed mobile network and an unlicensed-radio access network connected to the conventional network as suggested in par. 0006 of **Nylander**.

Claim 16

Westerinen, in view of **Nylander**, discloses the method according to claim 14, wherein the sending of the updating signal is uncorrelated to any mobile station phone call establishment, the updating signal being sent 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 (**Westerinen**, see fig. 9 & 10 for storing EM signals by time or location).

Claim 17

Westerinen, in view of **Nylander**, discloses the method according to claim 14, 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 (**Westerinen**, par. 0078 in view of fig. 9, 10 & 15).

Claim 18

Westerinen, in view of **Nylander**, discloses the method according to claim 14, wherein the frequency of the updating signal is different from the frequency of the distinctive defining signal (**Westerinen**, as shown in fig. 1-3 & par. 0042-0058, EM radiation emitting devices could be communicating with Bluetooth or WLAN or IRDA and the mobile device in fig. 5 could uploading vis GSM network which uses different frequency from short range frequency such BT or WLAN or IRDA).

Examiner's Note

15. It is to note that the device claims 1-13 and the method claims 14-18 are recited with different features which might potentially lead to election/restriction requirement. Should applicant decide to amend the claims, it is suggested to keep within the same scope of the invention for the corresponding device and method claims in order not to invoke restriction requirement.

Conclusion

16. 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

17. Any inquiry concerning this communication or earlier communications from the examiner should be directed to SAN HTUN whose telephone number is (571)270-3190. The examiner can normally be reached on MON-THU 7:00-5:30.

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 571-273-8300.

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

/SAN HTUN/

Primary Examiner, Art Unit 2643

Notice of References Cited	Application/Control No. 14/738,083	Applicant(s)/Patent Under Reexamination PÉREZ LAFUENTE, CARLOS A	
	Examiner SAN HTUN	Art Unit 2643	Page 1 of 1

U.S. PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Name	CPC Classification	US Classification
*	A	US-6,434,389 B1	08-2002	Meskanen; Harri	H04W48/20	455/436
*	B	US-2010/0298017 A1	11-2010	Dalsgaard; Lars	H04J11/0069	455/507
	C	US-				
	D	US-				
	E	US-				
	F	US-				
	G	US-				
	H	US-				
	I	US-				
	J	US-				
	K	US-				
	L	US-				
	M	US-				

FOREIGN PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Country	Name	CPC Classification
	N					
	O					
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*A copy of this reference is not being furnished with this Office action. (See MPEP § 707.05(a).)
Dates in MM-YYYY format are publication dates. Classifications may be US or foreign.

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INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Not for submission under 37 CFR 1.99)

Application Number	14738083
Filing Date	2015-06-12
First Named Inventor	Carlos A. Perez Lafuente
Art Unit	2643
Examiner Name	San A. Htun
Attorney Docket Number	0572.0001C5

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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	

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	1	20040166870		2004-08-26	Backes	

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Receipt date: 05/25/2016 **INFORMATION DISCLOSURE STATEMENT BY APPLICANT** **(Not for submission under 37 CFR 1.99)**	Application Number	14738083
	Filing Date	2015-06-12
	First Named Inventor	Carlos A. Perez Lafuente
	Art Unit	2643 14738083 - GAU: 2643
	Examiner Name	San A. Htun
	Attorney Docket Number	0572.0001C5

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EXAMINER SIGNATURE

Examiner Signature	/SAN HTUN/	Date Considered	08/18/2016

*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.

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Search Notes	Application/Control No.	Applicant(s)/Patent Under Reexamination
	14738083	PÉREZ LAFUENTE, CARLOS A.
	Examiner	Art Unit
	JEAN CHANG	2643

CPC- SEARCHED		
Symbol	Date	Examiner
H04W4/00-206.H04W8/$.H04W12/$.H04W16/$.H04W28/$.H04W36/$.H04W48/$.H04W60/$.H04W64/$.H04W72/$.H04W74/$.H04M1/7253.H04B5/00. H04B3/$.H04B2203/$.	04/21/2016	/S.H./

CPC COMBINATION SETS - SEARCHED		
Symbol	Date	Examiner

US CLASSIFICATION SEARCHED			
Class	Subclass	Date	Examiner
455	456.4, 555, 408, 432.2, 406, 458, 414.1, 446, 456.1, 433	8/10/2015	jc
455	456.4, 555, 408, 432.2, 406, 458, 414.1, 446, 456.1, 433	1/20/2016	jc

SEARCH NOTES		
Search Notes	Date	Examiner
inventor search and text search on East for transmitting device location monitor wireless fixed location	8/10/2015	jc
update inventor search and text search on East	1/20/2016	jc
Searched in EAST attached.	04/21/2016	/S.H./
Conducted inventor and assignee search in EAST.	04/21/2016	/S.H./
Consulted with Danieal Swerdlow (QAS) for 112, sencond and enablement.	04/25/2016	/S.H./
Searched updated in EAST.	08/19/2016	/S.H./

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
S1	34	("6529491" | "20080220782" | "20080102896" | "20080132225" | "20060084443" | "20080280604" | "20080085703" | "20070037577" | "20020032032" | "6434389" | "20090047968" | "20080207195" | "20110269460" | "20070171871").PN.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2016/04/21 17:18
S2	72	("20050075124" | "20100167725" | "6516190" | "7634255" | "6920317" | "6836653" | "6526267" | "7266366" | "20030092450" | "20050148297" | "20080004045" | "20080261604" | "6122520" | "7778652" | "7848765" | "6516193" | "6552648" | "5642303" | "6671506" | "7171189" | "6920317" | "20030176197" | "6526267" | "20020094801" | "6826414" | "6920317" | "6625442" | "8723664" | "6826414" | "20040192267" | "20040224682" | "6334052" | "6516193" | "6785536" | "7142869" | "20020094801" | "6516193" | "6826414").PN.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2016/04/21 17:24
S3	2	"7548731".pn.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2016/04/21 17:41
S4	2	US-20100317371-A1.did.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2016/04/21 17:44
S5	2	("20150281895").PN.	US-PGPUB; USPAT; USOCR; DERWENT	ADJ	ON	2016/04/21 17:51
S6	0	(("PÃ‰ REZ") near3 ("LAFUENTE") near3 ("Carlos")).INV.	EPO; JPO; DERWENT	ADJ	ON	2016/04/21 17:51
S7	0	(("PÃ‰ REZ") near3 ("LAFUENTE") near3 ("Carlos")).INV.	US-PGPUB; USPAT; USOCR	ADJ	ON	2016/04/21 17:51
S8	3	"7324824".pn.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO;	ADJ	ON	2016/04/21 17:54

			DERWENT; IBM_TDB			
S9	0	(AFIRMA near CONSULTING near TECHNOLOGIES).as.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2016/04/21 17:56
S10	16	(AFIRMA near CONSULTING near TECHNOLOGIES).as. or afirma.as.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2016/04/21 17:56
S11	691018	(H04W4/00-206 or H04W8/$ or H04W12/$ or H04W16/$ or H04W28/$ or H04W36/$ or H04W48/$ or H04W60/$ or H04W64/$ or H04W72/$ or H04W74/$ or H04M1/7253 or H04B5/00 or H04B3/$ or H04B2203/$).CPC.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2016/04/21 18:03
S12	11923	(location or area or boundary or position or zone or region or geographic$3) and (special or private or home or specific or environment) and (wirless or mobile or cell$4) and (wi?fi or bluetooth or wlan or nfc) and (network near7 (identity or code or id or identif$7)) and (connect$3 or status or communicat$3) and (power? line or (power near3 line) or plc or adsl or pstn) and (detect$3 or measur$5 or report$3 or monitor$3 or track$3) and ((identif$7 or location or position) near7 (code or id or identity or identif$7)) and (bs or (base station) or (access point) or ap or enb or hnb) and GSM	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2016/04/21 18:09
S13	4373	S11 and S12	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2016/04/21 18:11
S14	545	S13 and (power line)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2016/04/21 18:11
S15	540	S14 and (server or controller)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2016/04/21 18:11
S16	456	S15 and database	US-PGPUB; USPAT;	ADJ	ON	2016/04/21 18:12

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S18	2	("20080242299").PN.	US-PGPUB; USPAT; USOCR; DERWENT	ADJ	ON	2016/04/21 18:22
S19	44	("20060234762" | "7133669" | "7756485" | "20030119454" | "20070042777" | "5903832" | "7245913" | "20040076177" | "20040215845" | "20070255797" | "20050079863" | "20040266426" | "20050152304" | "20070067734" | "6438390" | "20030119454" | "20080113692" | "20040076177" | "6546263" | "7072468").PN.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2016/04/21 18:23
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S21	4	"8014776".pn.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2016/04/21 18:34
S22	2	("20140295813").PN.	US-PGPUB; USPAT; USOCR; DERWENT	ADJ	ON	2016/04/25 13:29
S23	21	("20100020710" | "20110059744" | "20110086652" | "20100291929" | "20100317351" | "20140073304" | "20130040640" | "20110274097").PN.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2016/04/25 13:29
S24	2	us-20080242298-a1.did.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2016/04/25 17:35
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S29	0	S28 and (special cell)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2016/08/19 16:22
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S31	2	("20100298017").PN.	US-PGPUB; USPAT; USOCR; DERWENT	ADJ	ON	2016/08/19 17:05
S32	34	("6529491" | "20080220782" | "20080102896" | "20080132225" | "20060084443" | "20080280604" | "20080085703" | "20070037577" | "20020032032" | "6434389" | "20090047968" | "20080207195" | "20110269460" | "20070171871").PN.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2016/08/19 17:10
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S34	8872	S33 and (pstn or (telephone network))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2016/08/19 17:28
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analysis from *Alice Corp.*[7] (also called the *Mayo* test) for claims directed to laws of nature, natural phenomena, and abstract ideas (the judicially recognized exceptions).

I. Two-Part Analysis for Judicial Exceptions

A. Flowchart Step 2A (Part 1 *Mayo* Test)—Determine whether the claim is *directed* to a law of nature, a natural phenomenon, or an abstract idea (judicial exceptions).

After determining what applicant has invented by reviewing the entire application disclosure and construing the claims in accordance with their broadest reasonable interpretation (MPEP 2103), determine whether the claim as a whole is directed to a judicial exception. A claim to a process, machine, manufacture or composition of matter (*Step 1: YES*) that is not directed to any judicial exceptions (*Step 2A: NO*) is eligible and needs no further eligibility analysis. A claim that is directed to at least one exception (*Step 2A: YES*) requires further analysis to determine whether the claim recites a patent-eligible application of the exception (*Step 2B*).

1. Determine What the Claim Is "Directed to"

A claim is directed to a judicial exception when a law of nature, a natural phenomenon, or an abstract idea is recited (*i.e.*, set forth or described) in the claim. Such a claim requires closer scrutiny for eligibility because of the risk that it will "tie up"[8] the excepted subject matter and pre-empt others from using the law of nature, natural phenomenon, or abstract idea. Courts tread carefully in scrutinizing such claims because at some level all inventions embody, use, reflect, rest upon, or apply a law of nature, natural phenomenon, or abstract idea.[9] To properly interpret the claim, it is important to understand what the applicant has invented and is seeking to patent.

For claims that may recite a judicial exception, but are directed to inventions that clearly do not seek to tie up the judicial exception, see Section I.B.3. regarding a streamlined eligibility analysis.

2. Identify the Judicial Exception Recited in the Claim

MPEP 2106(II) provides a detailed explanation of the judicial exceptions and their legal bases. It should be noted that there are no bright lines between the types of exceptions because many of these concepts can fall under several exceptions. For example, mathematical formulas are considered to be an exception as they express a scientific truth, but have been labelled by the courts as both abstract ideas and laws of nature. Likewise, "products of nature" are considered to be an exception because they tie up the use of naturally occurring things, but have been labelled as both laws of nature and natural phenomena. Thus, it is sufficient for this analysis to identify that the claimed concept aligns with at least one judicial exception.

Laws of nature and natural phenomena, as identified by the courts, include naturally occurring principles/substances and substances that do not have markedly different characteristics compared to what occurs in nature. See Section I.A.3. for a discussion of the markedly different characteristics analysis used to determine whether a claim that includes a nature-based product limitation recites an exception. The types of concepts courts have found to be laws of nature and natural phenomena are shown by these cases, which are intended to be illustrative and not limiting:

- An isolated DNA (*Myriad:* see Section III, Example 2);
- a correlation that is the consequence of how a certain compound is metabolized by the body (*Mayo:* see Section III, Example 5);
- electromagnetism to transmit signals (*Morse:*[10] see Section IV.A.1.); and
- the chemical principle underlying the union between fatty elements and water (*Tilghman:*[11] see Section IV.A.2.).

Abstract ideas have been identified by the courts by way of example, including fundamental economic practices, certain methods of organizing human activities, an idea 'of itself,' and mathematical relationships/formulas.[12] The types of concepts courts have found to be abstract ideas are shown by these cases, which are intended to be illustrative and not limiting:

- Mitigating settlement risk (*Alice:* see Section III, Example 6);
- hedging (*Bilski:*[13] see Section IV.A.5.);
- creating a contractual relationship (*buySAFE:*[14] see Section IV.C.3.);
- using advertising as an exchange or currency (*Ultramercial:*[15] see Section IV.C.4.);
- processing information through a clearinghouse (*Dealertrack:*[16] see Section IV.B.3.);
- comparing new and stored information and using rules to identify options (*SmartGene:*[17] see Section IV.B.4.);
- using categories to organize, store and transmit information (*Cyberfone:*[18] see Section IV.B.5.);
- organizing information through mathematical correlations (*Digitech:*[19] see Section IV.C.1.);
- managing a game of bingo (*Planet Bingo:*[20] see Section IV.C.2.);
- the Arrhenius equation for calculating the cure time of rubber (*Diehr:*[21] see Section III, Example 3);
- a formula for updating alarm limits (*Flook:*[22] see Section III, Example 4);
- a mathematical formula relating to standing wave phenomena (*Mackay Radio:*[23] see Section IV.A.3.); and
- a mathematical procedure for converting one form of numerical representation to another (*Benson:*[24] see Section IV.A.4.)

3. Nature-Based Products

a. Determine Whether the Markedly Different Characteristics Analysis Is Needed To Evaluate a Nature-Based Product Limitation Recited in a Claim

Nature-based products, as used herein, include both eligible and

[7] *Alice Corp.*, 134 S. Ct. at 2355.

[8] *Mayo*, 132 S. Ct. at 1301 ("[E]ven though rewarding with patents those who discover new laws of nature and the like might well encourage their discovery, those laws and principles, considered generally, are 'the basic tools of scientific and technological work.' And so there is a danger that the grant of patents that tie up their use will inhibit future innovation premised upon them, a danger that becomes acute when a patented process amounts to no more than an instruction to 'apply the natural law,' or otherwise forecloses more future invention than the underlying discovery could reasonably justify" (quoting *Gottschalk* v. *Benson*, 409 U.S. 63, 67 (1972)).

[9] An invention is not rendered ineligible for patent simply because it involves an abstract concept. Applications of such concepts "to a new and useful end," remain eligible for patent protection. *Alice Corp.*, 134 S.Ct. at 2354 (quoting *Benson*, 409 U.S. at 67).

[10] *O'Reilly* v. *Morse*, 56 U.S. 62 (1853).

[11] *Tilghman* v. *Proctor*, 102 U.S. 707 (1881).

[12] *Alice Corp.*, 134 S. Ct. at 2355–56.

[13] *Bilski* v. *Kappos*, 561 U.S. 593 (2010).

[14] *buySAFE, Inc.* v. *Google, Inc.*, ___ F.3d ___, 112 USPQ2d 1093 (Fed. Cir. 2014).

[15] *Ultramercial, LLC* v. *Hulu, LLC and WildTangent*, ___ F.3d ___, 112 USPQ2d 1750 (Fed. Cir. 2014).

[16] *Dealertrack Inc.* v. *Huber*, 674 F.3d 1315 (Fed. Cir. 2012).

[17] *SmartGene, Inc.* v. *Advanced Biological Labs., SA*, 555 Fed. Appx. 950 (Fed. Cir. 2014) (nonprecedential).

[18] *Cyberfone Sys.* v. *CNN Interactive Grp.*, 558 Fed. Appx. 988 (Fed. Cir. 2014) (nonprecedential).

[19] *Digitech Image Tech., LLC* v. *Electronics for Imaging, Inc.*, 758 F.3d 1344 (Fed. Cir. 2014).

[20] *Planet Bingo, LLC* v. *VKGS LLC*, ___ Fed. Appx. ___ (Fed. Cir. 2014) (nonprecedential).

[21] *Diamond* v. *Diehr*, 450 U.S. 175 (1981).

[22] *Parker* v. *Flook*, 437 U.S. 584 (1978).

[23] *Mackay Radio & Tel. Co.* v. *Radio Corp. of Am.*, 306 U.S. 86 (1939).

[24] *Benson*, 409 U.S. at 63.

intermediary updates the shadow records in real time as transactions are entered, allowing only those transactions for which the parties' updated shadow records indicate sufficient resources to satisfy their mutual obligations. At the end of the day, the intermediary instructs the relevant financial institutions to carry out the "permitted" transactions in accordance with the updated shadow records, thus mitigating the risk that only one party will perform the agreed-upon exchange. The invention is claimed in the form of a computer-implemented process, a system enabling that process, and a computer-readable medium enabling that process to be performed by a computer.

Representative Method Claim (U.S. Patent No. 5,970,479)

Claim 33. A method of exchanging obligations as between parties, each party holding a credit record and a debit record with an exchange institution, the credit records and debit records for exchange of predetermined obligations, the method comprising the steps of:

(a) creating a shadow credit record and a shadow debit record for each stakeholder party to be held independently by a supervisory institution from the exchange institutions;

(b) obtaining from each exchange institution a start-of-day balance for each shadow credit record and shadow debit record;

(c) for every transaction resulting in an exchange obligation, the supervisory institution adjusting each respective party's shadow credit record or shadow debit record, allowing only these transactions that do not result in the value of the shadow debit record being less than the value of the shadow credit record at any time, each said adjustment taking place in chronological order; and

(d) at the end-of-day, the supervisory institution instructing one of the exchange institutions to exchange credits or debits to the credit record and debit record of the respective parties in accordance with the adjustments of the said permitted transactions, the credits and debits being irrevocable, time invariant obligations placed on the exchange institutions.[45]

Analysis: The claim is directed to a statutory category, *i.e.*, a process (*Step 1: YES*). The claim recites the concept of managing settlement risk through an intermediary, *i.e.*, intermediated settlement. The claimed invention describes the procedures an intermediary should take in managing settlement risk between two parties, *i.e.*, specific details of intermediating settlement. Intermediated settlement, like risk hedging in *Bilski*, is not a preexisting fundamental truth but rather is a longstanding commercial practice (a method of organizing human activity). The concept of intermediated settlement is a fundamental economic practice long prevalent in our system of commerce, which is in the realm of abstract ideas identified by the Supreme Court. Thus, the claim is directed to the abstract idea of intermediated settlement (*Step 2A: YES*).

Next, the claim as a whole is analyzed to determine whether any element, or combination of elements, is sufficient to ensure that the claim amounts to significantly more than the exception. Although a computer acts as the intermediary in the claimed method, the claims do no more than implement the abstract idea of intermediated settlement on a generic computer. Using a computer to create and maintain "shadow" accounts amounts to electronic recordkeeping, which is one of the most basic functions of a computer. The same is true with respect to the use of a computer to obtain data, adjust account balances, and issue automated instructions. All of these computer functions are "well-understood, routine, conventional activit[ies]" previously known to the industry. Each step does no more than require a generic computer to perform generic computer functions. Considered as an ordered combination, the computer components of the method add nothing that is not already present when the steps are considered separately, and thus simply recite the concept of intermediated settlement as performed by a generic computer. The claims do not purport to improve the functioning of the computer itself, or to improve any other technology or technical field. Use of an unspecified, generic computer does not transform an abstract idea into a patent-eligible invention. Thus, the claim does not amount to significantly more than the abstract idea itself (*Step 2B: NO*). The claim is not eligible and should be rejected under 35 U.S.C. 101.

Representative System Claim (U.S. Patent No. 7,725,375)

Claim 26. A data processing system to enable the exchange of an obligation between parties, the system comprising:

a communications controller,

a first party device, coupled to said communications controller,

a data storage unit having stored therein

(a) information about a first account for a first party, independent from a second account maintained by a first exchange institution, and

(b) information about a third account for a second party, independent from a fourth account maintained by a second exchange institution; and

a computer, coupled to said data storage unit and said communications controller, that is configured to

(a) receive a transaction from said first party device via said communications controller;

(b) electronically adjust said first account and said third account in order to effect an exchange obligation arising from said transaction between said first party and said second party after ensuring that said first party and/or said second party have adequate value in said first account and/or said third account, respectively; and

(c) generate an instruction to said first exchange institution and/or said second exchange institution to adjust said second account and/or said fourth account in accordance with the adjustment of said first account and/or third account, wherein said instruction being an irrevocable, time invariant obligation placed on said first exchange institution and/or said second exchange institution.

Analysis: The claim is directed to a statutory category, *i.e.*, a machine (*Step 1: YES*). As discussed for the method claim, the claim recites the concept of intermediated settlement and is directed to an abstract idea (*Step 2A: YES*).

Looking again to see what additional features are recited in the claim, the system includes a communications controller, a first party device, a data storage device, and a computer. The claimed hardware is generic hardware that nearly every computer will include. None of the hardware offers a meaningful limitation beyond generally linking the system to a particular technological environment, that is, implementation via computers. Put another way, the system claims are no different from the method claims in substance; the method claims recite the abstract idea implemented on a generic computer, while the system claims recite a handful of generic computer components configured to implement the same idea. The claim does not amount to significantly more than the underlying abstract idea (*Step 2B: NO*). The claim is not eligible and should be rejected under 35 U.S.C. 101.

IV. Summaries of Court Decisions Relating to Laws of Nature, Natural Phenomena, and Abstract Ideas

The following brief summaries are taken from decisions from the Supreme Court and the Federal Circuit in which claims were analyzed with respect to judicial exceptions to determine subject matter eligibility. Along with the examples in section III, these decisions demonstrate the various terms used by the courts to describe the exceptions

[45] In *Alice Corp.*, the parties stipulated that the method was performed by a computer, despite the lack of a computer recitation in the representative method claim.

and are provided simply to illustrate some of the different types of concepts found to fall within the exceptions. It should be noted that the courts' analyses in these decisions do not necessarily follow the eligibility framework explained in this Interim Eligibility Guidance as most of the cases were decided prior to *Alice Corp.* Therefore, instead of applying the eligibility analysis set forth in this Interim Eligibility Guidance to the facts of the decisions, a short description of the court's decision is provided for background purposes only. When considering these decisions, it is important to remember that the mere presence of an exception does not necessarily render a claim ineligible.

Part A presents several decisions from the Supreme Court, Part B presents several decisions from the Federal Circuit from 2010—2014 that dealt with abstract ideas, and Part C presents decisions from the Federal Circuit relating to abstract ideas since the *Alice Corp.* decision. Although the very small set of decisions from the Federal Circuit since *Alice Corp.* have resulted in findings of ineligibility, it should be recognized that the Supreme Court did not create a *per se* excluded category of subject matter, such as software or business methods, nor did it impose any special requirements for eligibility of software or business methods.

A. Supreme Court Decisions

1. *O'Reilly* v. *Morse* (U.S. Reissue Patent No. RE 117)

Claim 6. The claim was interpreted by the Supreme Court as a system of signs (signals) by closing a galvanic circuit rapidly for telegraphing, combined with machinery to record the signs.

Claim 8. I do not propose to limit myself to the specific machinery, or parts of machinery, . . . the essence of my invention being the use of the motive power of the electric or galvanic current, which I call electro-magnetism, however developed, for making or printing intelligible characters, signs, or letters, at any distances, being a new application of that power. . .

The claims are to the process of using electromagnetism to produce distinguishable signs for telegraphy, and in particular to print intelligible characters at any distance. While the format of the claims is outdated, it can be seen that claim 6 recites the system of signs in combination with the machinery for recording, which was found eligible. In contrast, claim 8 recites the use of electromagnetism without limits on the machinery for recording, which was found ineligible. The discovery of electromagnetism, which is a natural phenomenon, is not patentable by itself.

2. *Tilghman* v. *Proctor* (U.S. Patent No. 11,766)

The claim was interpreted by the Supreme Court as the process of subjecting to a high degree of heat a mixture continually kept up, of nearly equal quantities of fat and water in a convenient vessel strong enough to resist the effort of the mixture to convert itself into steam.

The claim is founded upon the chemical principle or scientific fact that the elements of neutral fat require that they be severally united with an atomic equivalent of water in order to separate from each other and become free. Although the claim recites the chemical union between the fatty elements and water, it is not directed to the mere principle. The claim is directed instead to a particular mode of bringing about the desired chemical union, *i.e.*, by heating the water under such pressure that the water does not become steam, and accordingly was found eligible.

3. *Mackay Radio & Telegraph Co.* v. *Radio Corp. of America* (U.S. Patent No. 1,974,387)

Claim 15. An antenna comprising a pair of relatively long conductors disposed with respect to each other at an angle substantially equal to twice $50.9(l/\lambda)^{-0.513}$ degrees, l being the length of the wire and λ the operating wave length in like units, and means in circuit with said antenna for exciting the conductors in phase opposition whereby standing waves of opposite instantaneous polarity are formed on the conductors throughout their length.

The claim is to an antenna system utilizing standing wave phenomena. To obtain the best directional radio propagation by a V type antenna, a mathematical formula is used to arrange the angle of the wires, their length, and the length of the wave propagated. The claim practically applies the mathematical formula to configure a particular antenna and thus was found eligible.

4. *Gottschalk* v. *Benson*

Claim 8. The method of converting signals from binary coded decimal form into binary which comprises the steps of:

(1) storing the binary coded decimal signals in a reentrant shift register,

(2) shifting the signals to the right by at least three places, until there is a binary '1' in the second position of said register,

(3) masking out said binary '1' in said second position of said register,

(4) adding a binary '1' to the first position of said register,

(5) shifting the signals to the left by two positions,

(6) adding a '1' to said first position, and

(7) shifting the signals to the right by at least three positions in preparation for a succeeding binary '1' in the second position of said register.

The claim recites a process for converting binary-coded-decimal (BCD) numerals into pure binary numerals. The procedures set forth in the claim are a generalized formulation for programs to solve mathematical problems of converting one form of numerical representation to another. The mathematical procedures can be carried out in existing computers long in use or can be performed without a computer. The end use is unlimited. The process claim was found to be so abstract and sweeping that it covered both known and unknown uses of the BCD to pure binary conversion. The mathematical formula in the claim has no substantial practical application except in connection with a digital computer, and thus the court found the claim ineligible as it would in effect be a patent on the algorithm itself.

5. *Bilski* v. *Kappos*

Claim 1. A method for managing the consumption risk costs of a commodity sold by a commodity provider at a fixed price comprising the steps of:

(a) initiating a series of transactions between said commodity provider and consumers of said commodity wherein said consumers purchase said commodity at a fixed rate based upon historical averages, said fixed rate corresponding to a risk position of said consumer;

(b) identifying market participants for said commodity having a counter-risk position to said consumers; and

(c) initiating a series of transactions between said commodity provider and said market participants at a second fixed rate such that said series of market participant transactions balances the risk position of said series of consumer transactions.

The claim explains the basic concept of hedging, or protecting against risk. The court found that the concept of hedging is an unpatentable abstract idea, just like the algorithms at issue in *Benson* and *Flook*. A dependent claim that narrows the concept to a mathematical formula was similarly found to be an abstract idea. The other dependent claims are broad examples of how hedging can be used in commodities and energy markets. Limiting an abstract idea to one field of use or adding token postsolution components does not make the concept patentable. The claims were found ineligible.

Index of Claims	Application/Control No.	Applicant(s)/Patent Under Reexamination
	14738083	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	08/10/2015	01/20/2016	04/30/2016	08/19/2016					
	1	✓	✓	✓	✓					
	2	✓	✓	✓	-					
	3	✓	✓	✓	✓					
	4	✓	✓	✓	✓					
	5	✓	✓	✓	✓					
	6	✓	✓	✓	✓					
	7	✓	✓	✓	✓					
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	13	✓	✓	✓	✓					
	14	✓	✓	✓	✓					
	15	✓	✓	✓	-					
	16	✓	✓	✓	✓					
	17	✓	✓	✓	✓					
	18	✓	✓	✓	✓					

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	Application Number	14738083
	Filing Date	2015-06-12
	First Named Inventor	Carlos A. Perez Lafuente
	Art Unit	2643
	Examiner Name	San A. Htun
	Attorney Docket Number	0572.0001C5

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	Application Number	14738083
	Filing Date	2015-06-12
	First Named Inventor	Carlos A. Perez Lafuente
	Art Unit	2643
	Examiner Name	San A. Htun
	Attorney Docket Number	0572.0001C5

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[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	14738083
	Filing Date	2015-06-12
	First Named Inventor	Carlos A. Perez Lafuente
	Art Unit	2643
	Examiner Name	San A. Htun
	Attorney Docket Number	0572.0001C5

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:	25883378
Application Number:	14738083
International Application Number:	
Confirmation Number:	4555
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:	0572.0001C5
Receipt Date:	25-MAY-2016
Filing Date:	12-JUN-2015
Time Stamp:	17:17:07
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	139313 77be21e0de07285a682763440dd128b7971d8249	no	2
Warnings:					
Information:					

2	Information Disclosure Statement (IDS) Form (SB08)	IDSSB08a.pdf	644248 454ecd7a526a9d4d9e090a18e53818a42e510b3d	no	4

Warnings:	
Information:	
Total Files Size (in bytes):	783561

This Acknowledgement Receipt evidences receipt on the noted date by the USPTO of the indicated documents, characterized by the applicant, and including page counts, where applicable. It serves as evidence of receipt similar to a Post Card, as described in MPEP 503.

New Applications Under 35 U.S.C. 111
If a new application is being filed and the application includes the necessary components for a filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application.

National Stage of an International Application under 35 U.S.C. 371
If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course.

New International Application Filed with the USPTO as a Receiving Office
If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Application No.	:	14/738,083
First Named Inventor	:	Carlos A. Perez Lafuente
Confirmation No.	:	4555
Filed	:	June 12, 2015
TC/A.U.	:	2643
Examiner	:	San A. Htun
Customer No.	:	27896
Docket No.	:	0572.0001C5
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
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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Application No.	:	14/738,083
First Named Inventor	:	Carlos A. Perez Lafuente
Confirmation No.	:	4555
Filed	:	June 12, 2015
TC/A.U.	:	2643
Examiner	:	San A. Htun
Customer No.	:	27896
Docket No.	:	0572.0001C5
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 NON-FINAL OFFICE ACTION

Dear Madam:

In response to the non-final Office Action dated May 9, 2016, please enter the following amendments and consider the response as follows:

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

Remarks begin on page 6 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 the Claims

1. (Currently Amended) A ~~radio communication defining device~~ a transmitter that is configured to transmit a distinctive defining signal that ~~at least partly~~ defines a special area by its coverage, the distinctive defining signal capable of being received and processed by a mobile station, the distinctive defining signal including data regarding a status of the radio communication defining device, the data including information indicating whether or not the transmitter is located in a predetermined environment.

2. (Currently Cancelled)

3. (Currently Amended) The ~~radio communication defining device~~ transmitter according to claim [[2]]1, wherein the distinctive defining signal includes identification data of the radio communication defining device.

4. (Currently Amended) The ~~radio communication defining device~~ transmitter according to claim [[2]]1 being configured to obtain information to determine whether or not the radio communication defining device is in the predetermined environment.

5. (Currently Amended) The ~~radio communication defining device~~ transmitter according to claim 4 being configured to receive the information via wireless communication with a radio transmitting device.

6. (Currently Amended) The ~~radio communication defining device~~ transmitter according to claim 5, wherein the radio transmitting device is a base station of a mobile telephone network.

7. (Currently Amended) The ~~radio communication defining device~~ transmitter according to claim 5 comprising a database that includes identification data of the radio transmitting device.

8. (Currently Amended) The ~~radio communication defining device~~ transmitter according to claim 4 configured to receive the information via communication with a fixed network to which the radio communication defining device is physically connected.

9. (Currently Amended) The ~~radio communication defining device~~ transmitter according to claim 8, wherein the fixed network is a telephone network.

10. (Currently Amended) The ~~radio communication defining device~~ transmitter according to claim 8, wherein the fixed network is a power line communication network.

11. (Currently Amended) The ~~radio communication defining device~~ transmitter according to claim 8, wherein the fixed network is an embedded system in a car.

12. (Currently Amended) The ~~radio communication defining device~~ transmitter according to claim 8, further comprising a memory that stores one or more parameters useable to authenticate the radio communication defining device in the fixed network.

13. (Currently Amended) The ~~radio communication defining device~~ transmitter according to claim 1, wherein the distinctive defining signal is coded.

14. (Currently Amended) A method associated with the use of a mobile station and at least one ~~radio communication defining device~~ transmitter that transmits a distinctive defining signal that ~~at least partly~~ defines a special area by its coverage, the distinctive defining signal including data regarding a status of the radio communication defining device, the method comprising:

receiving and processing the distinctive defining signal in the mobile station; and

sending from the mobile station via the mobile telephone network an updating signal to one or more servers of a provider of presence related services about the mobile station's presence in the special area, the updating signal comprising the data regarding a status of the radio communication defining device, the data including information indicative of whether or not the transmitter is located in a predetermined environment.

15. (Currently Cancelled)

16. (Original) The method according to claim 14, wherein the sending of the updating signal is uncorrelated to any mobile station phone call establishment, the updating signal being sent 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.

17. (Original) The method according to claim 14, 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.

18. (Original) The method according to claim 14, wherein the frequency of the updating signal is different from the frequency of the distinctive defining signal.

REMARKS

Claims 1, and 3-14 have been amended. Claims 2 and 15 have been cancelled. No claims have been added. Claims 1, 3-14 and 16-18 remain pending in the application.

Claim Rejections – 35 USC §112

Claims 1-13 were rejected under 35 USC §112, first paragraph, because the scope of the claims is not commensurate with the scope of the disclosure. The Office asserts that the term "radio communication defining device" is purely function terms without describing the corresponding structure to perform. The Applicant disagrees. Claims must be interpreted "consistent with the specification." Phillips v. AWH Corp., 415 F.3d 1303, 75 USPQ2d 1321 (Fed. Cir. 2005). Throughout the entirety of the specification the term "radio communication defining device" is used consistently to denote a device that wirelessly transmits radio defining signals and radio distinctive defining signals. According to some embodiments, the radio communicating defining device is a base station of a mobile telephone network, while in other embodiments the radio communicating defining device is a short range radio transmitting device such as a WIFI, Bluetooth or DECT device. One of ordinary skill in the art at the time of the present invention would have readily understood the structure of a radio communicating defining device as used in the claims by virtue of the structure and function attributed to it throughout the written description. However, for the purpose of expediting prosecution of the present application, the recitation "radio communication defining device" in claims 1-14 has been amended to recite "transmitter" as suggested by the Examiner.

Claim 1 was rejected under 35 USC §112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which the inventor regards as the invention. The feature "…at least partly defines…" in the claim is asserted to be unclear of the boundary of the claim scope. The Office asserts that the defining signal could include unlimited

any other information in addition to the information regarding a special area. As a first matter, there is no teaching in the present application that the distinctive defining signal can only contain information regarding a special area. Furthermore, the written description very clearly describes certain embodiments wherein the special area is not defined exclusively by a single distinctive defining signal. For example, paragraph [0108] states that 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. Thus, in some instances a distinctive defining signal may only partly define a special area as recited in claim 1.

Although the Applicant disagrees with the 35 USC §112, second paragraph rejection, claims 1 and 14 have been amended to remove the recitation from the claim for the sole purpose of expediting prosecution of the present application.

Claim Rejections – 35 USC §101

Claims 1 and 14 were rejected under 35 USC §101 as assertively be directed to a judicial exception (i.e., a law of nature, a natural phenomenon, or an abstract idea) without significantly more.

Applicant respectfully traverses this rejection for the following reasons.

The test for determining subject matter eligibility consists of: 1) determining whether the claim is directed to a law of nature, a natural phenomenon, or an abstract idea and, if so; 2) determining whether any element or combination of elements in the claim is sufficient to ensure that the claim amounts to significantly more than the law of nature, natural phenomenon, or abstract idea. *See, Alice Corp. Pty. Ltd. v. CLS Bank Int'l et al.*, 134 S.Ct. 2347, 2355 (2014). Limitations recited in a claim that may be enough to qualify as significantly more than the law of

nature, natural phenomenon, or abstract idea include: improvements to another technology (or technical field); and improvements to the functioning of a computer itself. *Id.* at 2358 and 2359.

In July 2015, the USPTO issued an Update to the Interim Guidance that substantially clarified for examiners how to go about assessing claims under 35 U.S.C. § 101 in view of the USPTO's comprehensive and up-to-date analysis of relevant case law. As explained below in detail, Applicant submits that these most recent guidelines help clarify that the claims of the subject application are patent eligible under 35 U.S.C. § 101.

The Claims Do Not Recite a Mere Abstract Idea Under the Present Guidelines

As noted above, the first part of the test for patent eligible subject matter is an analysis of the claim to determine the presence of an ineligible concept (e.g., a law of nature, a natural phenomenon, or an abstract idea). The July 2015 Update to the Interim Guidance specifies that a claimed concept is NOT an abstract idea unless it is similar to at least one concept the courts have identified as an abstract idea. The Updated Interim Guidance indicates that these concepts identified by the courts include: 1) a fundamental economic practice; 2) certain methods of organizing human activity; 3) an idea "of itself"; and 4) mathematical relationships/formulas.

According to the Updated Interim Guidance:

- a fundamental economic practice relates to the economy and commerce (i.e., agreements between people in the form of contracts, legal obligations and business relationships);
- certain methods of organizing human activities relate to interpersonal and intrapersonal activities (i.e., managing relationships or transactions between people, social activities and human behavior; satisfying or avoiding a legal obligation; advertising, marketing, and sales activities or behaviors; and managing human mental activity);

- an idea of itself relates to an idea standing alone (i.e., an uninstantiated concept, plan, or scheme; and a mental process that can be performed in the human mind or by pencil and paper); and
- a mathematical relationship/formula relates to mathematical concepts (i.e., mathematical algorithms, mathematical relationships, mathematical formulas, and calculations).

The Office Action does not meet the requirements of the July 2015 Update to the Interim Guidance for establishing that the claims are directed to an abstract idea. In regard to claim 1, the Office Action merely states without support that "Claim 1 is directed to an abstract idea as claim 1 recites merely transmitting. measuring and processing a signal, i.e., concerned with a mathematical equation or an algorithm for transmitting, measuring and processing" without any explanation of how such subject matter constitutes a mathematical equation or an algorithm for transmitting, measuring and processing. The rejection fails to take into account any of the claim language itself. Claim 1 as originally filed does not merely recite the transmitting. measuring and processing of a signal. Lastly, in regard to claim 1, the Office states on page 4 of the Office Action that the claim does not specifically recite how to define a special area. This is not true. The claim recites that the special area is defined by the coverage of the distinctive defining signal. In regard to claim 14, the Office merely states that "Similarly, claim 14 is ineligible as the claim fails to recite additional elements that amount to significantly more than conventional features [i.e., an abstract idea] commonly known in the related art for instance, intrinsic location updating procedure". Further, like claim 1, the Office has failed to provide any analysis that involves the language of the claim itself. Nor has the Office provided any explanation as to what an "intrinsic updating procedure" is, nor any rationale as to how it forms the basis of a 35 USC §101 rejection. Applicants submit that the mere generalities provided by the Office, in conjunction with a complete lack of an analysis that involves the language of claims 1 and 14, render the 35 USC §101 rejection of the claims improper.

A review of the claim requirements of the present Application reveals that the claims do not fall under any of these categories or concepts identified as an abstract idea; therefore, the claim requirements cannot be considered merely abstract ideas.

Rejected claim 1 set forth a radio communication defining device configured to transmit a distinctive defining signal that at least partly defines a special area by its coverage, the distinctive defining signal capable of being received and processed by a mobile station, the distinctive defining signal including data regarding a status of the radio communication defining device.

Rejected claim 14 set forth a method associated with the use of a mobile station and at least one radio communication defining device that transmits a distinctive defining signal that at least partly defines a special area by its coverage, the distinctive defining signal including data regarding a status of the radio communication defining device, the method comprising: receiving and processing the distinctive defining signal in the mobile station; and sending from the mobile station via the mobile telephone network an updating signal to one or more servers of a provider of presence related services about the mobile station's presence in the special area, the updating signal comprising the data regarding a status of the radio communication defining device.

Considering the first of the four categories described in the July 2105 Update, the claims do not constitute a fundamental economic practice that relates to the economy and commerce (i.e., agreements between people in the form of contracts, legal obligations and business relationships). Claims 1 and 14 have nothing to do with contracts, legal obligations and business relationships between people.

Likewise, such claim requirements clearly do not relate to the second category of abstract ideas, namely "certain methods of organizing human activities," which relate to interpersonal and intrapersonal activities, "i.e., managing relationships or transactions between people, social activities and human behavior; satisfying or avoiding a legal obligation; advertising, marketing, and sales activities or behaviors; and managing human mental activity." (*See, July 2015 Update to the Interim Guidance*).

Plainly, the claims are not directed to the third category of abstract ideas, "an idea of itself," which the July 2015 Update clarifies relates to an idea standing alone (i.e., an uninstantiated concept, plan, or scheme; and a mental process that can be performed in the human mind or by pencil and paper). The rationale set forth by the Office on pages 4 and 5 of the Office Action appears to be that for a 35 USC §102 rejection and not that of a 35 USC §101 rejection. In any event, in regard to claim 1, it should go without saying that a radio communication defining device that transmits a particular type of signal with particular types of data for the purpose of being processed in a mobile station by its very nature, cannot be performed in the human mind or by pencil or paper. In regard to claim 14, it should also go without saying that receiving and processing a distinctive defining signal in the mobile station; and sending from the mobile station via the mobile telephone network an updating signal to one or more servers of a provider of presence related services about the mobile station's presence in the special area, the updating signal comprising the data regarding a status of the radio communication defining device, by its very nature, cannot be performed in the human mind or by pencil or paper. Note, for example, in the figures the extensive use of network devices required to implement the system. Finally, the claims are not directed to the fourth category of abstract ideas, a mathematical relationship/formula (i.e., mathematical algorithms, mathematical relationships, mathematical formulas, and calculations).

In summary, because the July 2015 Update to the Interim Guidance specifies that a claimed concept is NOT an abstract idea unless it is similar to at least one concept the courts have identified as an abstract idea, and since the claims are not similar to any of these concepts identified by the courts, the claims cannot be considered to recite merely abstract ideas and thus comply with 35 U.S.C. § 101. If the Examiner disagrees, the Examiner is respectfully requested to specify in the next Office Action which of the four categories of exceptions the claims are believed to fall, as required by the July 2015 Update to the Interim Guidance, and to provide a fact-based explanation why the actual claim limitations are considered abstract under the indicated category.

Double Patenting

Claims 1 and 14 were rejected on the ground of nonstatutory double patenting as being unpatentable over claim 1 of U.S. Patent No. 8,934,922 and over claim 1 of U.S. Patent No. 9,119,030. Submitted herewith are terminal disclaimers to overcome the rejections.

Claim Rejections – 35 USC §103

Claims 1-18 were rejected under 35 USC §103(a) as being unpatentable over U.S. Publication No. 2010/0317371 (hereinafter "Westerinen") in view of U.S. Publication No. 2008/0242298 (hereinafter "Nylander").

The earliest priority date of the present application is March 28, 2006. The earliest priority date of Westerinen is June 12, 2009. Because Westerinen does not predate the present application, Applicant respectfully submits that the rejection of each of claims 1-18 is improper and should be withdrawn.

Conclusion

In view of the foregoing, Applicant respectfully requests the Examiner to find the application in condition for allowance with claims 1, 3-14 and 16-18. However, if for any reason the Examiner feels that the application is not now in condition for allowance, the Examiner is respectfully requested to call the undersigned attorney to discuss any unresolved issues and to expedite the disposition of the application.

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

Dated: May 24, 2016

Respectfully submitted by:

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

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Electronic Acknowledgement Receipt

EFS ID:	25866112
Application Number:	14738083
International Application Number:	
Confirmation Number:	4555
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:	0572.0001C5
Receipt Date:	24-MAY-2016
Filing Date:	12-JUN-2015
Time Stamp:	16:47:50
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		083Response.pdf	167245 dd2f8fec280fe45549378 8ea62449c46912b4bd8	yes	13

	Multipart Description/PDF files in .zip description		
	Document Description	**Start**	**End**
	Amendment/Req. Reconsideration-After Non-Final Reject	1	1
	Claims	2	5
	Applicant Arguments/Remarks Made in an Amendment	6	13
Warnings:			
Information:			
	Total Files Size (in bytes):	167245	

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.

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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.

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

Electronic Petition Request	**TERMINAL DISCLAIMER TO OBVIATE A DOUBLE PATENTING REJECTION OVER A "PRIOR" PATENT**
Application Number	14738083
Filing Date	12-Jun-2015
First Named Inventor	Carlos Pérez LaFuente
Attorney Docket Number	0572.0001C5
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) 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)

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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.

In making the above disclaimer, the owner does not disclaim the terminal part of the term of any patent granted on the instant application that would extend to the expiration date of the full statutory term of the prior patent, "as the term of said prior patent is presently shortened by any terminal disclaimer," in the event that said prior patent later:
- 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.	
Applicant 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 41900 ( ) 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	/Tim L. Kitchen/
Name	Tim L. Kitchen

*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:	14738083
Filing Date:	12-Jun-2015
Title of Invention:	METHOD AND SYSTEM FOR MONITORING A MOBILE STATION PRESENCE IN A SPECIAL AREA
First Named Inventor/Applicant Name:	Carlos A. Pérez LaFuente
Filer:	Tim L. Kitchen/Kelly elam
Attorney Docket Number:	0572.0001C5

Filed as Small 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	2814	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.: 14738083

Filing Date: 12-Jun-2015

Applicant/Patent under Reexamination: Pérez LaFuente et al.

Electronic Terminal Disclaimer filed on May 24, 2016

☒ 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:	25866205
Application Number:	14738083
International Application Number:	
Confirmation Number:	4555
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:	0572.0001C5
Receipt Date:	24-MAY-2016
Filing Date:	12-JUN-2015
Time Stamp:	16:50:44
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	3466
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	33718 387b80c8f579704c467f85914a086d74bf905f05	no	2
Warnings:					
Information:					
2	Fee Worksheet (SB06)	fee-info.pdf	30426 4be397a73405cf75f657780e77d5887769964c6d	no	2
Warnings:					
Information:					
		Total Files Size (in bytes):	64144		

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.

PTO/SB/06 (09-11)
Approved for use through 1/31/2014. OMB 0651-0032
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

PATENT APPLICATION FEE DETERMINATION RECORD Substitute for Form PTO-875	Application or Docket Number 14/738,083	Filing Date 06/12/2015	☐ To be Mailed

ENTITY: ☐ LARGE ☒ SMALL ☐ MICRO

APPLICATION AS FILED – PART I

FOR	(Column 1) NUMBER FILED	(Column 2) NUMBER EXTRA	RATE ($)	FEE ($)
☐ BASIC FEE (37 CFR 1.16(a), (b), or (c))	N/A	N/A	N/A	
☐ SEARCH FEE (37 CFR 1.16(k), (i), or (m))	N/A	N/A	N/A	
☐ EXAMINATION FEE (37 CFR 1.16(o), (p), or (q))	N/A	N/A	N/A	
TOTAL CLAIMS (37 CFR 1.16(i))	minus 20 =	*	X $ =	
INDEPENDENT CLAIMS (37 CFR 1.16(h))	minus 3 =	*	X $ =	
☐ APPLICATION SIZE FEE (37 CFR 1.16(s))	If the specification and drawings exceed 100 sheets of paper, the application size fee due is $310 ($155 for small entity) for each additional 50 sheets or fraction thereof. See 35 U.S.C. 41(a)(1)(G) and 37 CFR 1.16(s).			
☐ MULTIPLE DEPENDENT CLAIM PRESENT (37 CFR 1.16(j))				
* If the difference in column 1 is less than zero, enter "0" in column 2.			TOTAL	

APPLICATION AS AMENDED – PART II

AMENDMENT **05/24/2016**

	(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))	* 16	Minus	** 20	= 0	X $40 =	0
Independent (37 CFR 1.16(h))	* 2	Minus	***3	= 0	X $210 =	0
☐ Application Size Fee (37 CFR 1.16(s))						
☐ FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))						
					TOTAL ADD'L FEE	**0**

AMENDMENT

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

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

LIE
/ERIC DANTZLER/

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

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

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Application No.	:	14/738,083
First Named Inventor	:	Carlos A. Perez Lafuente
Confirmation No.	:	4555
Filed	:	June 12, 2015
TC/A.U.	:	2643
Examiner	:	Jean Chang
Customer No.	:	27896
Docket No.	:	0572.0001C5
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

REQUEST FOR REFUND

Dear Madam:

A charge(s) of $1200.00 related to the above-referenced application was withdrawn from deposit account 05-0460 on May 16, 2016. The charge is marked with Fee Code 1801, respectively, which relate to the Patent Office Fees for Request for Continued Examination (RCE) (Large Entity). Since Applicant is entitled to small entity status, it is respectfully requested that the difference between the RCE large entity fee ($1200) and the small entity fee ($600) be refunded.

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

Dated: May 23, 2016

Respectfully submitted by:

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

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

Electronic Acknowledgement Receipt

EFS ID:	25855073
Application Number:	14738083
International Application Number:	
Confirmation Number:	4555
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:	0572.0001C5
Receipt Date:	23-MAY-2016
Filing Date:	12-JUN-2015
Time Stamp:	16:47:50
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	Refund Request	RequestforRefund.pdf	89277 aa679c5b0f62f844f64fc5665a5f85f71b11c523	no	1

Warnings:	
Information:	

Total Files Size (in bytes):	89277

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
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New International Application Filed with the USPTO as a Receiving Office
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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Application No.	:	14/738,083
First Named Inventor	:	Carlos A. Perez Lafuente
Confirmation No.	:	4555
Filed	:	June 12, 2015
TC/A.U.	:	2643
Examiner	:	Jean Chang
Customer No.	:	27896
Docket No.	:	0572.0001C5
Title	:	METHOD AND SYSTEM FOR MONITORING A MOBILE STATION PRESENCE IN A SPECIAL AREA

2016 MAY 23 AM 11:09
USPTO
OFFICE OF ACCOUNTING
DIVISION

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

REQUEST FOR REFUND

Dear Madam:

A charge(s) of $1200.00 related to the above-referenced application was withdrawn from deposit account 05-0460 on May 16, 2016. The charge is marked with Fee Code 1801, respectively, which relate to the Patent Office Fees for Request for Continued Examination (RCE) (Large Entity). Since Applicant is entitled to small entity status, it is respectfully requested that the difference between the RCE large entity fee ($1200) and the small entity fee ($600) be refunded.

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Dated: May 23, 2016

Respectfully submitted by:

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

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

Electronic Patent Application Fee Transmittal

Application Number:	14738083
Filing Date:	12-Jun-2015
Title of Invention:	METHOD AND SYSTEM FOR MONITORING A MOBILE STATION PRESENCE IN A SPECIAL AREA
First Named Inventor/Applicant Name:	Carlos A. Pérez LaFuente
Filer:	Tim L. Kitchen
Attorney Docket Number:	0572.0001C5

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: 06/01/2016 SDIRETA1 00000012 050460 14738083 01 FC:2601 600.00 DA				
Patent-Appeals-and-Interference:				
Post-Allowance-and-Post-Issuance: Adjustment date: 06/01/2016 SDIRETA1 14738083 05/16/2016 ICLARK 00000004 050460 01 FC:1801 1200.00 CR				
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**

UNITED STATES PATENT AND TRADEMARK OFFICE

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

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
14/738,083	06/12/2015	Carlos A. Pérez LaFuente	0572.0001C5	4555

27896 7590 05/09/2016

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

EXAMINER
HTUN, SAN A

ART UNIT	PAPER NUMBER
2643	

NOTIFICATION DATE	DELIVERY MODE
05/09/2016	ELECTRONIC

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

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

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

epatent@usiplaw.com

Office Action Summary	Application No. 14/738,083	Applicant(s) PÉREZ LAFUENTE, CARLOS A.	
	Examiner SAN HTUN	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 *03/23/2016*.

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

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

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

4)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims*

5)☒ Claim(s) *1-18* 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) *1-18* 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. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 03/23/2016 has been entered.

2. In virtue of this communication, claims 1-18 are currently pending in this Office Action.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the first paragraph of pre-AIA 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same, and shall set forth the best mode contemplated by the inventor of carrying out his invention.

4. Claims 1-13 are rejected under 35 U.S.C. 112 (pre-AIA), first paragraph, because the scope of the claims is not commensurate with the scope of the enabling disclosure. To consider requirement and enablement of subject matter of Claims 1-13 under 35 USC 112, first paragraph, all of the relevant factors with respect to the claims as a whole were considered as follows.

The claimed "the radio communication defining device" in claims 1-13 is recited in purely function terms without describing or providing the corresponding structures to perform. Accordingly, claims may encompass embodiments that are not enabled by the specification such that it could lead to the claims which essentially cover not only the functions disclosed and enabled but also any structure that performs the functions, which is beyond the scope enabled in the specification.

To avoid any ambiguity, it is suggested that applicant might want to explicitly recite the involvement of each structure or each part of "a radio communication defining device" to perform each claimed functional term, for instance, a transmitter for transmitting a distinctive defining signal, so that the claimed device is clearly enabled under 35 USC 112, First Paragraph. See MPEP 2164.08.

5. 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.

6. Claim 1 is rejected under 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 recited feature "… at least partly defines …" in the claim is unclear of the boundary of the claim scope as the defining signal could include unlimited any other information in addition to the information regarding to a special area. Accordingly, the claim language has unclear boundaries of the claimed defining signal and thus, the claim renders indefiniteness. See MPEP 2173, 2173.05.

Claim Rejections - 35 USC § 101

7. 35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

8. Claims 1, and 14 are rejected under 35 U.S.C. 101 because the claimed invention is directed to a judicial exception (i.e., a law of nature, a natural phenomenon, or an abstract idea) without significantly more. In fact, the claim rejections are invoked by the broadly recited claims which will be addressed in details below. The dependent claims are not addressed at this time for the facts: 1) the independent claims are broadly recited; 2) analyzing the dependent claims might be indicating the incomplete message such that applicant might only think that the particular dependent claim must cooperate into the independent claims in order to overcome the claim rejections under 35 USC 101. See MPEP 2106(I) and *Alice Corporation Pty. Ltd. v. CLS Bank International, et al.*, 573 U.S. No. 13-298, June 19, 2014.

Initially, claim 1 could be reasonably interpreted to broadcast a signal with its location and available channel, i.e., communication status, by a radio communication defining device and the broadcasted signal is received and processed by a mobile station. It is important to note that if reasonable interpretation is given to the limitations in claim 1 in accordance with MPEP 2111, claim does not specifically recite how to define a special area, what involved in transmitting a distinctive signal and how a mobile station receives and what required processing the received signal. If so, conventionally, a base station or an access points in a wireless communications system would

broadcast a pilot or a beacon signal including its area code, [as to the claimed feature a special area by its coverage], available channel [as to communication status in the claim, transmit power information, etc.,. Additionally, a mobile station would conventionally receive the broadcasted pilot or beacon to process whether to join the base station or the network based on the pilot or beacon received. Claim 1 is directed to an abstract idea as claim 1 recites merely transmitting, measuring and processing a signal, i.e., concerned with a mathematical equation or an algorithm for transmitting, measuring and processing (see 74622 Federal Register / Vol. 79, No. 241 / Tuesday, December 16, 2014 / Rules and Regulations). Accordingly, claim 1 does not recite the eligible subject matter since the claim fails to recite additional elements that amount to significantly more than the conventional features [i.e., an abstract idea] commonly known in the related art for transmitting pilot signal and processing or measuring the pilot signal.

Similarly, claim 14 is ineligible as the claim fails to recite additional elements that amount to significantly more than the conventional features [i.e., an abstract idea] commonly known in the related art for instance, intrinsic location updating procedure.

Double Patenting

9. 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.

10. Claims 1 and 14 are rejected on the ground of nonstatutory double patenting as being unpatentable over claim 1 of U.S. Patent No. 8,934,922 B2, respectively. Although the claims at issue are not identical, they are not patentably distinct from each other by the following reasons:

Initially, the instant limitations of the instant claims 1 and 14 are compared to the patented claim 1 such that: the instant limitations of "…to transmit ..."; "… received and processed by a mobile station"; and "… a status of …" in instant claim 1 are compared to the patent limitations "preamble in the claim"; "transmitting via a mobile telephone network to the mobile station …"; and "receiving …" of claim 1, respectively; and the

instant limitations " receiving and processing ..."; and "sending ..." in instant claim 14 are compared to the patent limitations “preamble in the claim”; “transmitting via a mobile telephone network to the mobile station …"; and “receiving …” of claim 1, respectively.

Indeed, from the comparison, the patent claim 1 includes many more elements and more specific, and thereby, the patent claims encompass the broader scope of the instant claims 1 and 14. Accordingly, allowing the broader instant claims 1 and 14 could cause unjustified or improper timewise extension of the “right to exclude” granted by a patent and possible harassment by multiple assignees.

11. Claims 1 and 14 are rejected on the ground of nonstatutory double patenting as being unpatentable over claim 1 of U.S. Patent No. 9,119,030 B2, respectively. Although the claims at issue are not identical, they are not patentably distinct from each other by the following reasons:

Initially, the instant limitations of the instant claims 1 and 14 are compared to the patented claim 1 such that: the instant limitations of "…to transmit ..."; “… received and processed by a mobile station”; and “… a status of …” in instant claim 1 are compared to the patent limitations “preamble in the claim”; “transmitting via a mobile telephone network to the mobile station …"; “receiving …”; and “deriving …” of claim 1, respectively; and the instant limitations " receiving and processing ..."; and "sending ..." in instant claim 14 are compared to the patent limitations “preamble in the claim”; “transmitting via a mobile telephone network to the mobile station …"; “receiving …”; and “deriving …” of claim 1, respectively.

Indeed, from the comparison, the patent claim 1 includes many more elements and more specific, and thereby, the patent claims encompass the broader scope of the instant claims 1 and 14. Accordingly, allowing the broader instant claims 1 and 14 could cause unjustified or improper timewise extension of the "right to exclude" granted by a patent and possible harassment by multiple assignees.

Claim Rejections - 35 USC § 103

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

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

13. 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 pre-AIA 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

14. Claims 1-18 are rejected under pre-AIA 35 U.S.C. 103(a) as being unpatentable over **Westerinen** et al. Pub. No.: US 2010/0317371 A1 in view of **Nylander** et al. Pub. No.: US 2008/0242298 A1.

Claim 1

Westerinen discloses a radio communication defining device (EM radiation emitting devices in fig. 1-3) that is configured to transmit a distinctive defining signal that at least partly defines a special area by its coverage (see fig. 1-3 and par. 0040; par. 0098, the signal identifies information such as SSID and/or location is determined from the sensed signal; 1504 in fig. 15a & 15e), the distinctive defining signal capable of being received and processed by a mobile station (1106 of fig. 11 and 1206 of fig. 12; par. 0098, the mobile device processed the sensed EM signal to verify SSID and location).

Although **Westerinen** does not disclose "the distinctive defining signal including data regarding a status of the radio communication defining device", it is considered obvious by the following rationales.

Initially, if reasonable interpretation is given to the claim limitation "a status of the radio communication defining device" in accordance with MPEP 2111, beacon signal or electron magnetic signal of **Westerinen** could be carrying a status of the EM radiation emitting device as depicted in fig. 1-3. Based the prosecution history, to advance the prosecution, evidence is provided here. Typically, the beacon or pilot signal would include the identifier of the transmitter, location code or network code for cellular base stations, regulator information such as transmit power, and available channel information and one of these parameters could be interpreted as a status of the radio communication defining device. The evidence of these parameters from beacon or pilot or control signal from the base station could be seen in **Nylander**. In particular,

Nylander teaches the distinctive defining signal including data regarding a status of the radio communication defining device (see par. 0033 & 0034 for signal including CGI, LAC or MCC and MNC and ARFCN; one of them could be reasonably interpreted as the status of communication).

Therefore, it would have been obvious to one of ordinary skill in the art, at the time of this invention was made, to modify electromagnetic radiation emitting device of **Westerinen** by providing unlicensed-radio access networks as taught in **Nylander**. Such a modification would have managed the access points of an unlicensed-radio network to greatly simplify the handover between a conventional public licensed mobile network and an unlicensed-radio access network connected to the conventional network as suggested in par. 0006 of **Nylander**.

Claim 2

Westerinen, in view of **Nylander**, discloses the radio communication defining device according to claim 1, wherein the data includes information indicating whether or not the radio communication defining device is located in a predetermined environment (**Westerinen**, 1002 of fig. 10, 1106-1108 of fig. 11 and 1204-1206 of fig. 12 and location data 1504 in fig. 15a & 15e; **Nylander**, par. 0033,0034 & 0040, LAI or LAC or location code and CGI would indicate the corresponding location such as a predetermined environment).

Claim 3

Westerinen, in view of **Nylander**, discloses the radio communication defining device according to claim 2, wherein the distinctive defining signal includes identification data of the radio communication defining device (**Westerinen**, see fig. 3a and par. 0043-0044, 50-55 for SSID; **Nylander**, CGI in fig. 5 and see par. 0039-0041).

Claim 4

Westerinen, in view of **Nylander**, discloses the radio communication defining device according to claim 2 being configured to obtain information to determine whether or not the radio communication defining device is in the predetermined environment (**Westerinen**, 1002 of fig. 10, 1106-1108 of fig. 11 and 1204-1206 of fig. 12).

Claim 5

Westerinen, in view of **Nylander**, discloses the radio communication defining device according to claim 4 being configured to receive the information via wireless communication with a radio transmitting device (**Westerinen**, as depicted in fig. 1-3, the EM radiation emitting device could receive the transmission from mobile devices or the other backbone network devices).

Claim 6

Westerinen, in view of **Nylander**, discloses the radio communication defining device according to claim 5, wherein the radio transmitting device is a base station of a

mobile telephone network (**Westerinen**, par. 0049 or assume: EM emitting devices in fig. 1 are microcells or picocells of GSM which is conventionally link to the macro base station as described in par. 0040 & 0041 or fig. 2b for receiving a signal from BS of GSM; **Nylander**, par. 0028, HBSC connected to HBSC and MSC is able to receive a base station of mobile telephone network such as GSM, GPRS and CDMA 2000).

Claim 7

Westerinen, in view of **Nylander**, discloses the radio communication defining device according to claim 5 comprising a database that includes identification data of the radio transmitting device (**Westerinen**, fig. 1-3 in view of fig. 5 & 15 for having database inside EM radiation emitting device; **Nylander**, 40 in fig. 4).

Claim 8

Westerinen, in view of **Nylander**, discloses the radio communication defining device according to claim 4 configured to receive the information via communication with a fixed network to which the radio communication defining device is physically connected (**Westerinen**, par. 0057 & 0058, EM signals may be detected by the mobile device via a wired path).

Claim 9

Westerinen, in view of **Nylander**, discloses the radio communication defining device according to claim 8, wherein the fixed network is a telephone network

(**Westerinen**, fig. 3b and par. 0049 for communicating a landline telephone network in view of par. 0057).

Claim 10

Westerinen, in view of **Nylander**, discloses the radio communication defining device according to claim 8, wherein the fixed network is a power line communication network (**Westerinen**, power line communication in par. 0057).

Claim 11

Westerinen, in view of **Nylander**, discloses the radio communication defining device according to claim 8, wherein the fixed network is an embedded system in a car (**Westerinen**, par. 0074 & 0112, car).

Claim 12

Westerinen, in view of **Nylander**, discloses the radio communication defining device according to claim 8, further comprising a memory that stores one or more parameters useable to authenticate the radio communication defining device in the fixed network (**Westerinen**, as claim does not define what required or involved in authentication, as show in fig. 15, the EM radiation emitting devices in fig. 1-3 are authenticated based on the identifier as performed in 1208 of fig. 12; for instance, in fig. 15a, as shown in column 1504, based on ID1 or ID2 or ID#, the EM emitting devices in fixed network are identified or authenticated; alternatively, it is intrinsic feature for Wi-Fi

access points that device are conventionally joined after authentication and so does for Bluetooth Devices as shown in fig. 3 or see par. 0042 & 0044 for using IEEE 802.11 standard).

Claim 13

Westerinen, in view of **Nylander**, discloses the radio communication defining device according to claim 1, wherein the distinctive defining signal is coded (**Westerinen**, coded is too broad and even GSM or 802.11 or Bluetooth or any transmission using any protocol could be said as coded; for instance, Wi-Fi transmission is coded by 802.11 standard as explained in par. 0043 and so does for GSM transmission coded by GSM standard).

Claim 14

Westerinen discloses a method associated with the use of a mobile station (MS 100 in fig. 1-3) and at least one radio communication defining device (EM radiation emitting devices in fig. 1-3) that transmits a distinctive defining signal that at least partly defines a special area by its coverage (see fig. 1-3 and par. 0040; par. 0098, the signal identifies information such as SSID and/or location is determined from the sensed signal; 1504 in fig. 15a & 15e), the method comprising:

receiving and processing the distinctive defining signal in the mobile station (1106 of fig. 11 and 1206 of fig. 12; par. 0098, the mobile device processed the sensed EM signal to verify SSID and location); and

sending from the mobile station via the mobile telephone network an updating signal to one or more servers of a provider of presence related services about the mobile station's presence in the special area (fig. 5 and par. 0078, EM signals at different locations can be stored either at the mobile device or at a remote location; the mobile device 100 may communicate via a mobile device server 504 and a backend server such as database server 502 via a network 500 to upload data from sensing EM signals such as location data, time data and UI data).

Although **Westerinen** does not disclose “the distinctive defining signal including data regarding a status of the radio communication defining device, the updating signal comprising the data regarding a status of the radio communication defining device”, it is considered obvious by the following rationales.

Initially, if reasonable interpretation is given to the claim limitation “a status of the radio communication defining device” in accordance with MPEP 2111, beacon signal or electron magnetic signal of **Westerinen** could be carrying a status of the EM radiation emitting device as depicted in fig. 1-3. Based the prosecution history, to advance the prosecution, evidence is provided here. Typically, the beacon or pilot signal would include the identifier of the transmitter, location code or network code for cellular base stations, regulator information such as transmit power, and available channel information and one of these parameters could be interpreted as a status of the radio communication defining device. The evidence of these parameters from beacon or pilot or control signal from the base station could be seen in **Nylander**. In particular, **Nylander** teaches the distinctive defining signal including data regarding a status of the

radio communication defining device, the updating signal comprising the data regarding a status of the radio communication defining device (see par. 0033 & 0034 for signal including CGI, LAC or MCC and MNC and ARFCN; one of them could be reasonably interpreted as the status of communication).

Therefore, it would have been obvious to one of ordinary skill in the art, at the time of this invention was made, to modify electromagnetic radiation emitting device of **Westerinen** by providing unlicensed-radio access networks as taught in **Nylander**. Such a modification would have managed the access points of an unlicensed-radio network to greatly simplify the handover between a conventional public licensed mobile network and an unlicensed-radio access network connected to the conventional network as suggested in par. 0006 of **Nylander**.

Claim 15

Westerinen, in view of **Nylander**, discloses the method according to claim 14, wherein the data includes information indicative of whether or not the radio communication defining device is located in a predetermined environment (**Westerinen**, 1002 of fig. 10, 1106-1108 of fig. 11 and 1204-1206 of fig. 12 and location data 1504 in fig. 15a & 15e; **Nylander**, par. 0033,0034 & 0040, LAI or LAC or location code and CGI would indicate the corresponding location such as a predetermined environment).

Claim 16

Westerinen, in view of **Nylander**, discloses the method according to claim 14, wherein the sending of the updating signal is uncorrelated to any mobile station phone call establishment, the updating signal being sent 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 (**Westerinen**, see fig. 9 & 10 for storing EM signals by time or location).

Claim 17

Westerinen, in view of **Nylander**, discloses the method according to claim 14, 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 (**Westerinen**, par. 0078 in view of fig. 9, 10 & 15).

Claim 18

Westerinen, in view of **Nylander**, discloses the method according to claim 14, wherein the frequency of the updating signal is different from the frequency of the distinctive defining signal (**Westerinen**, as shown in fig. 1-3 & par. 0042-0058, EM radiation emitting devices could be communicating with Bluetooth or WLAN or IRDA and the mobile device in fig. 5 could uploading vis GSM network which uses different frequency from short range frequency such BT or WLAN or IRDA).

Examiner's Note

15. It is to note that the device claims 1-13 and the method claims 14-18 are recited with different features which might potentially lead to election/restriction requirement. Should applicant decide to amend the claims, it is suggested to keep within the same scope of the invention for the corresponding device and method claims in order not to invoke restriction requirement.

Contact Information

16. Any inquiry concerning this communication or earlier communications from the examiner should be directed to SAN HTUN whose telephone number is (571)270-3190. The examiner can normally be reached on MON-THU 7:00-5:30.

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 571-273-8300.

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

/SAN HTUN/

Primary Examiner, Art Unit 2643

Notice of References Cited	Application/Control No. 14/738,083	Applicant(s)/Patent Under Reexamination PÉREZ LAFUENTE, CARLOS A	
	Examiner SAN HTUN	Art Unit 2643	Page 1 of 1

U.S. PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Name	CPC Classification	US Classification
*	A	US-2008/0242298 A1	10-2008	Nylander; Tomas	H04W16/32	455/435.2
*	B	US-2010/0317371 A1	12-2010	Westerinen; William J.	H04M1/72566	455/456.6
	C	US-				
	D	US-				
	E	US-				
	F	US-				
	G	US-				
	H	US-				
	I	US-				
	J	US-				
	K	US-				
	L	US-				
	M	US-				

FOREIGN PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Country	Name	CPC Classification
	N					
	O					
	P					
	Q					
	R					
	S					
	T					

NON-PATENT DOCUMENTS

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

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

Index of Claims	Application/Control No.	Applicant(s)/Patent Under Reexamination
	14738083	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	08/10/2015	01/20/2016	04/30/2016						
	1	✓	✓	✓						
	2	✓	✓	✓						
	3	✓	✓	✓						
	4	✓	✓	✓						
	5	✓	✓	✓						
	6	✓	✓	✓						
	7	✓	✓	✓						
	8	✓	✓	✓						
	9	✓	✓	✓						
	10	✓	✓	✓						
	11	✓	✓	✓						
	12	✓	✓	✓						
	13	✓	✓	✓						
	14	✓	✓	✓						
	15	✓	✓	✓						
	16	✓	✓	✓						
	17	✓	✓	✓						
	18	✓	✓	✓						

EAST Search History

EAST Search History (Prior Art)

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
S1	34	("6529491" | "20080220782" | "20080102896" | "20080132225" | "20060084443" | "20080280604" | "20080085703" | "20070037577" | "20020032032" | "6434389" | "20090047968" | "20080207195" | "20110269460" | "20070171871").PN.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2016/04/21 17:18
S2	72	("20050075124" | "20100167725" | "6516190" | "7634255" | "6920317" | "6836653" | "6526267" | "7266366" | "20030092450" | "20050148297" | "20080004045" | "20080261604" | "6122520" | "7778652" | "7848765" | "6516193" | "6552648" | "5642303" | "6671506" | "7171189" | "6920317" | "20030176197" | "6526267" | "20020094801" | "6826414" | "6920317" | "6625442" | "8723664" | "6826414" | "20040192267" | "20040224682" | "6334052" | "6516193" | "6785536" | "7142869" | "20020094801" | "6516193" | "6826414").PN.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2016/04/21 17:24
S3	2	"7548731".pn.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2016/04/21 17:41
S4	2	US-20100317371-A1.did.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2016/04/21 17:44
S5	2	("20150281895").PN.	US-PGPUB; USPAT; USOCR; DERWENT	ADJ	ON	2016/04/21 17:51
S6	0	(("PÃ‰ REZ") near3 ("LAFUENTE") near3 ("Carlos")).INV.	EPO; JPO; DERWENT	ADJ	ON	2016/04/21 17:51
S7	0	(("PÃ‰ REZ") near3 ("LAFUENTE") near3 ("Carlos")).INV.	US-PGPUB; USPAT; USOCR	ADJ	ON	2016/04/21 17:51
S8	3	"7324824".pn.	US-PGPUB; USPAT; USOCR; FPRS;	ADJ	ON	2016/04/21 17:54

			EPO; JPO; DERWENT; IBM_TDB			
S9	0	(AFIRMA near CONSULTING near TECHNOLOGIES).as.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2016/04/21 17:56
S10	16	(AFIRMA near CONSULTING near TECHNOLOGIES).as. or afirma.as.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2016/04/21 17:56
S11	691018	(H04W4/00-206 or H04W8/$ or H04W12/$ or H04W16/$ or H04W28/$ or H04W36/$ or H04W48/$ or H04W60/$ or H04W64/$ or H04W72/$ or H04W74/$ or H04M1/7253 or H04B5/00 or H04B3/$ or H04B2203/$).CPC.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2016/04/21 18:03
S12	11923	(location or area or boundary or position or zone or region or geographic$3) and (special or private or home or specific or environment) and (wirless or mobile or cell$4) and (wi?fi or bluetooth or wlan or nfc) and (network near7 (identity or code or id or identif$7)) and (connect$3 or status or communicat$3) and (power?line or (power near3 line) or plc or adsl or pstn) and (detect$3 or measur$5 or report$3 or monitor$3 or track$3) and ((identif$7 or location or position) near7 (code or id or identity or identif$7)) and (bs or (base station) or (access point) or ap or enb or hnb) and GSM	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2016/04/21 18:09
S13	4373	S11 and S12	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2016/04/21 18:11
S14	545	S13 and (power line)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2016/04/21 18:11
S15	540	S14 and (server or controller)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2016/04/21 18:11

S16	456	S15 and database	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2016/04/21 18:12
S17	2	"7756485".pn.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2016/04/21 18:20
S18	2	("20080242299").PN.	US-PGPUB; USPAT; USOCR; DERWENT	ADJ	ON	2016/04/21 18:22
S19	44	("20060234762" | "7133669" | "7756485" | "20030119454" | "20070042777" | "5903832" | "7245913" | "20040076177" | "20040215845" | "20070255797" | "20050079863" | "20040266426" | "20050152304" | "20070067734" | "6438390" | "20030119454" | "20080113692" | "20040076177" | "6546263" | "7072468").PN.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2016/04/21 18:23
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S21	4	"8014776".pn.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2016/04/21 18:34
S22	2	("20140295813").PN.	US-PGPUB; USPAT; USOCR; DERWENT	ADJ	ON	2016/04/25 13:29
S23	21	("20100020710" | "20110059744" | "20110086652" | "20100291929" | "20100317351" | "20140073304" | "20130040640" | "20110274097").PN.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2016/04/25 13:29
S24	2	us-20080242298-a1.did.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2016/04/25 17:35
S25	2	US-20090061914-A1.did.	US-PGPUB;	ADJ	ON	2016/04/26

			USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB			15:49
S26	2	US-20150036494-A1.did.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2016/04/26 15:50

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Search Notes	Application/Control No.	Applicant(s)/Patent Under Reexamination
	14738083	PÉREZ LAFUENTE, CARLOS A.
	Examiner	Art Unit
	JEAN CHANG	2643

CPC- SEARCHED		
Symbol	Date	Examiner
H04W4/00-206.H04W8/$.H04W12/$.H04W16/$.H04W28/$.H04W36/$.H04W48/$.H04W60/$.H04W64/$.H04W72/$.H04W74/$.H04M1/7253.H04B5/00. H04B3/$.H04B2203/$.	04/21/2016	/S.H./

CPC COMBINATION SETS - SEARCHED		
Symbol	Date	Examiner

US CLASSIFICATION SEARCHED			
Class	Subclass	Date	Examiner
455	456.4, 555, 408, 432.2, 406, 458, 414.1, 446, 456.1, 433	8/10/2015	jc
455	456.4, 555, 408, 432.2, 406, 458, 414.1, 446, 456.1, 433	1/20/2016	jc

SEARCH NOTES		
Search Notes	Date	Examiner
inventor search and text search on East for transmitting device location monitor wireless fixed location	8/10/2015	jc
update inventor search and text search on East	1/20/2016	jc
Searched in EAST attached.	04/21/2016	/S.H./
Conducted inventor and assignee search in EAST.	04/21/2016	/S.H./
Consulted with Danieal Swerdlow (QAS) for 112, sencond and enablement.	04/25/2016	/S.H./

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

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

PTO/SB/30EFS (07-09)
Approved for use through 07/31/2012. OMB 0651-0031
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
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REQUEST FOR CONTINUED EXAMINATION(RCE)TRANSMITTAL
(Submitted Only via EFS-Web)

Application Number	14/738,083	Filing Date	2015-06-12	Docket Number (if applicable)	0572.0001C5	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.

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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 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.	:	14/738,083
First Named Inventor	:	Carlos A. Perez Lafuente
Confirmation No.	:	4555
Filed	:	June 12, 2015
TC/A.U.	:	2643
Examiner	:	Jean Chang
Customer No.	:	27896
Docket No.	:	0572.0001C5
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 2, 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 5 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 the Claims

1. (Original) A radio communication defining device that is configured to transmit a distinctive defining signal that at least partly defines a special area by its coverage, the distinctive defining signal capable of being received and processed by a mobile station, the distinctive defining signal including data regarding a status of the radio communication defining device.

2. (Previously Presented) The radio communication defining device according to claim 1, wherein the data includes information indicating whether or not the radio communication defining device is located in a predetermined environment.

3. (Previously Presented) The radio communication defining device according to claim 2, wherein the distinctive defining signal includes identification data of the radio communication defining device.

4. (Previously Presented) The radio communication defining device according to claim 2 being configured to obtain information to determine whether or not the radio communication defining device is in the predetermined environment.

5. (Previously Presented) The radio communication defining device according to claim 4 being configured to receive the information via wireless communication with a radio transmitting device.

6. (Previously Presented) The radio communication defining device according to claim 5, wherein the radio transmitting device is a base station of a mobile telephone network.

7. (Previously Presented) The radio communication defining device according to claim 5 comprising a database that includes identification data of the radio transmitting device.

8. (Previously Presented) The radio communication defining device according to claim 4 configured to receive the information via communication with a fixed network to which the radio communication defining device is physically connected.

9. (Previously Presented) The radio communication defining device according to claim 8, wherein the fixed network is a telephone network.

10. (Previously Presented) The radio communication defining device according to claim 8, wherein the fixed network is a power line communication network.

11. (Previously Presented) The radio communication defining device according to claim 8, wherein the fixed network is an embedded system in a car.

12. (Currently Amended) The radio communication defining device according to claim 8, further comprising a memory that stores one or more parameters ~~that is~~ useable to authenticate the radio communication defining device in the fixed network.

13. (Previously Presented) The radio communication defining device according to claim 1, wherein the distinctive defining signal is coded.

14. (Original) A method associated with the use of a mobile station and at least one radio communication defining device that transmits a distinctive defining signal that at least partly defines a special area by its coverage, the distinctive defining signal including data regarding a status of the radio communication defining device, the method comprising:

receiving and processing the distinctive defining signal in the mobile station; and

sending from the mobile station via the mobile telephone network an updating signal to one or more servers of a provider of presence related services about the mobile station's presence in the special area, the updating signal comprising the data regarding a status of the radio communication defining device.

15. (Original) The method according to claim 14, wherein the data includes information indicative of whether or not the radio communication defining device is located in a predetermined environment.

16. (Original) The method according to claim 14, wherein the sending of the updating signal is uncorrelated to any mobile station phone call establishment, the updating signal being sent 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.

17. (Original) The method according to claim 14, 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.

18. (Original) The method according to claim 14, wherein the frequency of the updating signal is different from the frequency of the distinctive defining signal.

REMARKS

Claim 12 has been amended. No claims have been added or cancelled. Claims 1-18 remain pending in the application.

Claim Rejections – 35 USC §102

Claims 1-6, 8, 9 and 12-18 were rejected under 35 USC §102(b) as being anticipated by U.S. Publication No. 2002/0094801 (hereinafter "Atorf").

For a reference to anticipate a claim, it must either expressly or inherently disclose the limitations of the claim. (*See e.g., Celeritas Techs. V. Rockwell Int'l Corp.*, 150 F.3d 1354, 1361 (Fed. Cir. 1998), stating that "[t]o anticipate a claim, a single prior art reference must expressly or inherently disclose each claim limitation." 35 USC §102 provides a strict standard for an anticipation rejection to apply. To apply, each and every claim limitation must be found in a single reference either expressly or inherently.

In regard to claim 1, the Office essentially repeats the rejection provided in the non-final Office Action dated August 17, 2015. It is generally asserted on page 9 of the Final Office Action, with no specificity, that the signal 3 of the fixed station 1 of Atorf includes data regarding a status of the fixed station 1. It is asserted that paragraphs 0006-0007, 0011-0017, 0021-0030 and 0035 of Atorf provide such a teaching. Again, for ease of reference, paragraphs 0006-0007, 0011-0017, 0021-0030 and 0035 of Atorf are 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.

[0011] The first signal is preferably a radio signal; preferably, use is made of a Bluetooth signal for which an appropriate Bluetooth communication interface is provided in the mobile telephone. It is also possible to utilize a DECT signal with a suitable DECT communication interface in the mobile telephone.

[0012] The invention not only relates to the method but also to a system that is suitable for carrying out the described method and includes a mobile radio network with at least one base station as well as a mobile telephone that can operate within the mobile radio network, and a local fixed station that is provided at the user end and is associated with the mobile telephone, where

[0013] the fixed station includes a transmission means for transmitting a first signal of limited range,

[0014] the mobile telephone includes a receiving means for the first signal,

[0015] the mobile telephone includes a transmission means for a second signal that is to be transmitted to the base station in response to the reception of the first signal, and

[0016] the base station includes means for switching over, in response to the reception of the second signal, from a first to a second user rate for the use of the mobile radio network by the mobile telephone.

[0017] The transmission means of the fixed station and the receiving means of the mobile telephone may be constructed so as to transmit an encoded first signal. The transmission means of the fixed station, moreover, may enable a clocked or continuous transmission mode for the first signal.

[0021] The transmission means of the fixed station and the receiving means of the mobile telephone may be arranged to transmit and receive, respectively, the first signal in the form of a radio signal, preferably a Bluetooth signal or a DECT signal, while utilizing suitable communication interfaces.

[0022] In order to realize protection against abuse of the system, it is advantageous to provide the fixed station with a mains connection for power supply. The fixed station can then operate only via a 220 V lead, so that the user of the system cannot simply carry the fixed station along with the mobile telephone with the result that the mobile telephone is always within the range of the fixed station. It is also advantageous 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 telephone in order to put the fixed station into operation, that is, also after an interruption of the power supply. If a third person attending the fixed station and/or the mobile telephone does not know this access code, it is impossible for this person to make unauthorized use of the system.

[0023] In a particularly advantageous further embodiment of the invention the fixed station may be provided with a connection device for connection to a fixed network that is preferably operated by the network operator, and also with a device via which the fixed station can be enabled for operation by the network operator, that is, by transmission of an enable code. The operation of the fixed station in conformity with this embodiment of the invention is controlled by the network operator per se. To this end, use is made of a fixed network connection via which the network operator has direct access to the fixed station. The fixed network should preferably be operated by the network operator per se. Alternatively, of course, it is possible that the network operator accesses the fixed station via the fixed network that is operated by another network operator.

[0024] The fixed station may include, additionally or alternatively, a receiving means for receiving an enable signal that can be supplied by the base station via the mobile radio network, and also a device for enabling.

[0025] In addition to the system, the invention also relates to a fixed station that can be used in conjunction with the method or the system. This fixed station is characterized in that it includes transmission means for transmitting an encoded radio signal of limited range. Further advantageous embodiments of the fixed station are disclosed in the dependent claims.

[0026] Further advantages, features and details of the invention will become apparent from the following description of an embodiment that is given with reference to the drawing.

[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.

[0028] The fixed station 1 also includes a receiving means 4 which serves to receive an access code which is transmitted so as to enable operation by the mobile telephone yet to be described. A mains connection to a 220 V lead is provided for the power supply of the fixed station and its elements; the fixed station 1 also includes a connection 6 to a fixed network.

[0029] The system also includes a mobile telephone 7 which can be moved into the range and out of the range at will as indicated by the arrow A. The mobile telephone, being shown in the form of a circuit diagram, includes a receiving device 8 which serves to receive the encoded signals 3 that are transmitted by the fixed station 1, that is, as long as the mobile telephone 7 is within the range R. The receiving means 8 include a communication interface which corresponds to the radio signal standard so, for example, a Bluetooth interface or a DECT interface.

[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.

[0035] An alternative mode of putting into operation can be performed via the fixed network connection 6. The network operator can directly access the fixed station 1 via this fixed network connection 6, thus selecting this station for putting into operation when the relevant conditions are satisfied. The fixed network connection 6, moreover, offers a given protection against abuse, because removal of the fixed station from the instantaneous location necessitates separation of the power supply connection 5 and also of the fixed network connection 6 and reconnection of the fixed station 1 in a different location. Putting into operation must then be performed

again; this requires intervention by the network operator that thus knows about the change of location and hence can detect possible abuse.

A careful reading of the reproduced text above reveals that absolutely nowhere is there disclosed therein that the signal 3 emitted by the fixed station 1 of Atorf includes data regarding a status of the fixed station 1.

With continued reference to claim 1, in response to Applicant's earlier arguments presented in the response to the Office Action dated August 17, 2015, the Office states on pages 2 and 3 of the Final Office:

Regarding claim 1, the fixed station 1 of Atorf includes a transmission means via which a signal 3 of limited range R is transmitted, a receiving means which serves to receive an access code which is transmitted so as to enable operation, a connection to a fixed network and a connection to the power supply. The fixed station can only be enabled for operation by the network operator or the user of the system when the relevant conditions are satisfied. Removal of the fixed station from the instantaneous location necessitates separation of the power supply connection and also of the fixed network connection and reconnection of the fixed station in a different location. Putting into operation must then be performed again and requires intervention by the network operator that thus knows about the change of location (para. 0027 - 0028, 0034 - 0035, 0022 - 0023). The signal 3 emitted by the fixed station 1 of Atorf, is in the form of a radio signal, preferably a Bluetooth signal or a DECT signal (para. 0021, 0011). Thus, it would have been obvious to one of ordinary skill in the art that the Bluetooth or DECT signal emitted by the fixed station 1 would at least have included the device identification of the fixed station 1. The Bluetooth or DECT signal emitted by the fixed station 1, when received by the mobile station, indicates not only the presence of the mobile station in the limited range R but also implies that the fixed station itself is in a predetermined location or environment as analyzed above, and the status of the fixed station ie enabled and operation. Thus, the distinctive defining signal, in this instance, Bluetooth or DECT signal 3 emitted by the fixed station of Atorf, including data regarding a status of the radio communication defining device. Please note that according to applicant's specification, the language "status" of the radio communication defining device cannot be found and is not defined.

Notably, nowhere in the Office's response above, or in Atorf itself, is there identified that the signal of limited range 3 itself includes data regarding a status of the fixed station 1. The Office's position appears to be that if the fixed station 1 is emitting the signal 3, the mere fact that the signal is being emitted implies a status of the fixed station 1. However, this is not what is being claimed in claim 1 of the present application. Claim 1 requires that the distinctive defining signal itself include specific data regarding the status of the radio communication defining device. The proper anticipation analysis of Atorf requires an inquiry into what Atorf teaches in regard to the data that is being transmitted in signal 3, not whether the signal 3 is being transmitted or not. Moreover, the Office's assertion that it would have been obvious to one of ordinary skill in the art that the Bluetooth or DECT signal emitted by the fixed station 1 of Atorf would at least have included the device identification of the fixed station 1 is unfounded and, in any event, contributes nothing to the anticipation analysis of Atorf in regard to claim 1.

As noted above, anticipation of a claim requires a finding in a single reference each and every claim limitation. Because Atorf does not teach signal 3 to include data regarding the status of the fixed station 1, Applicant respectfully submits that claim 1, and all claims depending therefrom, are not anticipated by the reference and request that the rejection be withdrawn.

Claim 2 depends from claim 1 and recites that the data transmitted in the distinctive defining signal includes information indicating whether or not the radio communication defining device is located in a predetermined environment.

In regard to claim 2, the Office essentially repeats the rejection provided in the non-final Office Action dated August 17, 2015. It is generally asserted on page 9 of the Final Office Action, with no specificity, that the signal 3 of the fixed station 1 of Atorf includes data that includes information whether or not the fixed station 1 is located in a predetermined environment. It is asserted that paragraphs 0006-0007, 0011-0017, 0021-0030 and 0035 of Atorf provide such a teaching. These paragraphs of Atorf are reproduced above. A detail reading of paragraphs

0006-0007, 0011-0017, 0021-0030 and 0035 reveals that absolutely nowhere therein is there disclosed therein the signal 3 emitted by the fixed station 1 of Atorf comprises data that includes information of whether or not the fixed station 1 is located in a predetermined environment.

With continued reference to claim 2, in response to Applicant's earlier arguments presented in the response to the Office Action dated August 17, 2015, the Office states on pages 3 and 4 of the Final Office:

> *Regarding claim 2, as analyzed above, the fixed station 1 of Atorf can only be enabled for operation by the network operator or the user of the system when the relevant conditions are satisfied and removal of the fixed station from the instantaneous location necessitates separation of the power supply connection and also of the fixed network connection and reconnection of the fixed station in a different location. Putting into operation must then be performed again and requires intervention by the network operator that thus knows about the change of location (para. 0027 - 0028, 0034 - 0035, 0022 - 0023). The signal 3 emitted by the fixed station 1 of Atorf, is in the form of a radio signal, preferably a Bluetooth signal or a DECT signal (para. 0021, 0011). Thus, it would have been obvious to one of ordinary skill in the art that the Bluetooth or DECT signal emitted by the fixed station 1 would at least have included the device identification of the fixed station 1. The Bluetooth or DECT signal emitted by the fixed station 1, when received by the mobile station, indicates not only the presence of the mobile station in the limited range R but also implies that the fixed station itself is in a predetermined location or environment as analyzed above, and the status of the fixed station is enabled and operational. Thus, the distinctive defining signal, in this instance, Bluetooth or DECT signal 3 emitted by the fixed station 1 of Atorf, including data regarding a status of the radio communication defining device, information indicating whether or not the radio communication defining device is located in a predetermined environment.*

Notably, nowhere in the Office's response above, or in Atorf itself, is there disclosed therein that the signal 3 emitted by the fixed station 1 of Atorf possesses information as to whether or not the fixed station 1 is located in a predetermined environment. Like above, the Office's position appears to be that if the fixed station 1 is emitting the signal 3, the mere fact that the signal is being emitted implies that the fixed station 1 is in a predetermined environment. However, this is

not what is being claimed in claim 2 of the present application. Claim 2 requires that the distinctive defining signal itself possess specific data that includes information indicating whether or not the radio communication defining device is located in a predetermined environment. The proper anticipation analysis of Atorf requires an inquiry into what Atorf teaches in regard to the data that is being transmitted in signal 3, not whether the signal 3 is being transmitted or not. Moreover, the Office's assertion that it would have been obvious to one of ordinary skill in the art that the Bluetooth or DECT signal emitted by the fixed station 1 of Atorf would at least have included the device identification of the fixed station 1 is unfounded and, in any event, contributes nothing to the anticipation analysis of Atorf in regard to claim 2.

As noted above, anticipation of a claim requires a finding in a single reference each and every claim limitation. Because Atorf fails to disclose all of the limitations of claim 2, Applicant respectfully submits that claim 2, and all claims depending therefrom, are not anticipated by the reference and request that the rejection be withdrawn.

Claim 3 depends from claim 2 and recites that the distinctive defining signal includes identification data of the radio communication defining device. Like the rejection in the August 17, 2015 Office Action, the rejection on page 9 of the Final Office Action simply restates claim 3 with a passing reference to paragraphs 0006, 011-017, 0021-0030 and 0035. A careful reading of each of these paragraphs that have been reproduced above clearly reveals that absolutely nowhere therein is there disclosed that the signal 3 emitted by the fixed station 1 of Atorf includes identification data of the fixed station 1.

Importantly, in response to Applicant's earlier arguments presented in the response to the Office Action dated August 17, 2015, the Office all but admits on page 4 of the Final Office Action that the limitations of claim 3 are not found in Atorf. On page 4 of the Final Office the Office states that "It would have been obvious to one of ordinary skill in the art that the Bluetooth or DECT signal 3 emitted by the fixed station 1 of Atorf would have included the device identification of

the fixed station. Thus, the distinctive defining signal includes identification data of the radio communication defining device." This statement is both unfounded and confusing in view of the fact that claim 3 stands rejected under 35 USC §102(b) as being anticipated by Atorf. As noted above, anticipation of a claim requires a finding in a single reference each and every claim limitation, either expressly or inherently. As noted above and as admitted by the Office, nowhere in Atorf is there disclosed that the signal 3 emitted by the fixed station 1 includes identification data of the fixed station 1. As a result of less than all of the limitations of claim 3 being found in Atorf, the Applicant respectfully submits that the claim is not anticipated by the reference.

Each of claims 4-6, 8, 9, 12 and 13 depends directly or indirectly from at least one of claims 1 and 2 and is not anticipated by Atorf for at least the same reasons as each of claims 1 and 2.

Claim 14 recites a method in which the mobile station receives a distinctive defining signal that includes data regarding a status of the radio communication defining device. The method further includes the mobile station sending an updating signal to one or more servers of a provider of presence related services with the updating signal comprising the data regarding the status of the radio communication defining device. The rejection of claim 14 on page 12 of the Final Office Action is essentially identical to the rejection presented in the Office Action dated August 17, 2016. The rejection simply restates the claim language of claim 14 and makes a passing reference to paragraphs 0007, 0023-0024, 0027-0030 and 0035 of Atorf.

In response to the Applicant's response to the August 17, 2015 Office Action, the Office on page 7 of the Final Office Action states that the signal 10 transmitted by the mobile telephone 7 of Atorf in response to having received the signal 3 indicates that the mobile telephone is within the range R of the fixed station 1. The Office states that this implies that the fixed station is in a predetermined environment and is enabled and operational. The Office thus states that the signal 10 of Atorf comprises data regarding the status of the fixed station 1.

Notably, nowhere in the Office's response to Applicant's arguments above, or in Atorf itself (see reproduced paragraphs 0007, 0023-0024, 0027-0030 and 0035 of Atorf above), is there identified that the signal 10 itself comprises data regarding a status of the fixed station 1. The Office's position appears to be that if the fixed station 1 is emitting the signal 3, the mere fact that the signal is being emitted implies a status of the fixed station 1 and that it follows that the updating signal necessarily includes this data. As explained above, Atorf in no way disclose the signal 3 emitted by the fixed station 1 comprises data regarding the status of the fixed station. But even if it did, there is no teaching in Atorf that the signal 10 sent from the mobile telephone 7 to the base station 11 would include such data. Like claim 1 above, the proper anticipation analysis of Atorf in regard to claim 14 requires an inquiry into what Atorf teaches in regard to the data that is being transmitted in signal 10, not whether the signal 10 is being transmitted or not.

As noted above, anticipation of a claim requires a finding in a single reference each and every claim limitation, either expressly or inherently. Because Atorf fails to disclose that signal 10 includes data regarding the status of the fixed station 1, Applicant respectfully submits that claim 14, and all claims depending therefrom, are not anticipated by the reference and request that the rejection be withdrawn.

In regard to claim 15, the Office essentially repeats the rejection provided in the non-final Office Action dated August 17, 2015. It is generally asserted on page 12 of the Final Office Action, with no specificity, that the signal 10 of Atorf includes data that includes information whether or not the fixed station 1 is located in a predetermined environment. It is asserted that paragraphs 0023-0024, 0027-0030 and 0035 of Atorf provide such a teaching. These paragraphs of Atorf are reproduced above. A detailed reading of these paragraphs reveals that absolutely nowhere therein is there disclosed the signal 10 emitted by the mobile telephone 7 of Atorf comprises data that includes information of whether or not the fixed station 1 is located in a predetermined environment. Like claim 14 above, the proper anticipation analysis of Atorf in regard to claim 15

requires an inquiry into what Atorf teaches in regard to the data that is being transmitted in signal 10, not whether the signal 10 is being transmitted or not.

As noted above, anticipation of a claim requires a finding in a single reference each and every claim limitation, either expressly or inherently. Because Atorf fails to disclose that signal 10 comprises data that includes information of whether or not the fixed station 1 is located in a predetermined environment, Applicant respectfully submits that claim 15 is not anticipated by the reference and request that the rejection be withdrawn.

In regard to claim 17, the Office essentially repeats the rejection provided in the non-final Office Action dated August 17, 2015. It is generally asserted on page 15 of the Final Office Action, with no specificity, that the signal 10 of Atorf comprises the result of a previous determination performed by the mobile station about the mobile station's presence in the special area. It is asserted that paragraphs 0030-0031 of Atorf provide such a teaching. These paragraphs of Atorf are reproduced above. A detail reading of these paragraphs reveals that absolutely nowhere therein is there disclosed therein that the signal 10 emitted by the mobile telephone 7 of Atorf comprises the result of a previous determination performed by the mobile station about the mobile station's presence in the special area.

On page 8 of the Final Office Action the Office reasons that because the signal 10 of Atorf may be transmitted continuously while the mobile telephone is within the range R or be successively clocked, it follows that the signal 10 in these situations comprise the result of a previous determination performed by the mobile telephone 7 about its presence in proximity to the fixed station 1. The rejection constitutes mere speculation with there being no basis in Atorf to draw such a conclusion.

As noted above, anticipation of a claim requires a finding in a single reference each and every claim limitation. An anticipation rejection based on speculation is clearly improper. Because

Atorf fails to disclose all of the limitations of claim 17, Applicant respectfully submits that the claim is not anticipated by the reference and request that the rejection be withdrawn.

Each of claims 16 and 18 depends from claim 14 and is not anticipated by Atorf for at least the same reasons as claim 14.

Claim Rejections – 35 USC §103

Claims 7, 10 and 11 were rejected under 35 U.S.C. 103(a) as being unpatentable over Atorf.

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 Office 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).

Claim 7 depends from claim 5, which depends from claim 2, which depends from claim 1. As noted above, a prima facie case of obviousness can only be established upon there being a finding of all of the limitations of the subject claim in the prior art. As explained above, Atorf fails to disclose all of the limitations of at least claims 1 and 2. Thus, by virtue of its dependency on claims 1 and 2, claim 17 is patentable over Atorf.

Claim 10 depends from claim 8 and recites that the fixed network is a power line communication network. The Office admits on page 15 of the Final Office Action that no such teaching is provided by Atorf. 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 claim. The Federal Circuit has held that "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). In the present case, having found no prior art to read on claim 10, the Office in a conclusory manner decrees that a power line communication network is an obvious variation of the fixed network of Atorf. The Office has failed to provide any articulated reasoning with some rationale underpinning to support its conclusion of obviousness as required by the Federal Circuit. For at least these reasons, the Office has failed to provide a prima facie case of obviousness as to claim 10. The Applicant, therefore respectfully requests that the obviousness rejection of claim 10 be withdrawn.

Claim 11 depends from claim 8 and recites that the fixed network is an embedded system in a car. The Office admits on page 16 of the Final Office Action that no such teaching is provided by Atorf. 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 claim. The Federal Circuit has held that "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). In the present case, having found no prior art to read on claim 11, the Office in a conclusory manner decrees that an embedded system in a car is an obvious variation of the fixed network of Atorf. The Office has failed to provide any articulated reasoning with some rationale underpinning to support its conclusion of obviousness as required by the Federal Circuit. For at least these reasons, the Office has failed to provide a prima facie case of obviousness as to claim 11. The Applicant, therefore respectfully requests that the obviousness rejection of claim 11 be withdrawn.

Conclusion

In view of the foregoing, Applicant respectfully requests the Examiner to find the application in condition for allowance with claims 1-18. 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:	14738083
Filing Date:	12-Jun-2015
Title of Invention:	METHOD AND SYSTEM FOR MONITORING A MOBILE STATION PRESENCE IN A SPECIAL AREA
First Named Inventor/Applicant Name:	Carlos A. Pérez LaFuente
Filer:	Tim L. Kitchen
Attorney Docket Number:	0572.0001C5

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:	25281150
Application Number:	14738083
International Application Number:	
Confirmation Number:	4555
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:	0572.0001C5
Receipt Date:	23-MAR-2016
Filing Date:	12-JUN-2015
Time Stamp:	14:00:08
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	Request for Continued Examination (RCE)	RCExml.pdf	825274 9efaa3c4abd2bd8ded7dd1f63906673ad0bf9c7a	no	3

Warnings:	
Information:	

2		AmdAFAsFiled.pdf	226843 d9043e1d634ce975b84dc5598ef8ca4b7342bc8c	yes	19

	Multipart Description/PDF files in .zip description		
	Document Description	**Start**	**End**
	Amendment Submitted/Entered with Filing of CPA/RCE	1	1
	Claims	2	4
	Applicant Arguments/Remarks Made in an Amendment	5	19

Warnings:

Information:

3	Fee Worksheet (SB06)	fee-info.pdf	30633 dad98fddc2779f1e20fe7bde24e7a71136a7e4f7	no	2

Warnings:

Information:

Total Files Size (in bytes):	1082750

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.

PTO/SB/06 (09-11)
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PATENT APPLICATION FEE DETERMINATION RECORD Substitute for Form PTO-875	Application or Docket Number 14/738,083	Filing Date 06/12/2015	☐ To be Mailed

ENTITY: ☒ LARGE ☐ SMALL ☐ MICRO

APPLICATION AS FILED – PART I

FOR	(Column 1) NUMBER FILED	(Column 2) NUMBER EXTRA	RATE ($)	FEE ($)
☐ BASIC FEE (37 CFR 1.16(a), (b), or (c))	N/A	N/A	N/A	
☐ SEARCH FEE (37 CFR 1.16(k), (i), or (m))	N/A	N/A	N/A	
☐ EXAMINATION FEE (37 CFR 1.16(o), (p), or (q))	N/A	N/A	N/A	
TOTAL CLAIMS (37 CFR 1.16(i))	minus 20 =	*	X $ =	
INDEPENDENT CLAIMS (37 CFR 1.16(h))	minus 3 =	*	X $ =	
☐ APPLICATION SIZE FEE (37 CFR 1.16(s))	If the specification and drawings exceed 100 sheets of paper, the application size fee due is $310 ($155 for small entity) for each additional 50 sheets or fraction thereof. See 35 U.S.C. 41(a)(1)(G) and 37 CFR 1.16(s).			
☐ MULTIPLE DEPENDENT CLAIM PRESENT (37 CFR 1.16(j))				
* If the difference in column 1 is less than zero, enter "0" in column 2.			TOTAL	

APPLICATION AS AMENDED – PART II

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

LIE
/SHIRELL M. CARMICHAEL/

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

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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
14/738,083	06/12/2015	Carlos A. Pérez LaFuente	0572.0001C5	4555

27896 7590 02/02/2016

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EXAMINER	
CHANG, JEAN	

ART UNIT	PAPER NUMBER
2643	

NOTIFICATION DATE	DELIVERY MODE
02/02/2016	ELECTRONIC

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

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

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

epatent@usiplaw.com

Office Action Summary	Application No. 14/738,083	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) *1-18* 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) *1-18* 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, 14 and respective dependents have been considered. The arguments are understood but Examiner respectfully disagrees.

   - Regarding claim 1, the fixed station 1 of Atorf includes a transmission means via which a signal 3 of limited range R is transmitted, a receiving means which serves to receive an access code which is transmitted so as to enable operation, a connection to a fixed network and a connection to the power supply. The fixed station can only be enabled for operation by the network operator or the user of the system when the relevant conditions are satisfied. Removal of the fixed station from the instantaneous location necessitates separation of the power supply connection and also of the fixed network connection and reconnection of the fixed station in a different location. Putting into operation must then be performed again and requires intervention by the network operator that thus knows about the change of location (para. 0027 - 0028, 0034 - 0035, 0022 - 0023). The signal 3 emitted by the fixed station 1 of Atorf, is in the form of a radio signal, preferably a Bluetooth signal or a DECT signal (para. 0021, 0011). Thus, it would have been obvious to one of ordinary skill in the art that the Bluetooth or DECT signal emitted by the fixed station 1 would at least have included the device identification of the fixed station 1. The Bluetooth or DECT

signal emitted by the fixed station 1, when received by the mobile station, indicates not only the presence of the mobile station in the limited range R but also implies that the fixed station itself is in a predetermined location or environment as analyzed above, and the status of the fixed station is enabled and operational. Thus, the distinctive defining signal, in this instance, Bluetooth or DECT signal 3 emitted by the fixed station 1 of Atorf, including data regarding a status of the radio communication defining device. Please note that according to applicant's specification, the language "status" of the radio communication defining device cannot be found and is not defined.

- Regarding claim 2, as analyzed above, the fixed station 1 of Atorf can only be enabled for operation by the network operator or the user of the system when the relevant conditions are satisfied and removal of the fixed station from the instantaneous location necessitates separation of the power supply connection and also of the fixed network connection and reconnection of the fixed station in a different location. Putting into operation must then be performed again and requires intervention by the network operator that thus knows about the change of location (para. 0027 - 0028, 0034 - 0035, 0022 - 0023). The signal 3 emitted by the fixed station 1 of Atorf, is in the form of a radio signal, preferably a Bluetooth signal or a DECT signal (para. 0021, 0011). Thus, it would have been obvious to one of ordinary skill in the art that the Bluetooth or DECT signal emitted by the fixed station 1 would at least have included the device identification of the fixed station 1. The Bluetooth or DECT signal emitted by the fixed station 1, when received by the mobile station,

indicates not only the presence of the mobile station in the limited range R but also implies that the fixed station itself is in a predetermined location or environment as analyzed above, and the status of the fixed station is enabled and operational. Thus, the distinctive defining signal, in this instance, Bluetooth or DECT signal 3 emitted by the fixed station 1 of Atorf, including data regarding a status of the radio communication defining device, information indicating whether or not the radio communication defining device is located in a predetermined environment.

- Regarding claim 3, the distinctive defining signal, in this instance, signal 3 emitted by the fixed station 1 of Atorf, is in the form of a radio signal, preferably a Bluetooth or DECT signal (para. 0021, 0029). It would have been obvious to one of ordinary skill in the art that the Bluetooth or DECT signal emitted by the fixed station 1 would have included the device identification of the fixed station 1. Thus, the distinctive defining signal includes identification data of the radio communication defining device.
- Regarding claim 4, as analyzed above, the fixed station 1 of Atorf includes a transmission means via which a signal 3 of limited range R is transmitted, a receiving means, a connection to a fixed network, a connection to the power supply, the fixed station can only be enabled for operation by the network operator or the user of the system when the relevant conditions are satisfied, removal of the fixed station from the instantaneous location necessitates separation of the power supply connection and also of the fixed network connection, reconnection of the fixed station in a different location and putting into operation must then be performed again and requires intervention by the network operator that thus knows about the change of location.

The Bluetooth or DECT signal emitted by the fixed station 1, when received by the mobile station, indicates not only the presence of the mobile station in the limited range R but also implies that the fixed station itself is in a predetermined location or environment as analyzed above, and the status of the fixed station is enabled and operational. In order to put the fixed station into operation, the receiving and comparison means of the fixed station serves to receive an access code, compare the access code with a stored access code. The fixed station can be put into operation in the case of correspondence (0027 - 0028, 0034 - 0035, 0022 - 0023). Thus, the radio communication defining device is configured to obtain information to determine whether or not it is in a predetermined environment.

- Regarding claim 5, as analyzed above, the fixed station 1 of Atorf includes a transmission means via which a signal 3 of limited range R is transmitted, a receiving means, a connection to a fixed network, a connection to the power supply, the fixed station can only be enabled for operation by the network operator or the user of the system when the relevant conditions are satisfied, removal of the fixed station from the instantaneous location necessitates separation of the power supply connection and also of the fixed network connection, reconnection of the fixed station in a different location and putting into operation must then be performed again and requires intervention by the network operator that thus knows about the change of location. The Bluetooth or DECT signal emitted by the fixed station 1, when received by the mobile station, indicates not only the presence of the mobile station in the limited range R but also implies that the fixed station itself is in a predetermined location or

environment as analyzed above, and the status of the fixed station is enabled and operational. In order to put the fixed station into operation, the receiving and comparison means of the fixed station serves to receive an access code, compare the access code with a stored access code. The fixed station can be put into operation in the case of correspondence (0027 - 0028, 0034 - 0035, 0022 - 0023). The fixed station may include a receiving means for receiving an enable signal that can be supplied by the base station via the mobile radio network and also a device for enabling (para. 0024, 0012). Thus, the radio communication defining device is configured to obtain information via wireless communication with a radio transmitting device.

- Regarding claim 6, the same reasoning as analyzed above for claim 5 applies.
- Regarding claim 8, as analyzed above, the fixed station 1 of Atorf includes a transmission means, a receiving means, a connection to a fixed network, a connection to the power supply, the fixed station can only be enabled for operation by the network operator or the user of the system when the relevant conditions are satisfied, removal of the fixed station from the instantaneous location necessitates separation of the power supply connection and also of the fixed network connection, reconnection of the fixed station in a different location and putting into operation must then be performed again and requires intervention by the network operator that thus knows the change of location (para. 0027 – 0028, 0034 – 0035, 0022 – 0024). The fixed station may be provided with a connection device for connection to a fixed network that is preferably operated by the network operator, and also with a device via which the fixed station can be enabled for operation by the network operator, that is, by

transmission of an enable code. The network operator can directly access the fixed station via the fixed network connection, select the station for putting into operation when the relevant conditions are satisfied (para. 0035, 0023). Thus, the radio communication defining device is configured to receive the information via communication with a fixed network to which the radio communication defining device is physically connected.

- Regarding claim 14, as analyzed above, when the signal 3 emitted from the fixed station 1 is received by the mobile telephone, the mobile telephone transmits signals 10 to a base station of the mobile radio network, the signals 10 indicating that the signal 3 has been received and that hence the mobile telephone is within the range R of the fixed station 1, and also implies that the fixed station is in a predetermined environment, is enabled and operational as analyzed above. Thus, the distinctive defining signal including data regarding a status of the radio communication defining device, the updating signal comprising the data regarding a status of the radio communication defining device. According to applicant's specification, the language "status" of the radio communication defining device cannot be found and is not defined.
- Regarding claim 15, the same reasoning analyzed in claims 14 and 1- 4 above applies.
- Regarding claim 17, as analyzed in claim 14, Atorf teaches that when the signal 3 is received by the mobile telephone, the mobile telephone transmits signals 10 to the base station of the mobile radio network, indicating that the signal 3 has been received from the fixed station and that the mobile telephone is within the range R of

the fixed station. The signal 10 may be transmitted continuously during the stay within the range R or be successively clocked (para. 0030 – 0031). Thus, the updating signal comprising the result of a previous determination performed by the mobile station about the mobile station's presence in the special area.

Terminal Disclaimer

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

Claim Rejections - 35 USC § 102

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

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in-
(1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent; or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, *except* that an international application filed under the treaty defined in section 351(a) shall have the effects for the purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English.

4. **Claims 1-6, 8-9 and 12-18 are rejected under 35 U.S.C. 102(b) as being anticipated by Atorf (US 2002/0094801 A1).**

Claim 1.

Atorf teaches

A radio communication defining device (FIG. 1:1) *that is configured to transmit a distinctive defining signal* (FIG. 1:3) *that at least partly defines a special area by its coverage* (FIG. 1:R)*, the distinctive defining signal capable of being received and processed by a mobile station* (FIG. 1:7)*, the distinctive defining signal including data regarding a status of the radio communication defining device* (para. 0011 – 0017, 0006 – 0007, 0021 – 0030, 0035).

Claim 2.

Atorf teaches

The radio communication defining device according to claim 1, wherein the data includes information indicating whether or not the radio communication defining device is located in a predetermined environment (para. 0011 – 0017, 0006 – 0007, 0021 – 0030, 0035).

Claim 3.

Atorf teaches

The radio communication defining device according to claim 2, wherein the distinctive

defining signal includes identification data of the radio communication defining device (para. 0011 – 0017, 0006, 0021 – 0030, 0035).

Claim 4.

Atorf teaches

The radio communication defining device according to claim 2, being configured to obtain information to determine whether or not the radio communication defining device is in the predetermined environment (para. 0021 – 0028, 0034 – 0035, 0022 - 0023).

Claim 5.

Atorf teaches

The radio communication defining device according to claim 4, being configured to receive the information via wireless communication with a radio transmitting device (para. 0021 – 0028, 0034 – 0035).

Claim 6.

Atorf teaches

The radio communication defining device according to claim 5, wherein the radio transmitting device is a base station of a mobile telephone network (para. 0012, 0023 – 0025, 0034 – 0035).

Claim 8.

Atorf teaches

The radio communication defining device according to claim 4, being configured to receive the information via communication with a fixed network to which the

radio communication defining device is physically connected (para. 0021 – 0028, 0034 – 0035, 0011 – 0017).

Claim 9.

Atorf teaches

The radio communication defining device according to claim 8, wherein the fixed network is a telephone network (para. 0011 – 0017, 0021 – 0028, 0035).

Claim 12.

Atorf teaches

The radio communication defining device according to claim 8, further comprising a memory that stores one or more parameter that is useable to authenticate the radio communication defining device in the fixed network (para. 0022 – 0023, 0034 – 0035, the fixed station is provided with receiving and comparison means for an access code that is to be applied to the fixed station in order to put the fixed station into operation … the receiving means, also being constructed as comparison means, compare the access code with a stored access code, the fixed station can be put into operation in the case of correspondence).

Claim 13.

Atorf teaches

The radio communication defining device according to claim 1, wherein the distinctive defining signal is coded (para. 0006, 0017, 0022 – 0030).

Claim 14.

Atorf teaches

A method associated with the use of a mobile station and at least one radio communication defining device that transmits a distinctive defining signal that at least partly defines a special area by its coverage, the distinctive defining signal including data regarding a status of the radio communication defining device (para. 0027 – 0030, 0035, 0023 – 0024)*, the method comprising:*

receiving and processing the distinctive defining signal in the mobile station (para. 0030)*; and*

sending from the mobile station via the mobile telephone network an updating signal to one or more servers of a provider of presence related services about the mobile station's presence in the special area, the updating signal comprising the data regarding a status of the radio communication defining device (para.0030, 0007).

Claim 15.

Atorf teaches

The method according to claim 14, wherein the data includes information indicative of whether or not the radio communication defining device is located in a predetermined environment (para. 0027 – 0030, 0035, 0023 – 0024).

Claim 16.

Atorf teaches

The method according to claim 14, wherein the sending of the updating signal is uncorrelated to any mobile station phone call establishment, the updating signal being sent 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 (para. 0030 – 0031, 0007 - 0008).

Claim 17.

Atorf teaches

The method according to claim 14, 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 (para. 0030 – 0031).

Claim 18.

Atorf teaches

The method according to claim 14, wherein the frequency of the updating signal is different from the frequency of the distinctive defining signal (para. 0027 – 0030, 0035, 0023 – 0024).

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 7 and 10-11 are rejected under 35 U.S.C. 103 (a) as being unpatentable over Atorf (US 2002/0094801 A1).**

Claim 7.

Atorf teaches

The radio communication defining device according to claim 5, comprising a database that stores access code. The fixed station is provided with receiving and comparison means for an access code that is to be applied to the fixed station in order to put the fixed station into operation. The receiving means, also being constructed as comparison means, compare the access code with a stored access code; the fixed station can be put into operation in the case of correspondence (para. 0022, 0034). The stored access code, therefore, is used to validate the access code received via a mobile phone as an enabling signal to put the fixed station into operation and ensure that the fixed station is in a predetermined environment.

Atorf does not disclose the database *that includes identification data of the radio transmitting device.* However, as Atorf teaches that the fixed station may include a receiving means for receiving an enable signal that can be supplied by the base station via the mobile radio network (para. 0024), it would have been obvious to one of ordinary skill in the art at the time the invention was made to configure the database to *include identification data of the radio transmitting device* as additional data or as a variation of the stored access code, without departing from the spirit of his teaching, in order to authenticate the identification of the radio transmitting device before the enable signal received from the radio transmitting device is applied to the fixed station, just as the stored access code is used to authenticate the validity of the access code received from the mobile telephone for putting the fixed station into operation.

Claim 10.

Atorf teaches

A radio communication defining device according to claim 8, wherein the fixed network is a telephone network (para. 0011 – 0017, 0021 – 0028, 0035).

Although Atorf does not elaborate on *wherein the fixed network is a power line communication network,* however, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have realized that a power line communication network is an obvious variation of fixed network and the

teaching of Atorf can be applied to a power line communication network without departing from the spirit of his teaching.

Claim 11.

Atorf teaches

A radio communication defining device according to claim 8, wherein the fixed network is a telephone network (para. 0011 – 0017, 0021 – 0028, 0035).

Although Atorf does not elaborate on *wherein the fixed network is an embedded system in a car,* however, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have realized that *an embedded system in a car* is merely one example out of a variety of fixed networks, an obvious variation of the fixed network taught by Atorf, and the teaching of Atorf can be applied to *an embedded system in a car* without departing from the spirit of his teaching.

Conclusion

6. 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

Notice of References Cited	Application/Control No. 14/738,083	Applicant(s)/Patent Under Reexamination PÉREZ LAFUENTE, CARLOS A	
	Examiner JEAN CHANG	Art Unit 2643	Page 1 of 1

U.S. PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Name	CPC Classification	US Classification
*	A	US-2002/0094801 A1	07-2002	Atorf, Manfred	H04M15/80	455/406
*	B	US-6,526,267 B1	02-2003	Jokimies; Matti	H04W8/183	342/387
*	C	US-6,516,193 B1	02-2003	Salmela; Seija	H04W48/16	455/432.3
*	D	US-6,552,648 B1	04-2003	Rick; Thomas	B60R25/00	180/287
*	E	US-2003/0176197 A1	09-2003	Chen, Che-Hung	H04M1/72502	455/462
*	F	US-6,826,414 B1	11-2004	Reynolds; Philip	H04W48/02	455/432.1
*	G	US-6,920,317 B1	07-2005	Muhonen; Ahti	H04M15/31	370/352
	H	US-				
	I	US-				
	J	US-				
	K	US-				
	L	US-				
	M	US-				

FOREIGN PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Country	Name	CPC Classification
	N					
	O					
	P					
	Q					
	R					
	S					
	T					

NON-PATENT DOCUMENTS

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

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

Index of Claims	Application/Control No.	Applicant(s)/Patent Under Reexamination
	14738083	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	08/10/2015	01/20/2016							
	1	✓	✓							
	2	✓	✓							
	3	✓	✓							
	4	✓	✓							
	5	✓	✓							
	6	✓	✓							
	7	✓	✓							
	8	✓	✓							
	9	✓	✓							
	10	✓	✓							
	11	✓	✓							
	12	✓	✓							
	13	✓	✓							
	14	✓	✓							
	15	✓	✓							
	16	✓	✓							
	17	✓	✓							
	18	✓	✓							

Search Notes	Application/Control No.	Applicant(s)/Patent Under Reexamination
	14738083	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, 406, 458, 414.1, 446, 456.1, 433	8/10/2015	jc
455	456.4, 555, 408, 432.2, 406, 458, 414.1, 446, 456.1, 433	1/20/2016	jc

SEARCH NOTES		
Search Notes	Date	Examiner
inventor search and text search on East for transmitting device location monitor wireless fixed location	8/10/2015	jc
update inventor search and text search on East	1/20/2016	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 13:06
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 13:06
L3	266	bluetooth near10 device identification	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2016/01/22 13:07
L4	0	l3 and l1	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2016/01/22 13:07
L5	14	l3 and l2	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2016/01/22 13:07
S1	29	"6334052"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2011/09/26 17:50
S2	5	"6785536"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2011/09/26 17:55
S3	20	"6826414"	US-PGPUB;	ADJ	ON	2011/09/26

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

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

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S21	6	"lafuente, carlos".inv.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2011/09/28 10:48
S22	1	S20 and S16	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2011/09/28 10:49
S23	16	"6625442"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2011/09/28 10:49
S24	20	"6516193"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2011/09/28 10:52
S25	5	"6785536"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2011/09/30 18:40
S26	6	"6920317"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2011/09/30 18:42
S27	1182	(special or limited or distint or different or preferred or discount or home) near10 (service or tarrif or rate) near10 (area or coverage or location or zone) same (signal or code or identifier or identification or parameter or flag) same ((base station) or cell or AP or device) same (wireless or mobile) and (monitor or presence)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2012/06/21 10:39
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		((base station) or cell or AP or device) same (wireless or mobile) and (monitor or presence) near10 (mobile or wireless) (station or device or phone) near10 (determin$4 or recogniz$4 or realiz$3 or check$3)	IBM_TDB			
S29	368	455/456.4.ccls.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2012/06/21 11:35
S30	6	"lafuente, carlos".inv.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2012/06/21 11:36
S31	15	(special or limited or distint or different or preferred or discount or home) near10 (service or tarrif or rate) near10 (area or coverage or location or zone) same (signal or code or identifier or identification or parameter or flag) same ((base station) or cell or AP or device) same (wireless or mobile) and (monitor or presence) near10 (mobile or wireless) (station or device or phone) near10 (determin$4 or recogniz$4 or realiz$3 or check$3)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2012/06/21 11:36
S32	0	S31 and S29	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2012/06/21 11:36
S33	18	(special or limited or distint or different or preferred or discount or home) near10 (service or tarrif or rate) near10 (area or coverage or location or zone) same (signal or code or identifier or identification or parameter or flag) same ((base station) or cell or AP or device) same (wireless or mobile) and (monitor or presence) near10 (mobile or wireless) (station or device or phone) near10 (determin$4 or recogniz$4 or realiz$3 or check$3)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2012/06/25 01:08
S34	6	"lafuente, carlos".inv.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2012/06/25 01:10
S35	1	S33 and S34	US-PGPUB; USPAT; USOCR; FPRS;	ADJ	ON	2012/06/25 01:10

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

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

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

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

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

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

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

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

			EPO; JPO; DERWENT; IBM_TDB			
S94	1	"14250517"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2014/09/19 13:33
S95	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; 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;	ADJ	ON	2014/10/15 18:22

			USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB			
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; 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	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2014/10/15 23:29

		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.				
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; 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;	ADJ	ON	2014/10/30 18:55

			FPRS; EPO; JPO; DERWENT; IBM_TDB			
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; 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	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2015/02/27 11:36

		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)))				
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 (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	US-PGPUB; USPAT; USOCR;	ADJ	ON	2015/03/29 09:11

		(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)))	FPRS; EPO; JPO; DERWENT; IBM_TDB			
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; 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;	ADJ	ON	2015/03/29

			USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB			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; 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;	ADJ	ON	2015/05/26

			USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB			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;	ADJ	ON	2015/07/24

			USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB			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	US-PGPUB; USPAT; USOCR; FPRS;	ADJ	ON	2015/08/09 15:02

		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)))	EPO; JPO; DERWENT; IBM_TDB			
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; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2015/08/09 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	1	"14561426"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2015/08/10 01:41

S191	0	S190 and defining device same location monitor same database	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2015/08/10 01:42
S192	0	S190 and defining device same location monitor anddatabase	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2015/08/10 01:43
S193	0	S190 and defining device same location monitor and database	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2015/08/10 01:43
S194	0	S190 and defining device same location monitor	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2015/08/10 01:44
S195	0	S190 and location monitor	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2015/08/10 01:45
S196	1	S190 and location	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2015/08/10 01:45
S197	1	S190 and location same defining device	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2015/08/10 01:45
S198	1	S190 and location same defining device and predetermined and wireless and base station and database	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2015/08/10 01:46
S199	0	S190 and location same defining device and predetermined and wireless same fixed same power line same car and base station and database	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO;	ADJ	ON	2015/08/10 01:47

			DERWENT; IBM_TDB			
S200	1	S190 and location same defining device and predetermined and wireless same fixed same power and base station and database	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2015/08/10 01:47
S201	0	S190 and location same defining device and predetermined and wireless same fixed same power and base station and database and authenticate	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2015/08/10 01:47
S202	1	S190 and location same defining device and predetermined and wireless same fixed same power and base station and database and authenticat$4	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2015/08/10 01:47
S203	89	"6826414"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2015/08/10 02:05
S204	7	"14738083"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2016/01/20 19:04
S205	0	S204 and fixed station same Bluetooth same radio same signal	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2016/01/20 19:05
S206	0	S204 and fixed station same radio same signal	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2016/01/20 19:05
S207	1	S204 and device same bluetooth same radio same signal	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2016/01/20 19:06
S208	1	S204 and device same bluetooth same radio same signal and identification same defining device	US-PGPUB; USPAT; USOCR;	ADJ	ON	2016/01/20 19:16

			FPRS; EPO; JPO; DERWENT; IBM_TDB			
S209	8291	bluetooth near5 signal and identification	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2016/01/20 19:23
S210	1284	bluetooth near5 signal same identification	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2016/01/20 19:23
S211	548	bluetooth near5 signal near15 identification	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2016/01/20 19:23
S212	154	bluetooth signal near15 identification	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2016/01/20 19:23
S213	14	"12294641"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2016/01/20 19:25
S214	9	S212 and @ad<"20060328"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2016/01/20 19:26
S215	42	bluetooth signal near20 format	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2016/01/20 19:51
S216	13	S215 and @ad<"20060328"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2016/01/20 19:51
S217	160	bluetooth signal near20 identification	US-PGPUB;	ADJ	ON	2016/01/20

			USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB			19:53
S218	9	S217 and @ad<"20060328"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2016/01/20 19:53
S219	142	bluetooth signal near10 identification	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2016/01/20 20:04
S220	9	S219 and @ad<"20060328"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2016/01/20 20:04
S221	9573	bluetooth near10 identification	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2016/01/20 20:04
S222	1160	S221 and @ad<"20060328"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2016/01/20 20:04
S223	265	bluetooth near10 device identification	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2016/01/20 20:05
S224	48	S223 and @ad<"20060328"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2016/01/20 20:05
S225	7	"14738083"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT;	ADJ	ON	2016/01/20 20:37

			IBM_TDB			
S226	0	S225 and definging signal same status same defining device	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2016/01/20 20:37
S227	1	S225 and defining signal same status same defining device	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2016/01/20 20:38
S228	1	S225 and status same defining device	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2016/01/20 20:49
S229	1	S225 and status	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2016/01/20 20:50
S230	1	S225 and device same environment	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2016/01/20 20:52
S231	1	S225 and device same environment and reliable information	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2016/01/20 21:03
S232	1	DECT signal same identification	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2016/01/21 13:15
S233	0	S232 and @ad<"20060328"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2016/01/21 13:16
S234	556	DECT same identification	US-PGPUB; USPAT; USOCR; FPRS;	ADJ	ON	2016/01/21 13:19

			EPO; JPO; DERWENT; IBM_TDB			
S235	202	S234 and @ad<"20060328"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2016/01/21 13:19
S236	42	(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-$ or US-20040092249-$ or US-20040192207-$ or US-20050076242-$ or US-20060205419-$ or US-20070197243-$ or US-20030176197-$ or US-20030157963-$).did. or (US-6334052-$ 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-$ or US-6246376-$ or US-6552648-$).did. or (WO-2007009297-$).did. or (WO-0027152-$ or WO-9858505-$ or WO-2007014714-$ or JP-2000050335-$ or EP-1303155-$).did.	US-PGPUB; USPAT; EPO; DERWENT	ADJ	ON	2016/01/21 22:57
S237	0	S236 and (database or memory or storage or store) near20 (identification or identifier or id) near15 (radio or wireless) near5 (device or (base station)) and presence	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2016/01/21 23:00
S238	6111	(database or memory or storage or store) near20 (identification or identifier or id) near15 (radio or wireless) near5 (device or (base station)) and presence	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2016/01/21 23:01
S239	337	(database or memory or storage or store) near20 (identification or identifier or id) near15 (radio or wireless) near5 (device or (base station)) same presence	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2016/01/21 23:01
S240	86	S239 and @ad<"20060328"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2016/01/21 23:02

S241	13	(database or memory or storage or store) near20 (identification or identifier or id) near15 (radio or wireless) near5 (device or (base station)) same mutual near5 authenticat$4	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2016/01/21 23:17
S242	4	S241 and @ad<"20060328"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2016/01/21 23:17
S243	1224	(database or memory or storage or store) near20 (identification or identifier or id) near15 (radio or wireless) near5 (device or (base station)) same authenticat$4	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2016/01/21 23:20
S244	227	S243 and @ad<"20060328"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2016/01/21 23:20
S245	14	(database or memory or storage or store) near20 (identification or identifier or id) near15 (radio or wireless) near5 (device or (base station)) same authenticat$4 same mutual	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2016/01/21 23:20
S246	4	S245 and @ad<"20060328"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2016/01/21 23:20
S247	7	"14738083"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2016/01/22 11:49
S248	1	S247 and status	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2016/01/22 11:49

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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Application No.	:	14/738,083
First Named Inventor	:	Carlos A. Perez Lafuente
Confirmation No.	:	4555
Filed	:	June 12, 2015
TC/A.U.	:	2643
Examiner	:	Jean Chang
Customer No.	:	27896
Docket No.	:	0572.0001C5
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 17, 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 5 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. (Original) A radio communication defining device that is configured to transmit a distinctive defining signal that at least partly defines a special area by its coverage, the distinctive defining signal capable of being received and processed by a mobile station, the distinctive defining signal including data regarding a status of the radio communication defining device.

2. (Currently Amended) [[A]] The radio communication defining device according to claim 1, wherein the data includes information indicating whether or not the radio communication defining device is located in a predetermined environment.

3. (Currently Amended) [[A]] The radio communication defining device according to claim 2, wherein the distinctive defining signal includes identification data of the radio communication defining device.

4. (Currently Amended) [[A]] The radio communication defining device according to claim 2, ~~further comprising a location monitor~~ ~~that~~ being configured to obtain[[s]] information to determine whether or not the radio communication defining device is in the predetermined environment.

5. (Currently Amended) [[A]] The radio communication defining device according to claim 4, ~~wherein the location monitor is~~ being configured to receive the information via wireless communication with a radio transmitting device.

6. (Currently Amended) [[A]] The radio communication defining device according to claim 5, wherein the radio transmitting device is a base station of a mobile telephone network.

7. (Currently Amended) [[A]] The radio communication defining device according to claim 5, ~~wherein the location monitor comprises~~ comprising a database that includes identification data of the radio transmitting device.

8. (Currently Amended) [[A]] The radio communication defining device according to claim 4, ~~wherein the location monitor is~~ being configured to receive the information via communication with a fixed network to which the radio communication defining device is physically connected.

9. (Currently Amended) [[A]] The radio communication defining device according to claim 8, wherein the fixed network is a telephone network.

10. (Currently Amended) [[A]] The radio communication defining device according to claim 8, wherein the fixed network is a power line communication network.

11. (Currently Amended) [[A]] The radio communication defining device according to claim 8, wherein the fixed network is an embedded system in a car.

12. (Currently Amended) [[A]] The radio communication defining device according to claim 8, further comprising a memory that stores one or more parameter that is useable to authenticate the radio communication defining device in the fixed network.

13. (Currently Amended)[[A]] The radio communication defining device according to claim 1, wherein the distinctive defining signal is coded.

14. (Original) A method associated with the use of a mobile station and at least one radio communication defining device that transmits a distinctive defining signal that at least partly defines a special area by its coverage, the distinctive defining signal including data regarding a status of the radio communication defining device, the method comprising:

receiving and processing the distinctive defining signal in the mobile station; and

sending from the mobile station via the mobile telephone network an updating signal to one or more servers of a provider of presence related services about the mobile station's presence in the special area, the updating signal comprising the data regarding a status of the radio communication defining device.

15. (Original) The method according to claim 14, wherein the data includes information indicative of whether or not the radio communication defining device is located in a predetermined environment.

16. (Original) The method according to claim 14, wherein the sending of the updating signal is uncorrelated to any mobile station phone call establishment, the updating signal being sent 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.

17. (Original) The method according to claim 14, 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.

18. (Original) The method according to claim 14, wherein the frequency of the updating signal is different from the frequency of the distinctive defining signal.

REMARKS

Claims 1-18 have been examined and stand rejected. By the above amendments, claims 2-13 have been amended. No claims have been added or canceled. Accordingly, claims 1-18 remain pending in the application. Favorable reconsideration of the application and allowance of all the claims are respectfully requested in view of the above amendments and the following remarks.

Claim Objection

Each of claims 2-13 has been amended to recite "The" instead of "A". Accordingly, the Examiner is requested to withdraw the objection to these claims.

Written Description Rejection

Claims 4-12 stand rejected under 35 U.S.C. §112, first paragraph, as failing to comply with the written description requirement. The term "location monitor" has been deleted from each of claims 4, 5, 7 and 8. Accordingly, the Examiner is respectfully requested to reconsider and withdraw this rejection.

Double Patenting Rejections

Claims 14-18 stand rejected on the ground of non-statutory double patenting as being unpatentable over U.S. Patent 8,738,040 in view of Atorf (U.S. Publication No. 2002/0094801). A terminal disclaimer to obviate the non-statutory double patenting rejection is filed herewith in compliance with 37 CFR § 1.321.

Claims 14-18 stand rejected on the ground of non-statutory double patenting as being unpatentable over U.S. Patent No. 9,042,910 in view of U.S. Patent 8,738,040, and further in view of Atorf (U.S. Publication No. 2002/0094801). A terminal disclaimer to obviate the non-statutory double patenting rejection is filed herewith in compliance with 37 CFR § 1.321. The terminal disclaimers are being filed as a matter of expedience and should not be interpreted as

Applicant's agreement with or acquiescence to the Examiner's arguments or the propriety of the rejections.

Anticipation Rejection

Claims 1-9 and 12-18 stand rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Publication No. 2002/0094801 (hereinafter "Atorf").

For a reference to anticipate a claim, it must either expressly or inherently disclose the limitations of the claim. (*See e.g., Celeritas Techs. V. Rockwell Int'l Corp.*, 150 F.3d 1354, 1361 (Fed. Cir. 1998), stating that "[t]o anticipate a claim, a single prior art reference must expressly or inherently disclose each claim limitation." 35 U.S.C. § 102 provides a strict standard for an anticipation rejection to apply. To apply, each and every claim limitation must be found in a single reference either expressly or inherently.

In regard to claim 1, it is asserted on pages 10 and 11 of the Office Action that the signal 3 of the fixed station 1 of Atorf includes data regarding a status of the fixed station 1. It is asserted that paragraphs [0006-0007], [0011-0017], [0021-0030] and [0035] of Atorf provide such a teaching. For ease of reference, paragraphs [0006-0007], [0011-0017], [0021-0030] and [0035] of Atorf are 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.

[0011] The first signal is preferably a radio signal; preferably, use is made of a Bluetooth signal for which an appropriate Bluetooth communication interface is provided in the mobile telephone. It is also possible to utilize a DECT signal with a suitable DECT communication interface in the mobile telephone.

[0012] The invention not only relates to the method but also to a system that is suitable for carrying out the described method and includes a mobile radio network with at least one base station as well as a mobile telephone that can operate within the mobile radio network, and a local fixed station that is provided at the user end and is associated with the mobile telephone, where

[0013] the fixed station includes a transmission means for transmitting a first signal of limited range,

[0014] the mobile telephone includes a receiving means for the first signal,

[0015] the mobile telephone includes a transmission means for a second signal that is to be transmitted to the base station in response to the reception of the first signal, and

[0016] the base station includes means for switching over, in response to the reception of the second signal, from a first to a second user rate for the use of the mobile radio network by the mobile telephone.

[0017] The transmission means of the fixed station and the receiving means of the mobile telephone may be constructed so as to transmit an encoded first signal. The transmission means of the fixed station, moreover, may enable a clocked or continuous transmission mode for the first signal.

[0021] The transmission means of the fixed station and the receiving means of the mobile telephone may be arranged to transmit and receive, respectively, the first signal in the form of a radio signal, preferably a Bluetooth signal or a DECT signal, while utilizing suitable communication interfaces.

[0022] In order to realize protection against abuse of the system, it is advantageous to provide the fixed station with a mains connection for power supply. The fixed station can then operate only via a 220 V lead, so that the user of the system cannot simply carry the fixed station along with the mobile telephone with the result that the mobile telephone is always within the range of the fixed station. It is also advantageous 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 telephone in order to put the fixed

station into operation, that is, also after an interruption of the power supply. If a third person attending the fixed station and/or the mobile telephone does not know this access code, it is impossible for this person to make unauthorized use of the system.

[0023] In a particularly advantageous further embodiment of the invention the fixed station may be provided with a connection device for connection to a fixed network that is preferably operated by the network operator, and also with a device via which the fixed station can be enabled for operation by the network operator, that is, by transmission of an enable code. The operation of the fixed station in conformity with this embodiment of the invention is controlled by the network operator per se. To this end, use is made of a fixed network connection via which the network operator has direct access to the fixed station. The fixed network should preferably be operated by the network operator per se. Alternatively, of course, it is possible that the network operator accesses the fixed station via the fixed network that is operated by another network operator.

[0024] The fixed station may include, additionally or alternatively, a receiving means for receiving an enable signal that can be supplied by the base station via the mobile radio network, and also a device for enabling.

[0025] In addition to the system, the invention also relates to a fixed station that can be used in conjunction with the method or the system. This fixed station is characterized in that it includes transmission means for transmitting an encoded radio signal of limited range. Further advantageous embodiments of the fixed station are disclosed in the dependent claims.

[0026] Further advantages, features and details of the invention will become apparent from the following description of an embodiment that is given with reference to the drawing.

[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.

[0028] The fixed station 1 also includes a receiving means 4 which serves to receive an access code which is transmitted so as to enable operation by the mobile telephone yet to be described. A mains connection to a 220 V lead is provided for the power supply of the fixed station and its elements; the fixed station 1 also includes a connection 6 to a fixed network.

[0029] The system also includes a mobile telephone 7 which can be moved into the range and out of the range at will as indicated by the arrow A. The mobile telephone, being shown in the form of a circuit diagram, includes a receiving device 8 which serves to receive the encoded signals 3 that are transmitted by the fixed station 1, that is, as long as the mobile telephone 7 is within the range R. The receiving means 8 include a communication interface which corresponds to the radio signal standard so, for example, a Bluetooth interface or a DECT interface.

[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.

[0035] An alternative mode of putting into operation can be performed via the fixed network connection 6. The network operator can directly access the fixed station 1 via this fixed network connection 6, thus selecting this station for putting into operation when the relevant conditions are satisfied. The fixed network connection 6, moreover, offers a given protection against abuse, because removal of the fixed station from the instantaneous location necessitates separation of the power supply connection 5 and also of the fixed network connection 6 and reconnection of the fixed station 1 in a different location. Putting into operation must then be performed again; this requires intervention by the network operator that thus knows about the change of location and hence can detect possible abuse.

A careful reading of the reproduced text above reveals that nowhere is there disclosed therein that the signal 3 emitted by the fixed station 1 of Atorf includes data regarding a status of the fixed station. Because less than all of the limitations of claim 1 are found in Atorf, Applicant respectfully submits that the claim, and all claims depending therefrom, are not anticipated by the reference.

In regard to claim 2, it is asserted on page 11 of the Office Action that the signal 3 of the fixed station 1 of Atorf includes data regarding a status of the fixed station 1 and that the data includes information indicating whether or not the fixed station 1 is located in a predetermined environment. It is asserted that paragraphs [0006-0007], [0011-0017], [0021-0030] and [0035]

of Atorf provide such a teaching. As noted above, nowhere in Atorf is there disclosed that the signal 3 of the fixed station 1 includes data regarding a status of the fixed station 1. A careful reading of the reproduced text of paragraphs [0006-0007], [0011-0017], [0021-0030] and [0035] above further reveals that nowhere is there disclosed therein that the signal 3 emitted by the fixed station 1 includes information indicating whether or not the fixed station 1 is located in a predetermined environment. Because less than all of the limitations of claim 2 are found in Atorf, Applicant respectfully submits that the claim, and all claims depending therefrom, are not anticipated by the reference.

In regard to claim 3, it is asserted on page 11 of the Office Action that the signal 3 of the fixed station 1 of Atorf includes identification data of the fixed station 1. It is asserted that paragraphs [0006], [0011-0017], [0021-0030] and [0035] of Atorf provide such a teaching. As noted above, nowhere in Atorf is there disclosed that the signal 3 of the fixed station 1 includes data regarding a status of the fixed station 1 nor information indicating whether or not the fixed station 1 is located in a predetermined environment. A careful reading of the reproduced text of paragraphs [0006], [0011-0017], [0021-0030] and [0035] above further reveals that nowhere is there disclosed therein that the signal 3 emitted by the fixed station 1 includes identification data of the fixed station 1. Because less than all of the limitations of claim 3 are found in Atorf, Applicant respectfully submits that the claim is not anticipated by the reference.

Amended claim 4 recites that the radio communication defining device is configured to obtain information to determine whether or not the radio communication defining device is in the predetermined environment. Nowhere in Atorf, including paragraphs [0021-0028] and [0035], is there disclosed that the fixed station 1 is configured to obtain information to determine whether or not it is in a predetermined environment.

Atorf teaches a number of measures in order to realize protection against abuse of the system. One is to provide the fixed station with a mains connection for power supply. The fixed station can then operate only via a 220 V lead, so that the user of the system cannot simply carry the fixed station along with the mobile telephone with the result that the mobile telephone is always within the range of the fixed station. Atorf also teaches that it is also advantageous 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 telephone in order to put the fixed station into operation, that is, also after an interruption of the power supply. If a third person attending the fixed station and/or the mobile telephone does not know this access code, it is impossible for this person to make unauthorized use of the system. According to another embodiment Atorf teaches that the fixed station may be provided with a connection device for connection to a fixed network that is preferably operated by the network operator, and also with a device via which the fixed station can be enabled for operation by the network operator, that is, by transmission of an enable code. The operation of the fixed station in conformity with this embodiment is controlled by the network operator per se. To this end, use is made of a fixed network connection via which the network operator has direct access to the fixed station. The fixed network should preferably be operated by the network operator per se. Alternatively the network operator accesses the fixed station via the fixed network that is operated by another network operator.

Because Atorf fails to disclose that the fixed station 1 is configured to obtain information to determine whether or not it is in a predetermined environment, Applicant respectfully submits that claim 4, and all claims depending therefrom, are not anticipated by the reference.

Claim 5 depends from claim 4 and further recites the radio communication defining device is configured to receive the information via a wireless communication with a radio transmitting device. It is asserted on page 12 of the Office Action that Atorf provides such a teaching in paragraphs [0021-0028] and [0035]. A careful reading of the reproduced text of paragraphs [0021-0028] and [0035] above clearly shows that nowhere is there disclosed therein that the fixed station 1 of Atorf is configured to obtain information to determine whether or not the fixed station is in a predetermined environment. Nor is there disclosed that the fixed station is configured to receive such information via a wireless communication with a radio transmitting device. Because less than all of the limitations of claim 5 are found in Atorf, Applicant respectfully submits that the claim, and all claims depending therefrom, are not anticipated by the reference.

Claim 6 depends from claim 5 and further recites the radio communication defining device is a base station of a mobile telephone network. Atorf teaches in paragraph [0024] that the fixed station 1 may include receiving means 4 for receiving an enable signal that can be supplied

by the base station 11 via the mobile network, and also a device for enabling. Nowhere in Atorf is there disclosed that the fixed station 1 is configured to receive from the base station 11 information to determine whether or not the fixed station 1 is in a predetermined environment. For at least these reason, Applicant respectfully submits that claim 6 is not anticipated by Atorf.

Claim 7 depends from claim 5 and further recites the radio communication defining device to comprise a database that includes identification data of the radio transmitting device. Nowhere in Atorf, including paragraphs [0021-0028] and [0035] (see reproduced text above above), is there taught or suggested that the fixed station 1 comprises a database that includes identification data of a radio transmitting device that transmits information to determine whether or not the fixed station 1 is in a predetermined environment. Because less than all of the limitations of claim 7 are found in Atorf, Applicant respectfully submits that the claim is not anticipated by the reference.

Claim 8 depends from claim 4 and further recites that the radio communication defining device is configured to receive the information via communication with a fixed network to which the radio communication defining device is physically connected. Atorf discloses that the fixed station 1 has a connection 6 to a fixed network, However, nowhere in Atorf, including paragraphs [0011-0017], [0021-0028] and [0035] (see reproduced text above), is there disclosed that the fixed station 1 is configured to receive information from the fixed network in order to determine whether or not the fixed station 1 is in a predetermined environment. Because less than all of the limitations of claim 8 are found in Atorf, Applicant respectfully submits that the claim, and all claims depending therefrom, are not anticipated by the reference.

Each of claims 9 and 12 depends from claim 8, and is not anticipated by Atorf for at least the same reasons as claim 8.

Claim 13 depends from claim 1, and is not anticipated by Atorf for at least the same reasons as claim 1.

Claim 14 recites a method wherein a mobile station receives and process a distinctive defining signal from a radio communication defining device with the distinctive defining signal at least partly defining a special area by its coverage and including data regarding a status of the radio communication defining device. Claim 14 further recites that the mobile station transmits

an updating signal including the status data to one or more servers of a provider of presence related services via a mobile telephone network. Nowhere in Atorf, including paragraphs [0007] and [0030] (see reproduced text above), is there disclosed that signals 10 and 13 transmitted by the mobile telephone 7 to the base station 11 include data regarding a status of the fixed station 1. Because less than all the limitations of claim 14 are found in Atorf, Applicant respectfully submits that the claim, and all claims depending therefrom, are not anticipated by the reference.

In regard to claim 15, it is asserted on page 15 of the Office Action that the signal 3 of the fixed station 1 of Atorf includes data regarding a status of the fixed station 1 and that the data includes information indicating whether or not the fixed station 1 is located in a predetermined environment. It is asserted that paragraphs [0023-0024], [0027-0030] and [0035] of Atorf provide such a teaching. As noted above, nowhere in Atorf is there disclosed that the signal 3 of the fixed station 1 includes data regarding a status of the fixed station 1. A careful reading of the reproduced text of paragraphs [0023-0024], [0027-0030] and [0035] above further reveals that nowhere is there disclosed therein that the signal 3 emitted by the fixed station 1 includes information indicating whether or not the fixed station 1 is located in a predetermined environment. Because less than all of the limitations of claim 15 are found in Atorf, Applicant respectfully submits that the claim is not anticipated by the reference.

Claim 16 depends from claim 14 and is not anticipated by Atorf for at least the same reasons as claim 14.

Claim 17 depends from claim 14 and recites that 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. It is asserted on page 15 of the Office Action that Atorf discloses such a method in paragraphs [0030] and [0031]. A careful reading of the reproduced text of paragraphs [0030] and [0031] above clearly shows that such a method is nowhere disclosed therein. Because less than all of the limitations of claim 17 are found in Atorf, Applicant respectfully submits that the claim is not anticipated by the reference.

Claim 18 depends from claim 14 and is not anticipated by Atorf for at least the same reasons as claim 14.

Obviousness Rejection

Claims 10 and 11 stand rejected under pre-AIA 35 U.S.C. § 103(a) as being unpatentable over Atorf. Applicant respectfully traverses this rejection.

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 U.S.C. § 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).

Claim 10 depends from claim 8 and recites that the fixed network is a power line communication network. The Office admits on page 16 of the Office Action that no such teaching is provided by Atorf. 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 claim. The Federal Circuit has held that "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). In the present case, having found no prior art to read on claim 10, the Office in a conclusory manner decrees that a power line communication network is an obvious variation of the fixed network of Atorf. The Office has failed to provide any articulated reasoning with some rationale underpinning to support its conclusion of obviousness. For at least these reasons, the Office has failed to provide a prima facie case of obviousness as to claim 10. The Applicant, therefore respectfully requests that the obviousness rejection of claim 10 be withdrawn.

Claim 11 depends from claim 8 and recites that the fixed network is an embedded system in a car. The Office admits on page 17 of the Office Action that no such teaching is provided by Atorf. 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 claim. The Federal Circuit has held that "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). In the present case, having found no prior art to read on claim 11, the Office in a conclusory manner decrees that an embedded system in a car is an obvious variation of the fixed network of Atorf. The Office has failed to provide any articulated reasoning with some rationale underpinning to support its conclusion of obviousness. For at least these reasons, the Office has failed to provide a prima facie case of obviousness as to claim 11. The Applicant, therefore respectfully requests that the obviousness rejection of claim 11 be withdrawn.

Conclusion

In view of the foregoing, Applicant respectfully requests the Examiner to find the application in condition for allowance with claims 1-18. 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

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

Electronic Acknowledgement Receipt

EFS ID:	23846374
Application Number:	14738083
International Application Number:	
Confirmation Number:	4555
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:	122358-385724
Receipt Date:	21-OCT-2015
Filing Date:	12-JUN-2015
Time Stamp:	15:50:29
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-0001C5.pdf	174165 a02051a4aaab080ee31bdc640921db9c897559c5	yes	16

	Multipart Description/PDF files in .zip description		
	Document Description	**Start**	**End**
	Amendment/Req. Reconsideration-After Non-Final Reject	1	1
	Claims	2	4
	Applicant Arguments/Remarks Made in an Amendment	5	16
Warnings:			
Information:			
	Total Files Size (in bytes):	174165	

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.

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

Electronic Petition Request	**TERMINAL DISCLAIMER TO OBVIATE A DOUBLE PATENTING REJECTION OVER A "PRIOR" PATENT**
Application Number	14738083
Filing Date	12-Jun-2015
First Named Inventor	Carlos Pérez LaFuente
Attorney Docket Number	122358-385724
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) 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)

9042910

8738040

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.

In making the above disclaimer, the owner does not disclaim the terminal part of the term of any patent granted on the instant application that would extend to the expiration date of the full statutory term of the prior patent, "as the term of said prior patent is presently shortened by any terminal disclaimer," in the event that said prior patent later:
- 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.	
Applicant 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:	14738083
Filing Date:	12-Jun-2015
Title of Invention:	METHOD AND SYSTEM FOR MONITORING A MOBILE STATION PRESENCE IN A SPECIAL AREA
First Named Inventor/Applicant Name:	Carlos A. Pérez LaFuente
Filer:	Patrick J. Finnan/Janet Dorgan
Attorney Docket Number:	122358-385724

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.: 14738083

Filing Date: 12-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:	23846436
Application Number:	14738083
International Application Number:	
Confirmation Number:	4555
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:	122358-385724
Receipt Date:	21-OCT-2015
Filing Date:	12-JUN-2015
Time Stamp:	15:52:43
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	2566
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	33674 80de5a338f072346b1b2c67b761e42fe629a0ded	no	2
Warnings:					
Information:					
2	Fee Worksheet (SB06)	fee-info.pdf	30514 4a6e9053ebdfc77b3bbcf721c4e97ca08001767e	no	2
Warnings:					
Information:					
		Total Files Size (in bytes):	64188		

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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.

UNITED STATES PATENT AND TRADEMARK OFFICE

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

APPLICATION NUMBER	FILING OR 371(C) DATE	FIRST NAMED APPLICANT	ATTY. DOCKET NO./TITLE
14/738,083	06/12/2015	Carlos A. Pérez LaFuente	122358-385724

CONFIRMATION NO. 4555

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

POWER OF ATTORNEY NOTICE

OC000000078135573

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/

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
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APPLICATION NUMBER	FILING OR 371(C) DATE	FIRST NAMED APPLICANT	ATTY. DOCKET NO./TITLE
14/738,083	06/12/2015	Carlos A. Pérez LaFuente	122358-385724

CONFIRMATION NO. 4555

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

POA ACCEPTANCE LETTER

OC000000078135613

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/

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

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

Schedule A

UNITED STATES PATENT APPLICATIONS

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

Electronic Acknowledgement Receipt

EFS ID:	23712809
Application Number:	14738083
International Application Number:	
Confirmation Number:	4555
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:	122358-385724
Receipt Date:	07-OCT-2015
Filing Date:	12-JUN-2015
Time Stamp:	17:15:49
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
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New International Application Filed with the USPTO as a Receiving Office
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UNITED STATES PATENT AND TRADEMARK OFFICE

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www.uspto.gov

APPLICATION NUMBER	FILING OR 371(C) DATE	FIRST NAMED APPLICANT	ATTY. DOCKET NO./TITLE
14/738,083	06/12/2015	Carlos A. Perez LaFuente	122358-385724

CONFIRMATION NO. 4555

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

PUBLICATION NOTICE

OC000000077796174

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

Publication No.US-2015-0281895-A1
Publication Date:10/01/2015

NOTICE OF PUBLICATION OF APPLICATION

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

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

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

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

Further assistance in electronically accessing the publication, or about PAIR, is available by calling the Patent Electronic Business Center at 1-866-217-9197.

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

UNITED STATES PATENT AND TRADEMARK OFFICE

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

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
14/738,083	06/12/2015	Carlos A. Pérez LaFuente	122358-385724	4555

26694 7590 08/17/2015

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

EXAMINER
CHANG, JEAN

ART UNIT	PAPER NUMBER
2643	

NOTIFICATION DATE	DELIVERY MODE
08/17/2015	ELECTRONIC

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

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

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

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

Office Action Summary	Application No. 14/738,083	Applicant(s) PÉREZ LAFUENTE, CARLOS A.	
	Examiner JEAN CHANG	Art Unit 2643	AIA (First Inventor to File) Status No

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

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTHS FROM THE MAILING DATE OF THIS COMMUNICATION.

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

Status

1)☒ Responsive to communication(s) filed on *6/12/2015*.

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

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

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

4)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims*

5)☒ Claim(s) *1-18* 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) *1-18* is/are rejected.

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

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

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

Application Papers

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

11)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

Priority under 35 U.S.C. § 119

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

Certified copies:

a)☐ All b)☐ Some** c)☒ None of the:

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

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

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

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

Attachment(s)

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

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

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

4) ☐ Other: _____.

DETAILED ACTION

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

Information Disclosure Statement

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

Claim Objections

3. Claims 2-13 are objected to because of the following informalities:

- Claims 2-13 recites the limitation “A radio communication defining device …” which should be "The radio communication defining device ...”

Appropriate correction is required.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

4. Claims 4-12 are rejected under 35 U.S.C. 112(a) or 35 U.S.C. 112 (pre-AIA), first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor or a joint inventor, or for pre-AIA the inventor(s), at the time the application was filed, had possession of the claimed invention. Claim 4 (and claims 5-12 depends on) recites

"A radio communication defining device according to claim 2, further comprising a location monitor that obtains information to determine whether or not the radio communication defining device is in the predetermined environment", which is not supported by the specification. Similarly, the limitations recited in claims 5, 7, 8 with respect to the "location monitor" are not supported by the specification. There is no description of such element according to applicant's specification.

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.

5. Claims 14-18 are rejected on the ground of nonstatutory double patenting as being unpatentable over U.S. Patent No. 8,738,040 in view of Atorf (US 2002/0094801 A1). Although the claims at issue are not identical, as summarized in the Table below, claims 14 and 16-17 of the instant application are anticipated by claims 1 and 4 of U.S. Patent No. 8,738,040, except the limitation “the updating signal comprising the data regarding a status of the radio communication defining device”. In an analogous art, Atorf teach the updating signal comprising the data regarding a status of the radio communication defining device (para. 0012 – 0017, 0006, 0022 – 0028, 0035, 0030; The fixed station is provided with receiving and comparison means for

an access code that is to be applied to the fixed station to put it into operation. The fixed station transmits an encoded signal which can be received only by an associated mobile station capable of reading the encoded signal. The fixed station is arranged at the location of the user, that is, normally in a building; the fixed station includes a transmission means via which a signal 3 of limited range is transmitted, preferably a radio signal, notably a Bluetooth signal ... when the signal 3 is received, the mobile station transmits signals 10 to a base station 11 of the mobile radio network, the signals 10 indicating that the signal 3 has been received and hence the mobile station is within the range R of the fixed station 1. Thus, the updating signal comprising the data regarding a status of the radio communication defining device). 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 claim 1 of U.S. Patent No. 8,738,040 to arrive at the subject matter of the instant application, so that the service provider may enable or disable the presence related service based on the updating signal received from the mobile station. Claims 15 and 18 of the instant application are anticipated by claim 4 of U.S. Patent No. 8,738,040.

Instant Application No. 14/738,083 Claims		**Patent No. 8,738,040 Claims**	
14.	A method associated with the use of a mobile station and at least one radio communication defining device that transmits a distinctive defining signal that at least partly defines a special area by its coverage, the distinctive defining signal including data regarding a status of the radio communication defining device, the method comprising:	1.	A method for monitoring the presence of a mobile station in one or more special areas associated with the mobile station, the method comprising: (see claim 4) (a) repeatedly transmitting from at least one radio communication defining device a radio distinctive defining signal in at least one channel that at least partially defines one of the special areas by its coverage,

	receiving and processing the distinctive defining signal in the mobile station; and sending from the mobile station via the mobile telephone network an updating signal to one or more servers of a provider of presence related services about the mobile station's presence in the special area, <u>the updating signal comprising the data regarding a status of the radio communication defining device.</u>		(b) observing the channel and processing any received signal by the mobile station in order to determine whether or not it is receiving a defining signal, (c) processing any received defining signal by the mobile station and the mobile station determines whether or not the defining signal received is a distinctive defining signal that at least partially defines one of the special areas, and determines whether or not the mobile station is present in one or more of the special areas, (d) sending an updating signal from the mobile station to a mobile telephone network about the mobile station presence in one or more of the special areas, where the updating signal sending is uncorrelated to any mobile station phone call establishment and is based on the last determination performed by the mobile station about its presence in each of the special areas, and said updating signal being sent at least one of (i) periodically, (ii) when the mobile station enters into or exits from one of the special areas, and (iii) when the mobile station remains into a special area, (e) routing the updating signal from the mobile telephone network to special operating means that adapt the value of at least one operating parameter taking into account the presence of the mobile station in each of the special areas, (f) associating the special areas with the mobile station by transmitting a checking data to the mobile station, this checking data being sent to any mobile station whose presence in the special areas is monitored and 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, one or more of the special areas associated with the mobile station.
15.	The method according to claim 14, wherein the data includes information indicative of whether or not the radio communication defining device is located in a predetermined environment.	4.	The method according to claim 1, wherein at least one radio communication defining device is a wireless device whose radio distinctive defining signal is a distinctive wireless signal transmitted by the wireless device in a frequency range outside the frequency range allocated for the mobile telephone network, the distinctive wireless signal containing wireless device identification data and reliable information confirming that the wireless device is effectively located into a predetermined environment, and the checking data associated with this wireless device including the wireless device identification data.
16.	The method according to claim 14, wherein the sending of the updating signal is uncorrelated to any mobile station phone call establishment, the updating signal being sent at least one of (i) periodically, (ii) at times recent to when the mobile station enters into or	1.	claim 1, item (d)

	exists from the special area, and (iii) when the mobile station remains in the special area.		
17.	The method according to claim 14, 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.	1.	Claim 1, item (c)
18.	The method according to claim 14, wherein the frequency of the updating signal is different from the frequency of the distinctive defining signal.	4.	The method according to claim 1, wherein at least one radio communication defining device is a wireless device whose radio distinctive defining signal is a distinctive wireless signal transmitted by the wireless device in a frequency range outside the frequency range allocated for the mobile telephone network, the distinctive wireless signal containing wireless device identification data and reliable information confirming that the wireless device is effectively located into a predetermined environment, and the checking data associated with this wireless device including the wireless device identification data.

6. Claims 14-18 are rejected on the ground of nonstatutory double patenting as being unpatentable over U.S. Patent No. 9,042,910 in view of Patent No. 8,738,040 further in view of Atorf (US 2002/0094801 A1). Although the claims at issue are not identical, as summarized in the Table below, claim 14 of the instant application is anticipated by claim 1 of U.S. Patent No. 9,042,910 except the limitation “the distinctive defining signal including data regarding a status of the radio communication defining device”, which is taught by claim 4 of Patent No. 8,738,040, and the limitation “the updating signal comprising the data regarding a status of the radio communication defining device”, which is taught by Atorf (para. 0012 – 0017, 0006, 0022 – 0028, 0035, 0030; The fixed station is provided with receiving and comparison means for an access code that is to be applied to the fixed station to put it into operation. The fixed station transmits an encoded signal which can be

received only by an associated mobile station capable of reading the encoded signal. The fixed station is arranged at the location of the user, that is, normally in a building; the fixed station includes a transmission means via which a signal 3 of limited range is transmitted, preferably a radio signal, notably a Bluetooth signal ... when the signal 3 is received, the mobile station transmits signals 10 to a base station 11 of the mobile radio network, the signals 10 indicating that the signal 3 has been received and hence the mobile station is within the range R of the fixed station 1. Thus, the updating signal comprising the data regarding a status of the radio communication defining device). 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 the claim 4 of U.S. Patent No. 8,738,040 and the teaching of Atorf into the claim 1 of U.S. Patent No. 9,042,910 to arrive at the subject matter of the instant application, so that the mobile station may use the checking data to determine whether the received defining signal is a distinctive defining signal and the service provider may enable or disable the presence related service based on the updating signal received from the mobile station. Claim 15 is anticipated by the claim 1 of U.S. Patent No. 9,042,910 in view of the claim 4 of U.S. Patent No. 8,738,040. Claim 16 is anticipated by claim 1 of U.S. Patent No. 9,042,910. Claims 17 and 18 of the instant application are anticipated by claims 2 and 3 of U.S. Patent No. 9,042,910 respectively.

Instant Application No. 14/738,083 Claims	**Patent No. 9,042,910 Claims**

14.	A method associated with the use of a mobile station and at least one radio communication defining device that transmits a distinctive defining signal that at least partly defines a special area by its coverage, the distinctive defining signal including data regarding a status of the radio communication defining device, the method comprising: receiving and processing the distinctive defining signal in the mobile station; and sending from the mobile station via the mobile telephone network an updating signal to one or more servers of a provider of presence related services about the mobile station's presence in the special area, the updating signal comprising the data regarding a status of the radio communication defining device.	1.	A method associated with the use of a mobile station and at least first and second radio communication defining devices that respectively transmit first and second distinctive defining signals that at least partly define a special area by a sum or intersection of their coverage, the first and second distinctive defining signals respectively including first and second data, the method comprising: determining in the mobile station if the mobile station is receiving one or both of the first and second distinctive defining signals and determining in the mobile station, based on a previously obtained at least portion of one or both of the first and second data, whether or not the mobile station is present in the special area; and sending from the mobile station via a mobile telephone network an updating signal to one or more servers of a provider of presence related services about the mobile station's presence in the special area, the sending of the updating signal being uncorrelated to any mobile station phone call establishment, the updating signal being sent 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.
15.	The method according to claim 14, wherein the data includes information indicative of whether or not the radio communication defining device is located in a predetermined environment.		
16.	The method according to claim 14, wherein the sending of the updating signal is uncorrelated to any mobile station phone call establishment, the updating signal being sent 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.	1.	see claim 1
17.	The method according to claim 14, 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.	2.	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.

18.	The method according to claim 14, wherein the frequency of the updating signal is different from the frequency of the distinctive defining signal.	3.	The method according to claim 1, wherein the frequency of the updating signal is different from the frequency of the distinctive defining signal.

Claim Rejections - 35 USC § 102

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

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in-
(1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent; or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, *except* that an international application filed under the treaty defined in section 351(a) shall have the effects for the purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English.

7. Claims 1-9 and 12-18 are rejected under 35 U.S.C. 102(b) as being anticipated by Atorf (US 2002/0094801 A1).

Claim 1.

Atorf teaches

A radio communication defining device (FIG. 1:1) *that is configured to transmit a distinctive defining signal* (FIG. 1:3) *that at least partly defines a special area by its coverage* (FIG. 1:R)*, the distinctive defining signal capable of being received and processed by a mobile station* (FIG. 1:7)*, the distinctive defining signal including*

data regarding a status of the radio communication defining device (para. 0011 – 0017, 0006 – 0007, 0021 – 0030, 0035).

Claim 2.

Atorf teaches

A radio communication defining device according to claim 1, wherein the data includes information indicating whether or not the radio communication defining device is located in a predetermined environment (para. 0011 – 0017, 0006 – 0007, 0021 – 0030, 0035).

Claim 3.

Atorf teaches

A radio communication defining device according to claim 2, wherein the distinctive defining signal includes identification data of the radio communication defining device (para. 0011 – 0017, 0006, 0021 – 0030, 0035).

Claim 4.

Atorf teaches

A radio communication defining device according to claim 2, further comprising a location monitor that obtains information to determine whether or not the radio communication defining device is in the predetermined environment (para. 0021 – 0028, 0035).

Claim 5.

Atorf teaches

A radio communication defining device according to claim 4, wherein the location monitor is configured to receive the information via wireless communication with a radio transmitting device (para. 0021 – 0028, 0035).

Claim 6.

Atorf teaches

A radio communication defining device according to claim 5, wherein the radio transmitting device is a base station of a mobile telephone network (para. 0012, 0023 – 0025, 0035).

Claim 7.

Atorf teaches

A radio communication defining device according to claim 5, wherein the location monitor comprises a database that includes identification data of the radio transmitting device (implied, para. 0021 – 0028, 0035).

Claim 8.

Atorf teaches

A radio communication defining device according to claim 4, wherein the location monitor is configured to receive the information via communication with a fixed network to which the radio communication defining device is physically connected (para. 0021 – 0028, 0035, 0011 – 0017).

Claim 9.

Atorf teaches

A radio communication defining device according to claim 8, wherein the fixed network is a telephone network (para. 0011 – 0017, 0021 – 0028, 0035).

Claim 12.

Atorf teaches

A radio communication defining device according to claim 8, further comprising a memory that stores one or more parameter that is useable to authenticate the radio communication defining device in the fixed network (para. 0021 – 0028, 0035, 0011 – 0017, implied by the fixed station is provided with receiving and comparison means for an access code that is to be applied to the fixed station in order to put the fixed station into operation … the fixed station is characterized in that it includes transmission means for transmitting an encoded radio signal of limited range … be received only by an associated mobile station that is capable of reading the encoded signal).

Claim 13.

Atorf teaches

A radio communication defining device according to claim 1, wherein the distinctive defining signal is coded (para. 0006, 0017, 0022 – 0030).

Claim 14.

Atorf teaches

A method associated with the use of a mobile station and at least one radio communication defining device that transmits a distinctive defining signal that at least partly defines a special area by its coverage, the distinctive defining signal including data regarding a status of the radio communication defining device (para. 0027 – 0030, 0035, 0023 – 0024)*, the method comprising:*

receiving and processing the distinctive defining signal in the mobile station (para. 0030)*; and*

sending from the mobile station via the mobile telephone network an updating signal to one or more servers of a provider of presence related services about the mobile station's presence in the special area, the updating signal comprising the data regarding a status of the radio communication defining device (para.0030, 0007).

Claim 15.

Atorf teaches

The method according to claim 14, wherein the data includes information indicative of whether or not the radio communication defining device is located in a predetermined environment (para. 0027 – 0030, 0035, 0023 – 0024).

Claim 16.

Atorf teaches

The method according to claim 14, wherein the sending of the updating signal is uncorrelated to any mobile station phone call establishment, the updating signal being sent 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 (para. 0030 – 0031, 0007 - 0008).

Claim 17.

Atorf teaches

The method according to claim 14, 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 (para. 0030 – 0031).

Claim 18.

Atorf teaches

The method according to claim 14, wherein the frequency of the updating signal is different from the frequency of the distinctive defining signal (para. 0027 – 0030, 0035, 0023 – 0024).

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.

8. **Claims 10-11 are rejected under 35 U.S.C. 103 (a) as being unpatentable over Atorf (US 2002/0094801 A1).**

Claim 10.

Atorf teaches

A radio communication defining device according to claim 8, wherein the fixed network is a telephone network (para. 0011 – 0017, 0021 – 0028, 0035).

Although Atorf does not elaborate on *wherein the fixed network is a power line communication network,* however, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have realized that a power line communication network is an obvious variation of fixed network and the teaching of

Atorf can be applied to a power line communication network without departing from the spirit of his teaching.

Claim 11.

Atorf teaches

A radio communication defining device according to claim 8, wherein the fixed network is a telephone network (para. 0011 – 0017, 0021 – 0028, 0035).

Although Atorf does not elaborate on *wherein the fixed network is an embedded system in a car,* however, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have realized that *an embedded system in a car* is merely one example out of a variety of fixed networks, an obvious variation of the fixed network taught by Atorf, and the teaching of Atorf can be applied to *an embedded system in a car* without departing from the spirit of his teaching.

Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jean Chang whose telephone number is (571) 270-7979. The examiner can normally be reached on Mon-Thursday from 9:00-5:00. If attempts to reach the examiner by telephone are unsuccessful, the examiner's Supervisor, Jinsong Hu can be reached on (571) 272-3965. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300. Information regarding the status of an application may be obtained from the Patent

Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Jean Chang/

Examiner, Art Unit 2643

/JINSONG HU/
Supervisory Patent Examiner,
Art Unit 2643

Notice of References Cited	Application/Control No. 14/738,083	Applicant(s)/Patent Under Reexamination PÉREZ LAFUENTE, CARLOS A	
	Examiner JEAN CHANG	Art Unit 2643	Page 1 of 1

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*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Name	Classification
*	A	US-2002/0094801 A1	07-2002	Atorf, Manfred	455/406
*	B	US-6,526,267 B1	02-2003	Jokimies et al.	455/161.1
*	C	US-6,516,193 B1	02-2003	Salmela et al.	455/432.3
*	D	US-6,826,414 B1	11-2004	Reynolds et al.	455/555
*	E	US-6,920,317 B1	07-2005	Muhonen, Ahti	455/405
	F	US-			
	G	US-			
	H	US-			
	I	US-			
	J	US-			
	K	US-			
	L	US-			
	M	US-			

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*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Country	Name	Classification
	N					
	O					
	P					
	Q					
	R					
	S					
	T					

NON-PATENT DOCUMENTS

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

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

Search Notes	Application/Control No.	Applicant(s)/Patent Under Reexamination
	14738083	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, 406, 458, 414.1, 446, 456.1, 433	8/10/2015	jc

SEARCH NOTES		
Search Notes	Date	Examiner
inventor search and text search on East for transmitting device location monitor wireless fixed location	8/10/2015	jc

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

PTO/SB/08b (07-09)
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INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Use as many sheets as necessary)

Sheet 1 of 2

Complete if Known	
Application Number	14/738,083
Filing Date	June 12, 2015
First Named Inventor	Carlos A. Pérez LaFuente
Art Unit	Not Yet Assigned 2643
Examiner Name	Not Yet Assigned Jean Chang
Attorney Docket Number	122358-385724

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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
	AA*	US-2002/0094801	07-18-2002	Atorf	
	AB*	US-6,516,190	02-04-2003	Linkola	
	AC*	US-6,516,193	02-04-2003	Salmela et al.	
	AD*	US-6,826,414	11-30-2004	Reynolds et al.	
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	AS*	US-7,266,366	09-04-2007	Kall	

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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	08/09/2015

*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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INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Use as many sheets as necessary)

Sheet 2 of 2

Complete if Known	
Application Number	14/738,083
Filing Date	June 12, 2015
First Named Inventor	Carlos A. Pérez LaFuente
Art Unit	Not Yet Assigned 2643
Examiner Name	Not Yet Assigned Jean Chang
Attorney Docket Number	122358-385724

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	
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	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	08/09/2015

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. * CITE NO.: Those application(s) which are marked with an single asterisk (*) next to the Cite No. are not supplied (under 37 CFR 1.98(a)(2)(iii)) because that application was filed after June 30, 2003 or is available in the IFW. ** CITE NO.: Those document(s) which are marked with an double asterisk (**) next to the Cite No. are not supplied because they were previously cited by or submitted to the Office in a prior application relied upon in this application for an earlier filing date under 35 U.S.C. 120. [1] Applicant's unique citation designation number (optional). [2] See Kinds Codes of USPTO Patent Documents at **www.uspto.gov** or MPEP 901.04. [3] Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). [4] For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. [5]Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. [6] Applicant is to place a check mark here if English language Translation is attached.

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

EAST Search History

EAST Search History (Prior Art)

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L1	1	"14561426"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2015/08/10 01:41
L2	0	l1 and defining device same location monitor same database	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2015/08/10 01:42
L3	0	l1 and defining device same location monitor anddatabase	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2015/08/10 01:43
L4	0	l1 and defining device same location monitor and database	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2015/08/10 01:43
L5	0	l1 and defining device same location monitor	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2015/08/10 01:44
L6	0	l1 and location monitor	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2015/08/10 01:45
L7	1	l1 and location	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2015/08/10 01:45
L8	1	l1 and location same defining device	US-PGPUB;	ADJ	ON	2015/08/10

			USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB			01:45
L9	1	l1 and location same defining device and predetermined and wireless and base station and database	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2015/08/10 01:46
L10	0	l1 and location same defining device and predetermined and wireless same fixed same power line same car and base station and database	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2015/08/10 01:47
L11	1	l1 and location same defining device and predetermined and wireless same fixed same power and base station and database	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2015/08/10 01:47
L12	0	l1 and location same defining device and predetermined and wireless same fixed same power and base station and database and authenticate	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2015/08/10 01:47
L13	1	l1 and location same defining device and predetermined and wireless same fixed same power and base station and database and authenticat$4	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2015/08/10 01:47
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;	ADJ	ON	2011/09/26 17:56

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

		identifier or identification or parameter or flag) same ((base station) or cell or AP) and monitor	EPO; JPO; DERWENT; IBM_TDB			
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;	ADJ	ON	2011/09/28

			USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB			10:48
S22	1	S20 and S16	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2011/09/28 10:49
S23	16	"6625442"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2011/09/28 10:49
S24	20	"6516193"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2011/09/28 10:52
S25	5	"6785536"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2011/09/30 18:40
S26	6	"6920317"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2011/09/30 18:42
S27	1182	(special or limited or distint or different or preferred or discount or home) near10 (service or tarrif or rate) near10 (area or coverage or location or zone) same (signal or code or identifier or identification or parameter or flag) same ((base station) or cell or AP or device) same (wireless or mobile) and (monitor or presence)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2012/06/21 10:39
S28	15	(special or limited or distint or different or preferred or discount or home) near10 (service or tarrif or rate) near10 (area or coverage or location or zone) same (signal or code or identifier or identification or parameter or flag) same ((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; 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;	ADJ	ON	2012/06/25 18:36

			USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB			
S37	771	(mobile or wireless or electronic or communication) (station or device or phone or terminal or equipment) near10 (presence or enter$4 or exit$4 or leav$4 or detect$4 or identify$4 or determin$4 or recogniz$4 or realiz$3 or check$3) near10 (special or limited or distint or different or preferred or discount or home) near10 ((service or tarrif or rate) or (area or coverage or location or zone)) same (send$4 or transmit$5 or transmi$6) near10 (signal or code or identifier or identification or parameter or flag or messag$3) same ((base station) or cell or AP or device)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2013/06/01 12:34
S38	211	(mobile or wireless or electronic or communication) (station or device or phone or terminal or equipment) near10 (presence or enter$4 or exit$4 or leav$4 or detect$4 or identify$4 or determin$4 or recogniz$4 or realiz$3 or check$3) near10 (special or limited or distint or different or preferred or discount or home) near5 ((service or tarrif or rate) or (area or coverage or location or zone)) near10 (send$4 or transmit$5 or transmi$6) near10 (signal or code or identifier or identification or parameter or flag or messag$3) near10 ((base station) or cell or AP or device or network)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2013/06/01 12:38
S39	150	(mobile or wireless or electronic or communication) (station or device or phone or terminal or equipment) near10 (presence or enter$4 or exit$4 or leav$4 or detect$4 or identify$4 or determin$4 or recogniz$4 or realiz$3 or check$3) near10 (special or limited or distint or different or preferred or discount or home) near5 ((service or tarrif or rate) or (area or coverage or location or zone)) near10 (send$4 or transmit$5 or transmi$6) near10 (signal or code or identifier or identification or parameter or flag or messag$3) near10 ((base station) or cell or AP or device or network)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	OFF	2013/06/01 12:49
S40	1	"12294641"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2013/06/01 13:53
S41	30	(mobile or wireless or electronic or communication) (station or device or phone or terminal or equipment) near10	US-PGPUB; USPAT; USOCR;	ADJ	OFF	2013/06/01 19:14

		(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)	FPRS; EPO; JPO; DERWENT; IBM_TDB			
S42	771	(mobile or wireless or electronic or communication) (station or device or phone or terminal or equipment) near10 (presence or enter$4 or exit$4 or leav$4 or detect$4 or identify$4 or determin$4 or recogniz$4 or realiz$3 or check$3) near10 (special or limited or distint or different or preferred or discount or home) near10 ((service or tarrif or rate) or (area or coverage or location or zone)) same (send$4 or transmit$5 or transmi$6) near10 (signal or code or identifier or identification or parameter or flag or messag$3) same ((base station) or cell or AP or device)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2013/06/01 19:20
S43	106	S42 and (location or zone or area) service	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2013/06/01 19:20
S44	11	(mobile or wireless or electronic or communication) (station or device or phone or terminal or equipment) near10 (presence or enter$4 or exit$4 or leav$4) near10 (special or limited or distint or different or preferred or discount or home) near10 ((service or tarrif or rate) (area or coverage or location or zone)) same (send$4 or transmit$5 or transmi$6) near10 (signal or code or identifier or identification or parameter or flag or messag$3)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2013/06/01 19:29
S45	19	(mobile or wireless or electronic or communication) (station or device or phone or terminal or equipment) near10 (presence or enter$4 or exit$4 or leav$4) near10 (special or limited or distint or different or preferred or discount or home) near10 ((service or tarrif or rate) near5 (area or coverage or location or zone)) same (send$4 or transmit$5 or transmi$6) near10 (signal or code or identifier or identification or parameter or flag or messag$3)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2013/06/01 19:30
S46	81	(mobile or wireless or electronic or 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	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT;	ADJ	ON	2013/06/01 19:36

		discount or home) near10 ((service or tarrif or rate) near5 (area or coverage or location or zone)) and (LBS or (location near6 service))	IBM_TDB			
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;	ADJ	ON	2013/06/01 22:55

			IBM_TDB			
S54	29	(US-20020094801-$ or US-20080004045-$ or US-20030092450-$ or US-20080261604-$ or US-20050148297-$ or US-20050075124-$ or US-20040224682-$ or US-20040192267-$ or US-20100167725-$ or US-20080171531-$).did. or (US-6334052-$ or US-6625442-$ or US-6785536-$ or US-6826414-$ or US-7778652-$ or US-7142869-$ or US-7171189-$ or US-6836653-$ or US-6516193-$ or US-6671506-$ or US-7634255-$ or US-7266366-$ or US-6920317-$ or US-6516190-$).did. or (WO-2007009297-$).did. or (WO-0027152-$ or WO-9858505-$ or WO-2007014714-$ or JP-2000050335-$).did.	US-PGPUB; USPAT; EPO; DERWENT	ADJ	ON	2013/06/01 23:06
S55	9	S54 and (enter$4 or exit$4 or leav$4) same (zone or (service area))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2013/06/01 23:07
S56	3822	(mobile or wireless or electronic or communication) (station or device or phone or terminal or equipment) same (presence or enter$4 or exit$4 or leav$4 or detect$4 or identify$4 or determin$4 or recogniz$4 or realiz$3 or check$3) near10 (special or limited or distint or different or preferred or discount or home) near10 ((service or tarrif or rate) or (area or coverage or location or zone)) same (send$4 or transmit$5 or transmi$6 or report$5 or notify$5)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2013/06/01 23:12
S57	1223	(mobile or wireless or electronic or communication) (station or device or phone or terminal or equipment) same (presence or enter$4 or exit$4 or leav$4 or detect$4 or identify$4 or determin$4 or recogniz$4 or realiz$3 or check$3) near10 (special or limited or distint or different or preferred or discount or home) near10 ((service or tarrif or rate) or (area or coverage or location or zone)) same (send$4 or transmit$5 or transmi$6 or report$5 or notify$5) and (zone or (service area) or LSA)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2013/06/01 23:14
S58	197	S57 and (enter$4 or exit$4) near10 (zone or (service area))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2013/06/01 23:16
S59	6	"lafuente, carlos".inv.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO;	ADJ	ON	2013/06/02 23:49

			DERWENT; IBM_TDB			
S60	22527	455/456.4.ccls. or 455/555.ccls. or 455/408.ccls. or 455/432.2.ccls. or 455/406.ccls. or 455/458.ccls. or 455/414.1.ccls. or 455/446.ccls. or 455/456.1.ccls. or 455/433.ccls.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2013/06/02 23:51
S61	1222	(mobile or wireless or electronic or communication) (station or device or phone or terminal or equipment) same (presence or enter$4 or exit$4 or leav$4 or detect$4 or identify$4 or determin$4 or recogniz$4 or realiz$3 or check$3) near10 (special or limited or distint or different or preferred or discount or home) near10 ((service or tarrif or rate) or (area or coverage or location or zone)) same (send$4 or transmit$5 or transmi$6 or report$5 or notify$5) and (zone or (service area) or LSA)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2013/06/02 23:52
S62	197	S61 and (enter$4 or exit$4) near10 (zone or (service area))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2013/06/02 23:52
S63	0	S62 and S59	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2013/06/02 23:52
S64	59	S62 and S60	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2013/06/02 23:52
S65	1	"12294641"	US-PGPUB; USPAT; EPO; DERWENT	ADJ	ON	2014/01/06 23:30
S66	1	S65 and updating signal	US-PGPUB; USPAT; EPO; DERWENT	ADJ	ON	2014/01/06 23:30
S67	1	S65 and updating signal same (period$5 or enter$4 or exit$4)	US-PGPUB; USPAT; EPO; DERWENT	ADJ	ON	2014/01/06 23:46
S68	1	S65 and updating signal and (period$5 or enter$4 or exit$4)	US-PGPUB; USPAT; EPO; DERWENT	ADJ	ON	2014/01/06 23:50
S69	1	S65 and updating signal and (periodically	US-PGPUB;	ADJ	ON	2014/01/07

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

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

		report$5 or notify$5 or signal$4) near10 (periodically or enter$4 or exit$4 or leav$4 or presence) near10 (special or limited or distinct$5 or preferred or discount or home) near10 ((service or tarrif or rate) or (area or coverage or location or zone))				
S82	24	"lafuente, carlos".inv.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2014/01/20 23:27
S83	30466	455/456.4.ccls. or 455/555.ccls. or 455/408.ccls. or 455/432.2.ccls. or 455/406.ccls. or 455/458.ccls. or 455/414.1.ccls. or 455/446.ccls. or 455/456.1.ccls. or 455/433.ccls.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2014/01/20 23:27
S84	1	S81 and S82	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2014/01/20 23:27
S85	6	S81 and S83	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2014/01/20 23:27
S86	4	((mobile or wireless or electronic or communication) (station or device or phone or terminal or equipment) same (receiv$4) near5 (signal or transmission or broadcast or data) near30 (detect$4 or identify$4 or determin$4 or recogniz$4 or presence) near20 (special or limited or distinct$5 or different or preferred or discount or home) near10 ((service or tarrif or rate) or (area or coverage or location or zone)) near20 (send$4 or transmit$5 or transmi$6 or report$5 or notify$5 or signal$4) near10 (periodically or enter$4 or exit$4 or leav$4 or presence) near10 (special or limited or distinct$5 or preferred or discount or home) near10 ((service or tarrif or rate) or (area or coverage or location or zone))).clm.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2014/01/20 23:30
S93	3	"12294641"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2014/09/19 13:31
S94	1	"14250517"	US-PGPUB;	ADJ	ON	2014/09/19

			USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB			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; 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;	ADJ	ON	2014/10/15 18:22

			IBM_TDB			
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; 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	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2014/10/15 23:29

		(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.				
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; 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; 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; 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	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2015/02/27 11:36

		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)))				
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 (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	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2015/03/29 09:11

		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)))				
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; 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;	ADJ	ON	2015/03/29 09:33

			IBM_TDB			
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; 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;	ADJ	ON	2015/05/26 21:53

			IBM_TDB			
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;	ADJ	ON	2015/07/24 11:02

			IBM_TDB			
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; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2015/08/09 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

8/ 10/ 2015 2:02:40 AM
C:\ Users\ jchang7\ Documents\ EAST\ Workspaces\ 14738083.wsp

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Address: COMMISSIONER FOR PATENTS
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Alexandria, Virginia 22313-1450
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BIB DATA SHEET

CONFIRMATION NO. 4555

SERIAL NUMBER	FILING or 371(c) DATE	CLASS	GROUP ART UNIT	ATTORNEY DOCKET NO.
14/738,083	06/12/2015 RULE	455	2643	122358-385724

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

INVENTORS
Carlos A. Pérez LaFuente, Madrid, SPAIN;

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

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

**** IF REQUIRED, FOREIGN FILING LICENSE GRANTED **** ** SMALL ENTITY **
06/22/2015

Foreign Priority claimed ☑ Yes ☐ No 35 USC 119(a-d) conditions met ☐ Yes ☑ No Verified and Acknowledged /JEAN CHANG/ Examiner's Signature	☐ Met after Allowance Initials	STATE OR COUNTRY	SHEETS DRAWINGS	TOTAL CLAIMS	INDEPENDENT CLAIMS
		SPAIN	7	18	2

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

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

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

Index of Claims	Application/Control No.	Applicant(s)/Patent Under Reexamination
	14738083	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	08/10/2015								
	1	✓								
	2	✓								
	3	✓								
	4	✓								
	5	✓								
	6	✓								
	7	✓								
	8	✓								
	9	✓								
	10	✓								
	11	✓								
	12	✓								
	13	✓								
	14	✓								
	15	✓								
	16	✓								
	17	✓								
	18	✓								

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APPLICATION NUMBER	FILING OR 371(C) DATE	FIRST NAMED APPLICANT	ATTY. DOCKET NO./TITLE
14/738,083	06/12/2015	Carlos A. Pérez LaFuente	122358-385724

CONFIRMATION NO. 4555

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

POA ACCEPTANCE LETTER

OC000000076303904

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**.

/qtran/

PTO/AIA/80 (07-12)
Approved for use through 11/30/2014. OMB 0651-0035
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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.

POWER OF ATTORNEY TO PROSECUTE APPLICATIONS BEFORE THE USPTO

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

I hereby appoint:

☒ Practitioners associated with Customer Number: 26694

OR

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

Name	Registration Number	Name	Registration Number

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

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

☒ The address associated with Customer Number: 26694

OR

☐

Firm or Individual Name			
Address			
City		State	Zip
Country			
Telephone		Email	

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

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

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

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

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

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

Privacy Act Statement

The **Privacy Act of 1974 (P.L. 93-579)** requires that you be given certain information in connection with your submission of the attached form related to a patent application or patent. Accordingly, pursuant to the requirements of the Act, please be advised that: (1) the general authority for the collection of this information is 35 U.S.C. 2(b)(2); (2) furnishing of the information solicited is voluntary; and (3) the principal purpose for which the information is used by the U.S. Patent and Trademark Office is to process and/or examine your submission related to a patent application or patent. If you do not furnish the requested information, the U.S. Patent and Trademark Office may not be able to process and/or examine your submission, which may result in termination of proceedings or abandonment of the application or expiration of the patent.

The information provided by you in this form will be subject to the following routine uses:

1. The information on this form will be treated confidentially to the extent allowed under the Freedom of Information Act (5 U.S.C. 552) and the Privacy Act (5 U.S.C 552a). Records from this system of records may be disclosed to the Department of Justice to determine whether disclosure of these records is required by the Freedom of Information Act.
2. A record from this system of records may be disclosed, as a routine use, in the course of presenting evidence to a court, magistrate, or administrative tribunal, including disclosures to opposing counsel in the course of settlement negotiations.
3. A record in this system of records may be disclosed, as a routine use, to a Member of Congress submitting a request involving an individual, to whom the record pertains, when the individual has requested assistance from the Member with respect to the subject matter of the record.
4. A record in this system of records may be disclosed, as a routine use, to a contractor of the Agency having need for the information in order to perform a contract. Recipients of information shall be required to comply with the requirements of the Privacy Act of 1974, as amended, pursuant to 5 U.S.C. 552a(m).
5. A record related to an International Application filed under the Patent Cooperation Treaty in this system of records may be disclosed, as a routine use, to the International Bureau of the World Intellectual Property Organization, pursuant to the Patent Cooperation Treaty.
6. A record in this system of records may be disclosed, as a routine use, to another federal agency for purposes of National Security review (35 U.S.C. 181) and for review pursuant to the Atomic Energy Act (42 U.S.C. 218(c)).
7. A record from this system of records may be disclosed, as a routine use, to the Administrator, General Services, or his/her designee, during an inspection of records conducted by GSA as part of that agency's responsibility to recommend improvements in records management practices and programs, under authority of 44 U.S.C. 2904 and 2906. Such disclosure shall be made in accordance with the GSA regulations governing inspection of records for this purpose, and any other relevant (*i.e.*, GSA or Commerce) directive. Such disclosure shall not be used to make determinations about individuals.
8. A record from this system of records may be disclosed, as a routine use, to the public after either publication of the application pursuant to 35 U.S.C. 122(b) or issuance of a patent pursuant to 35 U.S.C. 151. Further, a record may be disclosed, subject to the limitations of 37 CFR 1.14, as a routine use, to the public if the record was filed in an application which became abandoned or in which the proceedings were terminated and which application is referenced by either a published application, an application open to public inspection or an issued patent.
9. A record from this system of records may be disclosed, as a routine use, to a Federal, State, or local law enforcement agency, if the USPTO becomes aware of a violation or potential violation of law or regulation.

PTO/SB/96 (07-09)
Approved for use through 07/31/2012. OMB 0651-0031
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STATEMENT UNDER 37 CFR 3.73(b)

Applicant/Patent Owner: Carlos Alberto Pérez LaFuente

Application No./Patent No.: 14/738,083 Filed/Issue Date: 12 June 2015

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

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

states that it is:

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

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

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

A. [x] An assignment from the inventor(s) of the patent application/patent identified above. The assignment was recorded in the United States Patent and Trademark Office at Reel 035831, Frame 0288, or for which a copy thereof is attached.

OR

B. [ ] A chain of title from the inventor(s), of the patent application/patent identified above, to the current assignee as follows:

1. From: _____ To: _____
The document was recorded in the United States Patent and Trademark Office at
Reel _____, Frame _____, or for which a copy thereof is attached.

2. From: _____ To: _____
The document was recorded in the United States Patent and Trademark Office at
Reel _____, Frame _____, or for which a copy thereof is attached.

3. From: _____ To: _____
The document was recorded in the United States Patent and Trademark Office at
Reel _____, Frame _____, or for which a copy thereof is attached.

[ ] Additional documents in the chain of title are listed on a supplemental sheet(s).

[x] As required by 37 CFR 3.73(b)(1)(i), the documentary evidence of the chain of title from the original owner to the assignee was, or concurrently is being, submitted for recordation pursuant to 37 CFR 3.11.

[NOTE: A separate copy (*i.e.*, a true copy of the original assignment document(s)) must be submitted to Assignment Division in accordance with 37 CFR Part 3, to record the assignment in the records of the USPTO. See MPEP 302.08]

The undersigned (whose title is supplied below) is authorized to act on behalf of the assignee.

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

9890946-v1

Electronic Acknowledgement Receipt

EFS ID:	22861445
Application Number:	14738083
International Application Number:	
Confirmation Number:	4555
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:	122358-385724
Receipt Date:	08-JUL-2015
Filing Date:	12-JUN-2015
Time Stamp:	17:10:11
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	385724Statement373b.pdf	135203 4ba0a348fe3d0cdf370c0995cadecfbbd59a9383	no	1

Warnings:	
Information:	
Total Files Size (in bytes):	4257835

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 NUMBER	FILING or 371(c) DATE	GRP ART UNIT	FIL FEE REC'D	ATTY.DOCKET.NO	TOT CLAIMS	IND CLAIMS
14/738,083	06/12/2015	2642	730	122358-385724	18	2

CONFIRMATION NO. 4555

FILING RECEIPT

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

OC000000075883953

Date Mailed: 06/24/2015

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

Inventor(s)

Carlos A. Pérez LaFuente, Madrid, SPAIN;

Applicant(s)

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

Assignment For Published Patent Application

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

Power of Attorney: None

Domestic Priority data as claimed by applicant

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

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

If Required, Foreign Filing License Granted: 06/22/2015
The country code and number of your priority application, to be used for filing abroad under the Paris Convention, is **US 14/738,083**
Projected Publication Date: 10/01/2015
Non-Publication Request: No
Early Publication Request: No

**** SMALL ENTITY ****

Title

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

Preliminary Class

455

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

PROTECTING YOUR INVENTION OUTSIDE THE UNITED STATES

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

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

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

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

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

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Title 37, Code of Federal Regulations, 5.11 & 5.15

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NOT GRANTED

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

SelectUSA

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PATENT APPLICATION FEE DETERMINATION RECORD

Substitute for Form PTO-875

Application or Docket Number: 14/738,083

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))	18 minus 20 =	*	x 40 =	0.00	OR		
INDEPENDENT CLAIMS (37 CFR 1.16(h))	2 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	730		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	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	

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

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APPLICATION NUMBER	FILING OR 371(C) DATE	FIRST NAMED APPLICANT	ATTY. DOCKET NO./TITLE
14/738,083	06/12/2015	Carlos A. Pérez LaFuente	122358-385724

CONFIRMATION NO. 4555

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

IMPROPER CFR REQUEST

OC000000075883666

Date Mailed: 06/24/2015

RESPONSE TO REQUEST FOR CORRECTED FILING RECEIPT

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

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

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

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

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

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

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

Questions about the contents of this notice and the requirements it sets forth should be directed to the Office of Data Management, Application Assistance Unit, at **(571) 272-4000** or **(571) 272-4200** or **1-888-786-0101**.

/cma/

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

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

Attorney Docket No.	122358-385724
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* 38]
   Both the claims and abstract must start on a new page.
   (See MPEP § 608.01(a) for information on the preferred arrangement)
5. [X] **Drawing(s)** (35 U.S.C. 113) [*Total Sheets* 7]
6. **Inventor's Oath or Declaration** [*Total Pages* 1]
   (including substitute statements under 37 CFR 1.64 and assignments serving as an oath or declaration under 37 CFR 1.63(e))
   a. [ ] Newly executed (original or copy)
   b. [X] A copy from a prior application (37 CFR 1.63(d))
7. [X] **Application Data Sheet** ** See note below.*
   See 37 CFR 1.76 (PTO/AIA/14 or equivalent)
8. **CD-ROM or CD-R** in duplicate, large table, or Computer Program (*Appendix*)
   [ ] Landscape Table on CD
9. **Nucleotide and/or Amino Acid Sequence Submission** (*if applicable, items a. – c. are required*)
   a. [ ] Computer Readable Form (CRF)
   b. [ ] Specification Sequence Listing on:
      i. [ ] CD-ROM or CD-R (2 copies); or
      ii. [ ] Paper
   c. [ ] Statements verifying identity of above copies

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

ACCOMPANYING APPLICATION PAPERS

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

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

19. CORRESPONDENCE ADDRESS

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

Name					
Address					
City		State		Zip Code	
Country		Telephone		Email	

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

Application Data Sheet

Inventor Information

Inventor Number::	1
Given Name::	Carlos
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	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::	122358-385724
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
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Country of mailing address::	Spain
Postal or Zip Code of mailing address::	28029

Assignee Information Including Non-Applicant Assignee Information

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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 12, 2015
Name	Jeffri A. Kaminski	Registration Number	42,709

PTO/AIA/01 (06-12)
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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.

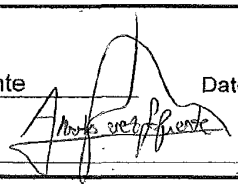
I hereby acknowledge that any willful false statement made in this declaration is punishable under 18 U.S.C. 1001 by fine or imprisonment of not more than five (5) years, or both.

WARNING:

Petitioner/applicant is cautioned to avoid submitting personal information in documents filed in a patent application that may contribute to identity theft. Personal information such as social security numbers, bank account numbers, or credit card numbers (other than a check or credit card authorization form PTO-2038 submitted for payment purposes) is never required by the USPTO to support a petition or an application. If this type of personal information is included in documents submitted to the USPTO, petitioners/applicants should consider redacting such personal information from the documents before submitting them to the USPTO. Petitioner/applicant is advised that the record of a patent application is available to the public after publication of the application (unless a non-publication request in compliance with 37 CFR 1.213(a) is made in the application) or issuance of a patent. Furthermore, the record from an abandoned application may also be available to the public if the application is referenced in a published application or an issued patent (see 37 CFR 1.14). Checks and credit card authorization forms PTO-2038 submitted for payment purposes are not retained in the application file and therefore are not publicly available.

LEGAL NAME OF INVENTOR

Inventor: Carlos A. Perez Lafuente Date (Optional): APRIL 14, 2014

Signature: 

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:	122358-385724

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:				
Miscellaneous-Filing:				
Petition:				
Patent-Appeals-and-Interference:				

Description	Fee Code	Quantity	Amount	Sub-Total in USD($)
Post-Allowance-and-Post-Issuance:				
Extension-of-Time:				
Miscellaneous:				
		Total in USD ($)		**730**

Electronic Acknowledgement Receipt	
EFS ID:	22618140
Application Number:	14738083
International Application Number:	
Confirmation Number:	4555
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:	122358-385724
Receipt Date:	12-JUN-2015
Filing Date:	
Time Stamp:	15:10:19
Application Type:	Utility under 35 USC 111(a)

Payment information:

Submitted with Payment	yes
Payment Type	Deposit Account
Payment was successfully received in RAM	$730
RAM confirmation Number	1689
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 1.21 (Miscellaneous fees and charges)

File Listing:

Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1		385724Application.pdf	175771 74eaf38b3dd7b62a634b8e57acf9e4d43ed754e0	yes	38
	Multipart Description/PDF files in .zip description				
	Document Description		**Start**	**End**	
	Specification		1	34	
	Claims		35	37	
	Abstract		38	38	
Warnings:					
Information:					
2	Drawings-only black and white line drawings	figures.pdf	144735 757f28468c2f0bb89d40c0a04abdbb5690b00ee1	no	7
Warnings:					
Information:					
3	Transmittal of New Application	385724Transmittal.pdf	121590 3a3407fadc97434f3b3ec5fdbd60b7d8b825858d	no	1
Warnings:					
Information:					
4	Application Data Sheet	385724ADS.pdf	80917 567a8a3a7f99620e49167468d4a33c35b5a64830	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	35393 7fee490052fd81f4daa0264cc0fb97c8b1a28d77	no	2
Warnings:					
Information:					
			Total Files Size (in bytes):	639613	

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.

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 radio communication defining device that is configured to transmit a distinctive defining signal that at least partly defines a special area by its coverage, the distinctive defining signal capable of being received and processed by a mobile station, the distinctive defining signal including data regarding a status of the radio communication defining device.

2. A radio communication defining device according to claim 1, wherein the data includes information indicating whether or not the radio communication defining device is located in a predetermined environment.

3. A radio communication defining device according to claim 2, wherein the distinctive defining signal includes identification data of the radio communication defining device.

4. A radio communication defining device according to claim 2, further comprising a location monitor that obtains information to determine whether or not the radio communication defining device is in the predetermined environment.

5. A radio communication defining device according to claim 4, wherein the location monitor is configured to receive the information via wireless communication with a radio transmitting device.

6. A radio communication defining device according to claim 5, wherein the radio transmitting device is a base station of a mobile telephone network.

7. A radio communication defining device according to claim 5, wherein the location monitor comprises a database that includes identification data of the radio transmitting device.

8. A radio communication defining device according to claim 4, wherein the location monitor is configured to receive the information via communication with a fixed network to which the radio communication defining device is physically connected.

9. A radio communication defining device according to claim 8, wherein the fixed network is a telephone network.

10. A radio communication defining device according to claim 8, wherein the fixed network is a power line communication network.

11. . A radio communication defining device according to claim 8, wherein the fixed network is an embedded system in a car.

12. A radio communication defining device according to claim 8, further comprising a memory that stores one or more parameter that is useable to authenticate the radio communication defining device in the fixed network.

13. A radio communication defining device according to claim 1, wherein the distinctive defining signal is coded.

14. A method associated with the use of a mobile station and at least one radio communication defining device that transmits a distinctive defining signal that at least partly defines a special area by its coverage, the distinctive defining signal including data regarding a status of the radio communication defining device, the method comprising:

receiving and processing the distinctive defining signal in the mobile station; and

sending from the mobile station via the mobile telephone network an updating signal to one or more servers of a provider of presence related services about the mobile station's presence in the special area, the updating signal comprising the data regarding a status of the radio communication defining device.

15. The method according to claim 14, wherein the data includes information indicative of whether or not the radio communication defining device is located in a predetermined environment.

16. The method according to claim 14, wherein the sending of the updating signal is uncorrelated to any mobile station phone call establishment, the updating signal being sent 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.

17. The method according to claim 14, 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.

18. The method according to claim 14, wherein the frequency of the updating signal is different from the frequency of the distinctive defining signal.

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.

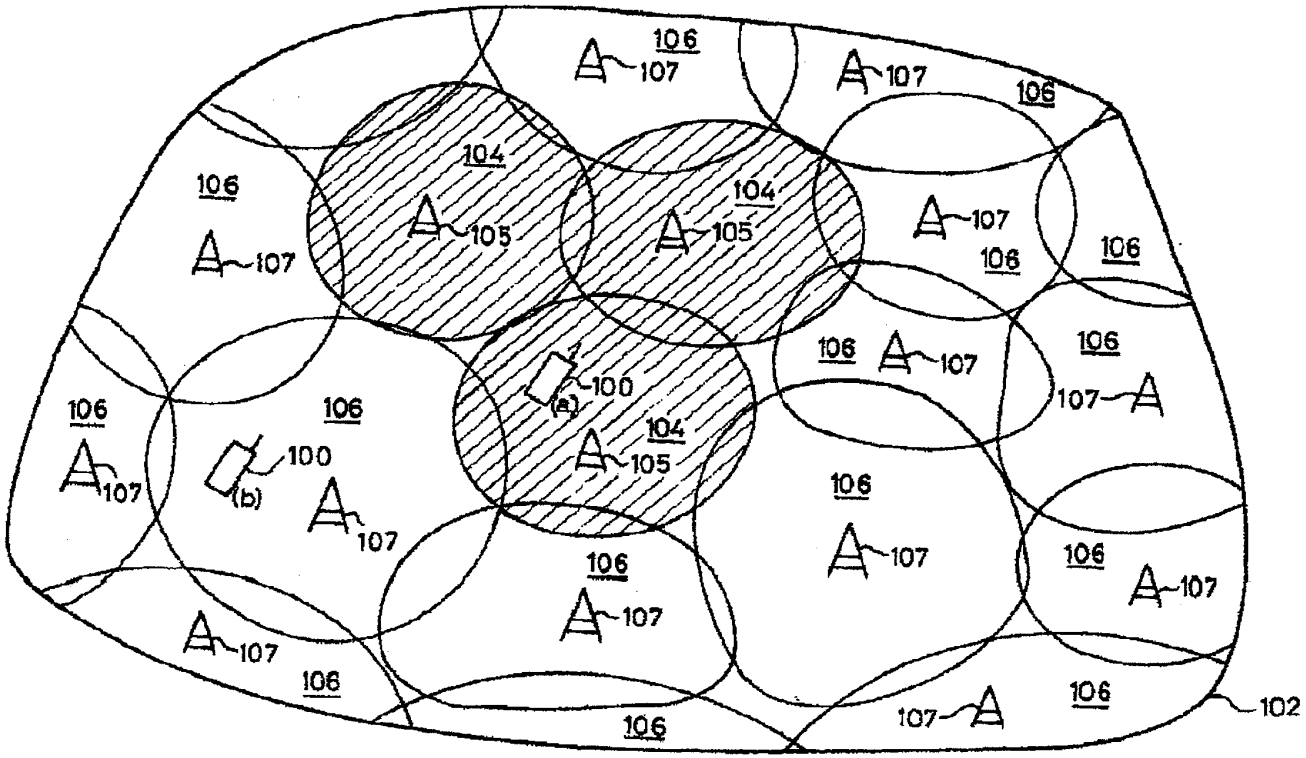
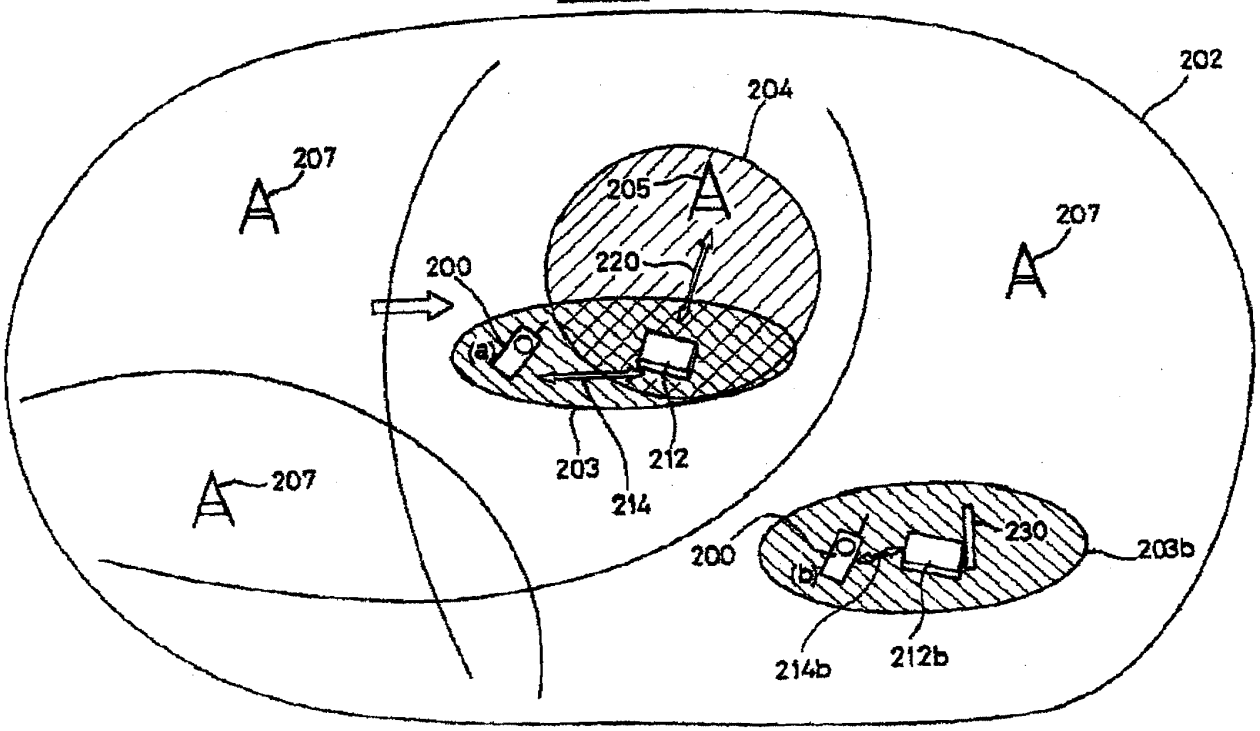


FIG_1

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APPLE INC.

FIG_2



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APPLE INC.

FIG-3

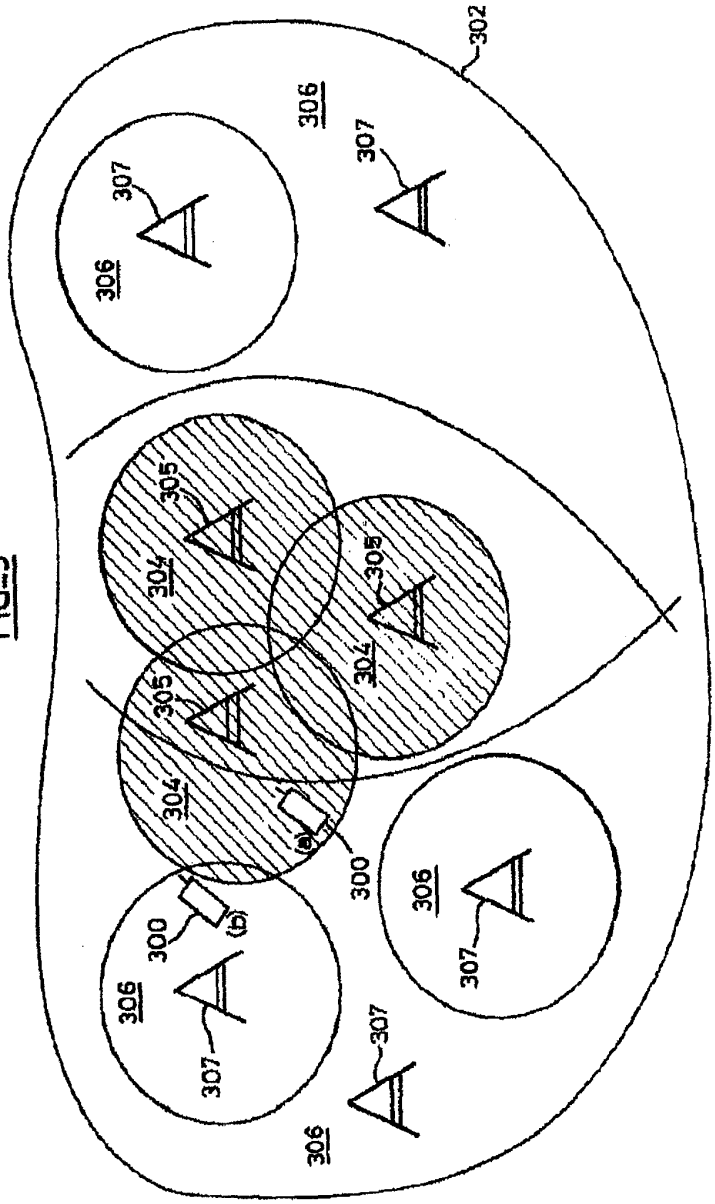


FIG_4

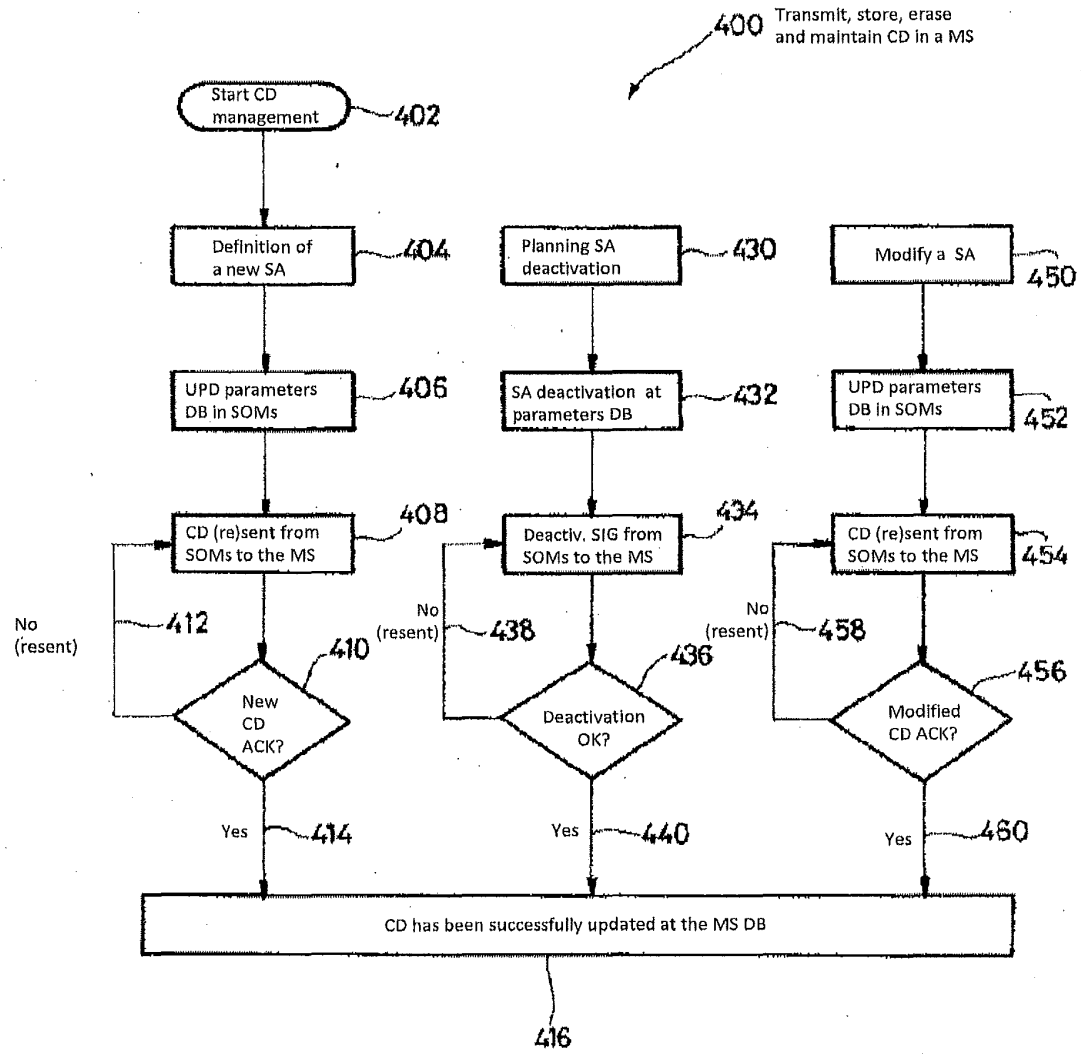

400
Transmit, store, erase and maintain CD in a MS
Start CD management
402
Definition of a new SA
404
UPD parameters DB in SOMs
406
CD (re)sent from SOMs to the MS
408
No (resent)
412
New CD ACK?
410
Yes
414
Planning SA deactivation
430
SA deactivation at parameters DB
432
Deactiv. SIG from SOMs to the MS
434
No (resent)
438
Deactivation OK?
436
Yes
440
Modify a SA
450
UPD parameters DB in SOMs
452
CD (re)sent from SOMs to the MS
454
No (resent)
458
Modified CD ACK?
456
Yes
460
CD has been successfully updated at the MS DB
416

FIG_5

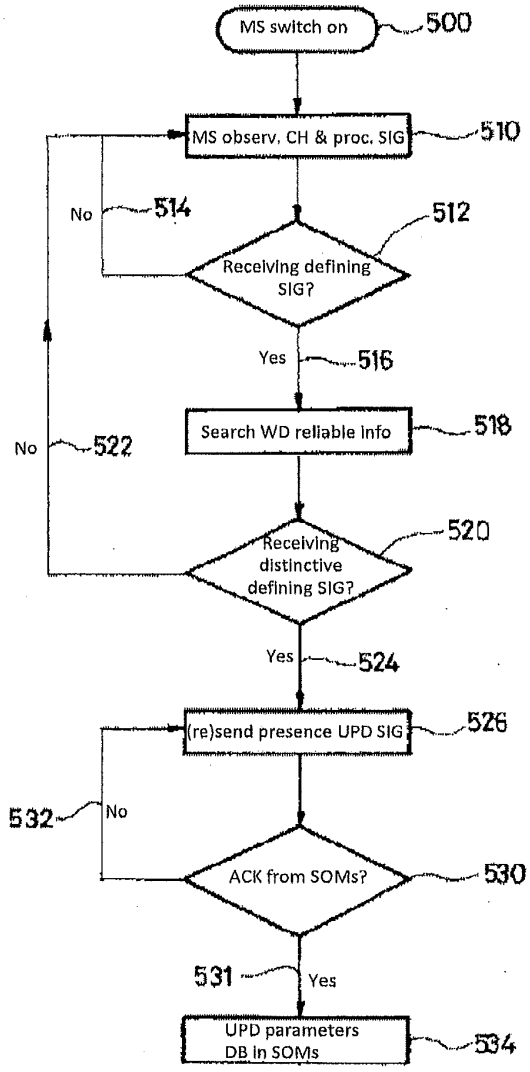
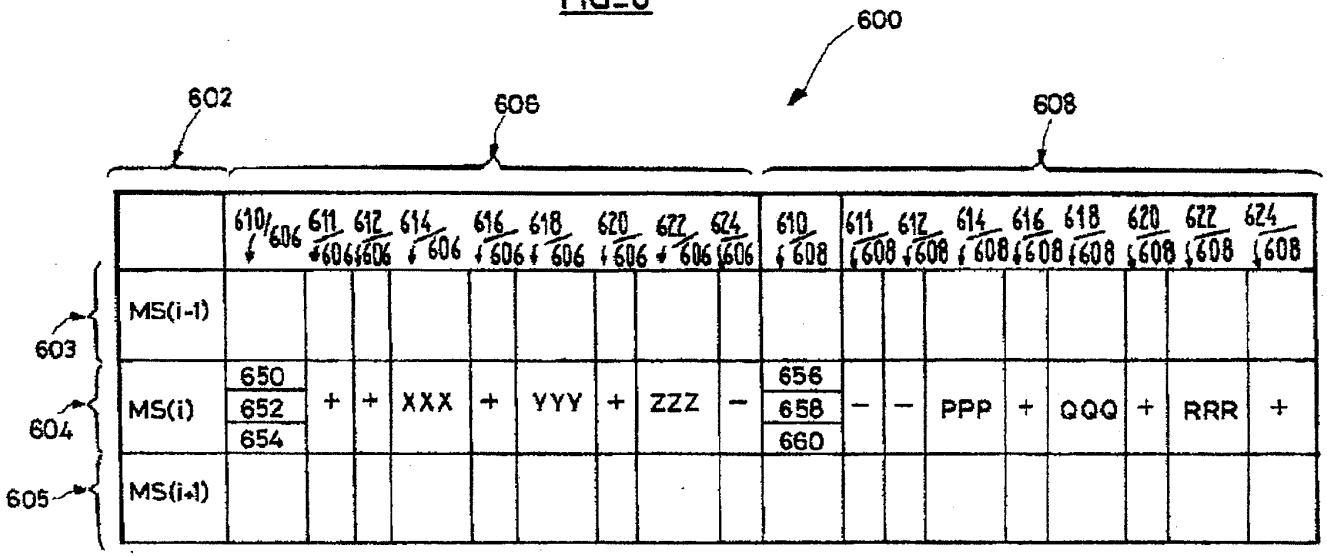
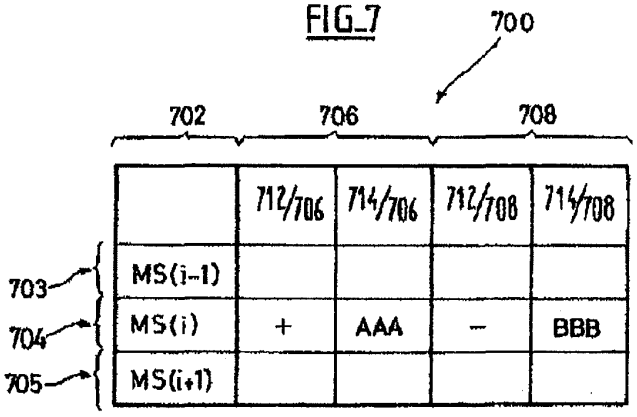

MS switch on
500
MS observ. CH & proc. SIG
510
No
514
512
Receiving defining SIG?
Yes
516
Search WD reliable info
518
No
522
Receiving distinctive defining SIG?
520
Yes
524
(re)send presence UPD SIG
526
532
No
ACK from SOMs?
530
531
Yes
UPD parameters DB in SOMs
534

FIG_6



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APPLE INC.

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)

Electronic Acknowledgement Receipt	
EFS ID:	22618140
Application Number:	14738083
International Application Number:	
Confirmation Number:	4555
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:	122358-385724
Receipt Date:	12-JUN-2015
Filing Date:	
Time Stamp:	15:10:19
Application Type:	Utility under 35 USC 111(a)

Payment information:

Submitted with Payment	yes
Payment Type	Deposit Account
Payment was successfully received in RAM	$730
RAM confirmation Number	1689
Deposit Account	220261
Authorized User	KAMINSKI, JEFFRI A
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File Listing:

Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1		385724Application.pdf	175771 74eaf38b3dd7b62a634b8e57acf9e4d43ed754e0	yes	38
	Multipart Description/PDF files in .zip description				
	Document Description		**Start**	**End**	
	Specification		1	34	
	Claims		35	37	
	Abstract		38	38	
Warnings:					
Information:					
2	Drawings-only black and white line drawings	figures.pdf	144735 757f28468c2f0bb89d40c0a04abdbb5690b00ee1	no	7
Warnings:					
Information:					
3	Transmittal of New Application	385724Transmittal.pdf	121590 3a3407fadc97434f3b3ec5fdbd60b7d8b825858d	no	1
Warnings:					
Information:					
4	Application Data Sheet	385724ADS.pdf	80917 567a8a3a7f99620e49167468d4a33c35b5a64830	no	4
Warnings:					
Information:					
This is not an USPTO supplied ADS fillable form					
5	Oath or Declaration filed	declaration.pdf	81207 f732bb431094c7f459d708b70d714f1399d5b1ec	no	1
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Information:					

6	Fee Worksheet (SB06)	fee-info.pdf	35393 7fee490052fd81f4daa0264cc0fb97c8b1a28d77	no	2
Warnings:					
Information:					
			Total Files Size (in bytes):	639613	

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(Use as many sheets as necessary)

Sheet 1 of 2

Complete if Known	
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First Named Inventor	Carlos A. Pérez LaFuente
Art Unit	Not Yet Assigned
Examiner Name	Not Yet Assigned
Attorney Docket Number	122358-385724

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.	
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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.

PTO/SB/08b (07-09)
Approved for use through 07/31/2012. OMB 0651-0031
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Substitute for form 1449/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Use as many sheets as necessary)

Sheet 2 of 2

Complete if Known	
Application Number	14/738,083
Filing Date	June 12, 2015
First Named Inventor	Carlos A. Pérez LaFuente
Art Unit	Not Yet Assigned
Examiner Name	Not Yet Assigned
Attorney Docket Number	122358-385724

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:	22621382
Application Number:	14738083
International Application Number:	
Confirmation Number:	4555
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:	122358-385724
Receipt Date:	12-JUN-2015
Filing Date:	
Time Stamp:	17:11:48
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	385724IDS.pdf	84971 8780d65d0e055a870848f66c4d2ee9ec5a9b159b	no	2
Warnings:					
Information:					

2	Information Disclosure Statement (IDS) Form (SB08)	385724SB08.pdf	167063 7112ae7ff94659ccf603cdedf931630542303 3d8	no	2

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Total Files Size (in bytes):	252034

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

In re Patent Application of: Carlos A. Pérez LaFuente	Art Unit: Not Yet Assigned
Application No: 14/738,083	Examiner: Not Yet Assigned
Confirmation No: 4555	
Filed: June 12, 2015	Atty. Docket No: 122358-385724
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. 14/738,176, 14/738,256 and 14/738,350, all filed on the same date, June 12, 2015.

Copies of the references on the PTO/SB/08 are not provided because they were previously cited by or submitted to the Office in prior application numbers 14/561426 filed

December 5, 2014, 14/315703 filed June 26, 2014, 14/250517 filed April 11, 2014, 12/294641 filed March 27, 2007 and relied upon in this application for an earlier filing date under 35 U.S.C. § 120.

In accordance with 37 C.F.R. § 1.97(g), the filing of this Information Disclosure Statement shall not be construed to mean that a search has been made or that no other material information as defined in 37 C.F.R. § 1.56(a) exists. In accordance with 37 C.F.R. § 1.97(h), the filing of this Information Disclosure Statement shall not be construed to be an admission that any patent, publication or other information referred to therein is "prior art" for this invention unless specifically designated as such.

It is submitted that the Information Disclosure Statement is in compliance with 37 C.F.R. § 1.98 and the Examiner is respectfully requested to consider the listed references.

The Director is hereby authorized to charge any deficiency in the fees filed, asserted to be filed or which should have been filed herewith (or with any paper hereafter filed in this application by this firm) to our Deposit Account No. 22-0261, under Order No. 122358-385724.

Dated: June 12, 2015

Respectfully submitted,

9798606

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