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UTILITY PATENT APPLICATION TRANSMITTAL

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

Attorney Docket No.	9466-24TSCT2
First Named Inventor	Peter D. Karabinis
Title	MOBILE DEVICE MODE ENABLEMENT RESPONSIVE TO A PROXIMITY CRITERIO
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. [✓] **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. [✓] **Specification** [*Total Pages* 23] Both the claims and abstract must start on a new page. *(See MPEP § 608.01(a) for information on the preferred arrangement)*
5. [✓] **Drawing(s)** (35 U.S.C. 113) [*Total Sheets* 3]
6. **Inventor's Oath or Declaration** [*Total Pages* 2] *(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. [✓] A copy from a prior application (37 CFR 1.63(d))
7. [✓] **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. [✓] **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:** REMARKS ACCOMPANYING CONTINUATION APPLICATION

***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

[✓] The address associated with Customer Number: 20792 **OR** [ ] Correspondence address below

Name					
Address					
City		State		Zip Code	
Country		Telephone		Email	

Signature	Vernon Guthrie	Date	November 1, 2017
Name (Print/Type)	Vernon H. Guthrie	Registration No. (Attorney/Agent)	63,798

This collection of information is required by 37 CFR 1.53(b). The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

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

 GOOGLE EXHIBIT 1004

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Application Data Sheet 37 CFR 1.76	Attorney Docket Number	9466-24TSCT2
	Application Number	
Title of Invention	MOBILE DEVICE MODE ENABLEMENT RESPONSIVE TO A PROXIMITY CRITERION	

The application data sheet is part of the provisional or nonprovisional application for which it is being submitted. The following form contains the bibliographic data arranged in a format specified by the United States Patent and Trademark Office as outlined in 37 CFR 1.76.
This document may be completed electronically and submitted to the Office in electronic format using the Electronic Filing System (EFS) or the document may be printed and included in a paper filed application.

Secrecy Order 37 CFR 5.2:

☐ Portions or all of the application associated with this Application Data Sheet may fall under a Secrecy Order pursuant to 37 CFR 5.2 (Paper filers only. Applications that fall under Secrecy Order may not be filed electronically.)

Inventor Information:

Inventor 1 Remove

Legal Name

Prefix	Given Name	Middle Name	Family Name	Suffix
	Peter	D.	Karabinis	

Residence Information (Select One) ◉ US Residency ◯ Non US Residency ◯ Active US Military Service

City	Cary	State/Province	NC	Country of Residence i	US

Mailing Address of Inventor:

Address 1	101 Chalon Drive		
Address 2			
City	Cary	State/Province	NC
Postal Code	27511	Country i	US

Inventor 2 Remove

Legal Name

Prefix	Given Name	Middle Name	Family Name	Suffix
	Rajendra		Singh	

Residence Information (Select One) ◉ US Residency ◯ Non US Residency ◯ Active US Military Service

City	Indian Creek Village	State/Province	FL	Country of Residence i	US

Mailing Address of Inventor:

Address 1	23 Indian Creek Island Road		
Address 2			
City	Indian Creek Village	State/Province	FL
Postal Code	33154	Country i	US

All Inventors Must Be Listed - Additional Inventor Information blocks may be generated within this form by selecting the **Add** button. Add

Correspondence Information:

Enter either Customer Number or complete the Correspondence Information section below.
For further information see 37 CFR 1.33(a).

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☐ **An Address is being provided for the correspondence Information of this application.**

Customer Number	20792	
Email Address	instructions@myersbigel.com	Add Email / Remove Email

Application Information:

Title of the Invention	MOBILE DEVICE MODE ENABLEMENT RESPONSIVE TO A PROXIMITY CRITERION		
Attorney Docket Number	9466-24TSCT2	**Small Entity Status Claimed**	☒
Application Type	Nonprovisional		
Subject Matter	Utility		
Total Number of Drawing Sheets (if any)	3	**Suggested Figure for Publication (if any)**	

Filing By Reference:

Only complete this section when filing an application by reference under 35 U.S.C. 111(c) and 37 CFR 1.57(a). Do not complete this section if application papers including a specification and any drawings are being filed. Any domestic benefit or foreign priority information must be provided in the appropriate section(s) below (i.e., "Domestic Benefit/National Stage Information" and "Foreign Priority Information").

For the purposes of a filing date under 37 CFR 1.53(b), the description and any drawings of the present application are replaced by this reference to the previously filed application, subject to conditions and requirements of 37 CFR 1.57(a).

Application number of the previously filed application	Filing date (YYYY-MM-DD)	Intellectual Property Authority or Country

Publication Information:

☐ Request Early Publication (Fee required at time of Request 37 CFR 1.219)

☐ **Request Not to Publish.** I hereby request that the attached application not be published under 35 U.S.C. 122(b) and certify that the invention disclosed in the attached application **has not and will not** be the subject of an application filed in another country, or under a multilateral international agreement, that requires publication at eighteen months after filing.

Representative Information:

Representative information should be provided for all practitioners having a power of attorney in the application. Providing this information in the Application Data Sheet does not constitute a power of attorney in the application (see 37 CFR 1.32).
Either enter Customer Number or complete the Representative Name section below. If both sections are completed the customer Number will be used for the Representative Information during processing.

Please Select One:	◉ Customer Number	○ US Patent Practitioner	○ Limited Recognition (37 CFR 11.9)
Customer Number	20792		

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Application Data Sheet 37 CFR 1.76	Attorney Docket Number	9466-24TSCT2
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Domestic Benefit/National Stage Information:

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 benefit claim 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.
When referring to the current application, please leave the "Application Number" field blank.

Prior Application Status	Pending		Remove
Application Number	Continuity Type	Prior Application Number	Filing or 371(c) Date (YYYY-MM-DD)
	Continuation of	15/251882	2016-08-30

Prior Application Status	Patented		Remove		
Application Number	Continuity Type	Prior Application Number	Filing Date (YYYY-MM-DD)	Patent Number	Issue Date (YYYY-MM-DD)
15/251882	Continuation of	12/264711	2008-11-04	9462411	2016-10-04

Additional Domestic Benefit/National Stage Data may be generated within this form by selecting the **Add** button.

Foreign Priority Information:

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)[i] 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).

Remove

Application Number	Country[i]	Filing Date (YYYY-MM-DD)	Access Code[i] (if applicable)

Additional Foreign Priority Data may be generated within this form by selecting the **Add** button.

Statement under 37 CFR 1.55 or 1.78 for AIA (First Inventor to File) Transition Applications

☐ 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.
NOTE: By providing this statement under 37 CFR 1.55 or 1.78, this application, with a filing date on or after March 16, 2013, will be examined under the first inventor to file provisions of the AIA.

Application Data Sheet 37 CFR 1.76	Attorney Docket Number	9466-24TSCT2
	Application Number	
Title of Invention	MOBILE DEVICE MODE ENABLEMENT RESPONSIVE TO A PROXIMITY CRITERION	

Authorization or Opt-Out of Authorization to Permit Access:

When this Application Data Sheet is properly signed and filed with the application, applicant has provided written authority to permit a participating foreign intellectual property (IP) office access to the instant application-as-filed (see paragraph A in subsection 1 below) and the European Patent Office (EPO) access to any search results from the instant application (see paragraph B in subsection 1 below).

Should applicant choose not to provide an authorization identified in subsection 1 below, applicant **must opt-out** of the authorization by checking the corresponding box A or B or both in subsection 2 below.

NOTE: This section of the Application Data Sheet is **ONLY** reviewed and processed with the **INITIAL** filing of an application. After the initial filing of an application, an Application Data Sheet cannot be used to provide or rescind authorization for access by a foreign IP office(s). Instead, Form PTO/SB/39 or PTO/SB/69 must be used as appropriate.

1. Authorization to Permit Access by a Foreign Intellectual Property Office(s)

A. Priority Document Exchange (PDX) - Unless box A in subsection 2 (opt-out of authorization) is checked, the undersigned hereby **grants the USPTO authority** to provide the European Patent Office (EPO), the Japan Patent Office (JPO), the Korean Intellectual Property Office (KIPO), the State Intellectual Property Office of the People's Republic of China (SIPO), the World Intellectual Property Organization (WIPO), and any other foreign intellectual property office participating with the USPTO in a bilateral or multilateral priority document exchange agreement in which a foreign application claiming priority to the instant patent application is filed, access to: (1) the instant patent application-as-filed and its related bibliographic data, (2) any foreign or domestic application to which priority or benefit is claimed by the instant application and its related bibliographic data, and (3) the date of filing of this Authorization. See 37 CFR 1.14(h)(1).

B. Search Results from U.S. Application to EPO - Unless box B in subsection 2 (opt-out of authorization) is checked, the undersigned hereby **grants the USPTO authority** to provide the EPO access to the bibliographic data and search results from the instant patent application when a European patent application claiming priority to the instant patent application is filed. See 37 CFR 1.14(h)(2).

The applicant is reminded that the EPO's Rule 141(1) EPC (European Patent Convention) requires applicants to submit a copy of search results from the instant application without delay in a European patent application that claims priority to the instant application.

2. Opt-Out of Authorizations to Permit Access by a Foreign Intellectual Property Office(s)

☐ A. Applicant **DOES NOT** authorize the USPTO to permit a participating foreign IP office access to the instant application-as-filed. If this box is checked, the USPTO will not be providing a participating foreign IP office with any documents and information identified in subsection 1A above.

☐ B. Applicant **DOES NOT** authorize the USPTO to transmit to the EPO any search results from the instant patent application. If this box is checked, the USPTO will not be providing the EPO with search results from the instant application.

NOTE: Once the application has published or is otherwise publicly available, the USPTO may provide access to the application in accordance with 37 CFR 1.14.

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Application Data Sheet 37 CFR 1.76	Attorney Docket Number	9466-24TSCT2
	Application Number	
Title of Invention	MOBILE DEVICE MODE ENABLEMENT RESPONSIVE TO A PROXIMITY CRITERION	

Applicant Information:

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.

Applicant 1

If the applicant is the inventor (or the remaining joint inventor or inventors under 37 CFR 1.45), this section should not be completed. The information to be provided in this section is the name and address of the legal representative who is the applicant under 37 CFR 1.43; or the name and address of the assignee, person to whom the inventor is under an obligation to assign the invention, or person who otherwise shows sufficient proprietary interest in the matter who is the applicant under 37 CFR 1.46. If the applicant is an applicant under 37 CFR 1.46 (assignee, person to whom the inventor is obligated to assign, or person who otherwise shows sufficient proprietary interest) together with one or more joint inventors, then the joint inventor or inventors who are also the applicant should be identified in this section.

Clear

◉ Assignee	○ Legal Representative under 35 U.S.C. 117	○ Joint Inventor
○ Person to whom the inventor is obligated to assign.	○ Person who shows sufficient proprietary interest	

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:

If the Applicant is an Organization check here. ☒

Organization Name	Telcom Ventures, LLC		
Mailing Address Information For Applicant:			
Address 1	200 South Biscayne Blvd.		
Address 2	Suite 2790		
City	Miami	**State/Province**	FL
Country	US	Postal Code	33131
Phone Number		Fax Number	
Email Address			

Additional Applicant Data may be generated within this form by selecting the Add button.

Assignee Information including Non-Applicant Assignee Information:

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.

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Application Data Sheet 37 CFR 1.76	Attorney Docket Number	9466-24TSCT2
	Application Number	
Title of Invention	MOBILE DEVICE MODE ENABLEMENT RESPONSIVE TO A PROXIMITY CRITERION	

Assignee 1

Complete this section if assignee information, including non-applicant assignee information, is desired to be included on the patent application publication. An assignee-applicant identified in the "Applicant Information" section will appear on the patent application publication as an applicant. For an assignee-applicant, complete this section only if identification as an assignee is also desired on the patent application publication.

If the Assignee or Non-Applicant Assignee is an Organization check here. ☐

Prefix	**Given Name**	Middle Name	**Family Name**	Suffix

Mailing Address Information For Assignee including Non-Applicant Assignee:

Address 1			
Address 2			
City		**State/Province**	
Country i		Postal Code	
Phone Number		Fax Number	
Email Address			

Additional Assignee or Non-Applicant Assignee Data may be generated within this form by selecting the Add button.

Signature:

NOTE: This Application Data Sheet must be signed in accordance with 37 CFR 1.33(b). **However, if this Application Data Sheet is submitted with the INITIAL filing of the application and either box A or B is not checked in subsection 2 of the "Authorization or Opt-Out of Authorization to Permit Access" section, then this form must also be signed in accordance with 37 CFR 1.14(c).**

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	Vernon Guthrie			Date (YYYY-MM-DD)	2017-11-01
First Name	Vernon H.	Last Name	Guthrie	Registration Number	63798

Additional Signature may be generated within this form by selecting the Add button.

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MOBILE DEVICE MODE ENABLEMENT RESPONSIVE TO A PROXIMITY CRITERION

Cross-Reference to Related Application

[0001] The present application is a continuation of Application No. 15/251,882, filed August 30, 2016, which is itself a continuation of Application No. 12/264,711, filed November 4, 2008, entitled *"Mobile Device Mode Enablement Responsive to a Proximity Criterion"*, assigned to the assignee of the present invention, the disclosures of which are hereby incorporated herein by reference as if set forth fully herein.

Field of the Invention

[0002] This invention relates to systems, devices and/or methods that may be used to provide an adaptive enablement of one or more communications modes based upon having satisfied a proximity criterion. The one or more communications modes may be one or more wireless and/or non-wireless communications modes.

Background of the Invention

[0003] Adaptivity and mobility aspects of wireless communications are becoming more important in people's lives. People are relying more and more on mobile wireless devices to perform an ever-increasing suite of functions such as, for example, navigation, e-mail, web surfing, streaming video, etc. However, there is a rigidity aspect that is associated with wireless mobile devices in that a wireless mobile device is typically configured to be capable of performing a predetermined number of functions independent of its location, Time-of-Day (ToD), velocity, acceleration, temperature, sensing of a signal, etc. It would, for example, be desirable to have a mobile wireless device act as a "wallet" (over and above other functions) only when it is time to pay for an item and not act as a wallet when there is no need to do so.

[0004] The present invention, addresses these limitations (i.e., the rigidity) of current wireless mobile devices. Accordingly, embodiments of the present invention

provide systems, devices and/or methods that may be used to enable adaptively one or more modes/functions of a device based upon having satisfied by the device (or another device) a proximity condition/criterion.

[0005] As used herein, the term "end-user device," "wireless mobile device," "mobile wireless device" or simply "device" includes any electronic device that may be used to transmit/receive information wirelessly and/or non-wirelessly such as, for example, a Digital Subscriber Line (DSL) modem/transceiver; a cable modem/transceiver; a cellular and/or satellite radiotelephone with or without a multi-line display; Personal Communications System (PCS) terminals that may combine a radiotelephone with data processing, facsimile and/or data communications capabilities; Personal Digital Assistants (PDA) that can include a radio frequency transceiver and/or a pager, Internet/Intranet access, Web browser, organizer, calendar and/or a global positioning system (GPS) receiver; laptop and/or palmtop computers or other appliances, which may (or may not) include a radio frequency transceiver.

[0006] An end-user device also may be referred to herein as a radiotelephone, radioterminal, mobile terminal, user device, wireless device, device and/or terminal; etc. As used herein, the term end-user device and/or any of its synonyms also include(s) any other radiating device/equipment/source that may have time-varying or fixed geographic coordinates and/or may be portable, transportable, installed in a vehicle (aeronautical, maritime, or land-based) and/or situated and/or configured to operate locally and/or in a distributed fashion over one or more terrestrial and/or extra-terrestrial location(s).

Brief Description of the Drawings

[0007] FIG. 1 depicts a communication system that detects a proximity criterion in accordance with the claimed embodiments;

[0008] FIG. 2 depicts another communication system that detects a proximity criterion in accordance with the claimed embodiments;

[0009] FIG. 3 is a flow chart illustrating a method of detecting proximity criterion and enabling functions or modes on devices in accordance with the claimed embodiments.

Detailed Description

[00010] The present invention now will be described more fully hereinafter with reference to specific embodiments and/or the accompanying drawing(s), in which embodiments of the invention are shown. This invention may, however, be embodied in many different forms and should not be construed as limited to the embodiments set forth herein. Rather, these embodiments are provided so that this disclosure will be thorough and complete, and will fully convey the scope of the invention to those skilled in the art.

[00011] It will be understood that when an element is referred to as being "connected," "coupled" and/or "responsive" to another element, it can be directly connected, coupled and/or responsive to the other element or intervening elements may be present. Furthermore, "connected," "coupled" and/or "responsive" as used herein may include wirelessly connected, coupled and/or responsive. The terminology used herein is for the purpose of describing particular embodiments only and is not intended to be limiting of the invention. As used herein, the singular forms "a," "an" and/or "the" are intended to include the plural forms as well, unless expressly stated otherwise. It will be further understood that the terms "includes," "comprises," "including" and/or "comprising," when used in this specification, specify the presence of stated features, integers, steps, operations, elements, and/or components, but do not preclude the presence and/or addition of one or more other features, integers, steps, operations, elements, components, and/or groups thereof.

[00012] Unless otherwise defined, all terms (including technical and scientific terms) used herein have the same meaning as commonly understood by one of ordinary skill in the art to which this invention belongs. It will be further understood that terms, such as those defined in commonly used dictionaries, should be interpreted as having a meaning that is consistent with their meaning in the context of the relevant art and the present disclosure, and will not be interpreted in an idealized or overly formal sense unless expressly so defined herein.

[00013] Furthermore, it will be understood that although terms such as, for example, first and second may be used herein to describe various elements, these

elements should not be limited by these terms. These terms are only used to distinguish one element from another element. Thus, a first element below could be termed a second element, and similarly, a second element may be termed a first element without departing from the teachings of the present invention. As used herein, the term "and/or" includes any and all combinations of one or more of the associated listed items. The symbol "/" is also used as a shorthand notation for "and/or."

[00014] A mobile device such as, for example, a wireless communications device (e.g., a wireless terminal, a wireless/mobile phone, a Personal Digital Assistant (PDA), a smart phone, a multi-media device including Global Positioning System (GPS) capability, etc.) and/or one or more systems that is/are providing service to the mobile device and/or to a device other than the mobile device, may be configured to enable one or more modes/functions of the mobile device and/or of the device other than the mobile device, responsive to a proximity criterion having been satisfied.

[00015] In some embodiments, determining whether the proximity criterion is satisfied comprises determining by the mobile device and/or by the one or more systems of a location associated with the mobile device. In other embodiments, determining whether the proximity criterion is satisfied comprises determining by the device other than the mobile device and/or by the one or more systems of a location that is associated with the device other than the mobile device. The determining by the mobile device, by the device other than the mobile device and/or by the one or more systems may, in some embodiments, comprise reception and/or processing of GPS signals in order to determine a Time-of-Day (ToD), Time-of-Month (ToM), Time-of-Year (ToY), velocity, acceleration and/or position (in three-dimensional space). In other embodiments, the determining may be based upon the mobile device and/or the device other than the mobile device detecting a signal that is being radiated by a device that is attached to and/or is installed in/on an entity (i.e., a device that is associated with the entity). In still further embodiments, the device other than the mobile device may send a message to the mobile device requesting enablement of one or more modes/functions of the mobile device and/or of the device other than the mobile device and, responsive to an affirmative response by the mobile device, the

mobile device and/or the device other than the mobile device may enable the one or more modes/functions of the mobile device and/or of the device other than the mobile device.

[00016] The entity may, for example, be a person, an animal, a vehicle (ground-based, maritime and/or aeronautical), a building (residential, commercial and/or office), a product that is for sale, a store that sells one or more products, a check-out counter in a store, a shopping cart that may be used by a customer to carry one or more products selected by the customer for purchase, one or more locations in time and/or space, a geographic area and/or a multi-dimensional region in time and/or space.

[00017] The signal that is being radiated by the device that is attached to and/or is installed in the entity may include an element that may be *a priori* known by the mobile device and/or by the device other than the mobile device. As such, according to some embodiments, the mobile device and/or the device other than the mobile device may, when proximate to the entity, receive the signal that is being radiated by the device that is attached to and/or is installed in the entity, detect the element that may be *a priori* known by the mobile device and/or by the device other than the mobile device and thus determine that the mobile device and/or the device other than the mobile device is proximate to the entity.

[00018] It will be understood that the signal that is being radiated by the device that is attached to and/or is installed in the entity may be radiated at a relatively low power level so that it may be detected by the mobile device and/or by the device other than the mobile device only over a relatively small distance between, for example, the mobile device and the device that is attached to and/or is installed in the entity (e.g., over a distance that is, for example, less than 100 meters, in some embodiments or less than 10 meters, in other embodiments). It will also be understood that the element that may be *a priori* known by the mobile device and/or by the device other than the mobile device may comprise an identity associated with the entity. In some embodiments, the identity may comprise a number, a word/name, a location, a Time-of-Day (ToD), a unique code, a region of space and/or time, etc.

[00019] According to some embodiments, the mobile device and/or the device other than the mobile device may be configured so that a user of the mobile device and/or a user of the device other than the mobile device, a service provider providing service to the mobile device and/or providing service to the device other than the mobile device and/or a manufacturer of the mobile device and/or the device other than the mobile device may program the mobile device and/or the device other than the mobile device to recognize the element and/or the identity associated with the entity.

[00020] A number of examples/applications of the concepts disclosed above will now be described to further illustrate the scope and spirit of the present invention to those skilled in the art.

[00021] **Example/Application No. 1:** A motor vehicle, such as, for example, a car, may be configured with a low-power radiator that radiates a signal that includes an identity of the motor vehicle, a velocity of the motor vehicle, an acceleration of the motor vehicle, a position of the motor vehicle, a Time-of-Day (ToD), a Time-of-Month (ToM), a Time-of-Year (ToY) and/or an indication of a content of the motor vehicle. Now imagine a person who is associated with the motor vehicle (e.g., an owner/driver of the motor vehicle) is approaching the motor vehicle. Let us assume that the person who is approaching the motor vehicle and is associated with the motor vehicle carries a wireless communications device. The wireless communications device may be configured to sense the signal that is being radiated by the low-power radiator, detect the identity of the motor vehicle and compare the detected identity with one or more *a priori* identities that are stored in the wireless communications device. If a match is found, the communications device may be configured to selectively enable, responsive to the match, for example, a "pay toll" function. Accordingly, as the motor vehicle approaches an access point that is configured to radiate a signal associated with toll collection, the communications device, responsive to having detected the signal associated with toll collection, may be configured to transmit information that may be used by the access point and/or by an associated toll collection system that may be connected to the access point to debit an account that is associated with a user and/or owner of the communications device. In further

embodiments of the present invention, if the match is found, the communications device may be configured to selectively enable, responsive to the match and responsive to a velocity of the motor vehicle, an acceleration of the motor vehicle, a position of the motor vehicle, a Time-of-Day (ToD), a Time-of-Month (ToM), a Time-of-Year (ToY) and/or a content of the motor vehicle, for example, the "pay toll" function. It will be understood that the velocity of the motor vehicle, the acceleration of the motor vehicle, the position of the motor vehicle, the ToD, the ToM and/or the ToY may be provided by the communications device (based on GPS signal processing, and/or based on any other means, that may be performed/implemented by the communications device and/or by a network that may be providing service to the communications device) and/or by the motor vehicle.

[00022] The wireless communications device may be configured to keep the pay toll function enabled for as long as the wireless communications device is able to sense the signal that is being radiated by the low-power radiator (i.e., the signal that includes an identity of the motor vehicle) and to selectively disable the pay toll function a short time after the wireless communications device is no longer able to sense the signal that is being radiated by the low-power radiator. In further embodiments, the wireless communications device may be configured to keep the pay toll function enabled as long as the wireless communications device is able to sense the signal that is being radiated by the low-power radiator and a specific value (or values) associated with at least one of a velocity of the motor vehicle, an acceleration of the motor vehicle, a position of the motor vehicle, a ToD, a ToM, a ToY and a content of the motor vehicle is/are being met/satisfied.

[00023] In accordance with some embodiments, even though the wireless communications device does not find a match but is able to sense the signal that is being radiated by the low-power radiator, the wireless communications device may be configured to provide a notification (e.g., a sound, a vibration, a light and/or an alpha-numeric display, etc.). Responsive to the notification, a user of the wireless communications device may instruct (for example, manually or via voice command) the wireless communications device to enable the pay toll function.

[00024] In further embodiments, a second wireless communications device that belongs to and/or is being used by a second person, senses a signal and, responsive to having sensed the signal (whether a match is found or not) sends a request selectively to a first wireless communications device. Responsive to the request, the first wireless communications device sends an acknowledgement and/or an authorization to the second wireless communications device. Responsive to the acknowledgement and/or authorization the second wireless communications device selectively enables a mode which, according to some embodiments, is the pay toll function. It will be understood that the first and second wireless communications devices may, according to some embodiments, be predetermined to function as described above. That is, the first wireless communications device acting as a "master" and the second wireless communications device acting as a "slave" in that the second wireless communications device is configured to enable a mode/function thereof responsive to a detection/match and responsive to receiving an authorization from the first wireless communications device. If the mode/function comprises paying for a transaction, an amount of money associated with the paying may be deducted/withdrawn from an account associated with an owner/user of the first wireless communications device.

[00025] Thus, according to some embodiments, the first wireless communications device functions independently and/or autonomously whereas the second wireless communications device functions dependently on the first wireless communications device, at least as far as at least one of its modes/functions is concerned. The master-slave relationship between the first and second wireless communications devices may, according to some embodiments, be predetermined. In other embodiments, the master-slave relationship may not be predetermined and may be negotiated and/or established, as a need for such a relationship arises, by exchanging information between the first and second wireless communications devices. It will be understood that, in some embodiments, at least one of the first and second wireless communications devices may not be a wireless communications device.

[00026] **Example/Application No. 2:** A wireless communications device may be configured to estimate a location associated therewith and may also be configured to estimate a value of at least one other parameter that may be associated with the

wireless communications device, an environment thereof and/or an entity (living or otherwise) that is associated with and/or is proximate to the wireless communications device. The "at least one other parameter" may, for example, be a velocity, acceleration, ToD, ToM, ToY, humidity, temperature, height, level of brightness, level of darkness, a blood pressure, a heart rate, a blood content, a physiological state, a psychological state, etc. As those skilled in the art will appreciate, the wireless communications device may be configured to estimate its location and the value of the "at least one other parameter" by, for example, processing GPS signals and/or by using other means and/or sensors that may, according to some embodiments, be device-based and/or network assisted/based means and/or sensors.

[00027] According to some embodiments, the wireless communications device may be configured to make a comparison between an estimate of its location and one or more other locations, that may be one or more other predetermined and/or pre-stored locations, and the wireless communications device may be configured to selectively enable a first communications mode/function responsive to an outcome of the comparison and/or to selectively disable a second communications mode/function responsive to the outcome of the comparison. In other embodiments, the wireless communications device may be configured to selectively enable the first communications mode/function responsive to the outcome of the comparison and/or responsive to a value of another parameter, such as, for example, a value associated with the "at least one other parameter" list and/or selectively disable the second communications mode/function responsive to the outcome of the comparison and/or responsive to a value of another parameter, such as, for example, a value associated with the "at least one other parameter" list.

[00028] For example, in some embodiments, if a comparison between an estimate of location of the wireless communications device and the one or more locations that are predetermined and/or pre-stored reveals a distance therebetween that is less than or equal to a threshold, the wireless communications device may be configured to selectively and/or preferentially enable a first communications mode, that may be one communications mode of a plurality of communications modes, that uses, for example, a first air interface protocol and a first set of frequencies to communicate

information wirelessly (wherein the first set of frequencies may be a predetermined first set of frequencies), while refraining from using (and/or using only infrequently and/or as a last resort depending on an emergency, need and/or a priority) a second communications mode, of the plurality of communications modes, comprising a second set of frequencies and/or a second air interface protocol. In some embodiments, refraining from using (and/or using only infrequently and/or as a last resort depending on an emergency, need and/or a priority) a second communications mode comprises selectively and/or preferentially disabling the second communications mode that uses, for example, the second air interface protocol and/or the second set of frequencies. It will be understood that, according to some embodiments, the first and/or second air interface protocols may be predetermined and that the first and/or second set of frequencies may also be predetermined. In further embodiments, at least one of the first air interface protocol, the second air interface protocol, the first set of frequencies and the second set of frequencies may not be predetermined and may be determined as required responsive to receiving a message, sensing/detecting at least a portion of an electro-magnet spectrum and/or via other means such as, for example, a user choice/preference/command.

[00029] In some embodiments, the first communications mode may comprise an air interface protocol, such as, for example, an Orthogonal Frequency Division Multiplexed and/or an Orthogonal Frequency Division Multiple Access (OFDM/OFDMA) protocol, a WiFi- and/or WiMAX-based air interface protocol that may be based upon Time Division Duplex (TDD) operation wherein a common set of frequencies are used bi-directionally (at different times) to provide uplink and downlink communications, and the first and/or second set of frequencies may comprise, for example, an un-licensed use and/or a licensed use set of frequencies.

[00030] In further embodiments, the wireless communications device may further be configured to selectively enable (or to prefer) a first communications mode and/or to selectively refrain from using (or avoid from using unless a level of priority and/or other reason is provided) a second communications mode, responsive to the comparison of position that was discussed earlier and/or responsive to a value of a quantity/parameter, such as, for example, a value associated with the “at least one

other parameter" and/or responsive to an event (man-caused or natural). The first communications mode may comprise a first air interface protocol and a first set of frequencies for transmission/reception of information and the second communications mode may comprise a second air interface protocol, that may be different from the first air interface protocol, and/or a second set of frequencies for transmission and/or reception of information that may be different (or at least partially different) from the first set of frequencies.

[00031] The wireless communications device may be configured to repeatedly make a decision based on the comparison of position that was discussed earlier, based on the value of a quantity/parameter, such as, for example, a value associated with the "at least one other parameter" and/or based on the event (man-caused and/or natural), to maintain the first communications mode enabled and/or to maintain the second communications mode disabled for as long as the comparison of position, the value of the quantity/parameter and/or the event (man-caused and/or natural) continues to satisfy a threshold criterion and to disable the first communications mode and/or enable the second communications mode after the wireless communications device determines that the comparison of position, the value of the quantity/parameter and/or the event no longer satisfies the threshold criterion.

[00032] In further embodiments, responsive to the comparison of position, the value of the quantity/parameter and/or the event satisfying the threshold criterion, the wireless communications device may be configured to send information (automatically or upon user command) selectively to one or more other devices that, according to some embodiments, may be predetermined other devices. In still other embodiments, responsive to the comparison of position, the value of the quantity/parameter and/or the event satisfying the threshold criterion, the wireless communications device may be configured to receive information (automatically or upon user command) selectively from one or more other devices that, according to some embodiments, may be predetermined other devices.

[00033] **Example/Application No. 3:** A shopping cart, for example, of the type used in a grocery and/or super-market store, may be configured to sense/detect one or more items that are placed in the shopping cart. As used herein, the term "configured

to sense/detect" may, in some embodiments, comprise sensing/detecting, for example, a weight, a manufacturer, an expiration date, a price and/or a nutritional value, etc. associated with the one or more items, wherein the sensing/detecting may be performed based upon any technology, such as, for example, a Radio Frequency (RF) tagging technology, a bar-code technology, an image recognition technology and/or any other technology.

[00034] Each shopping cart may include an identity (e.g., a number). Mr. Jones (a customer), who chooses a shopping cart having as identity a number such as, for example, "8787," may insert the number 8787 into a wireless communications device that Mr. Jones is carrying/using. Upon inserting the number 8787 into the wireless communications device, the wireless communications device may be configured to selectively establish a communications link, that may, in some embodiments, be a short-range communications link, with the shopping cart having identity 8787. From that time on, as the shopping cart senses/detects the one or more items that are placed in the shopping cart, information associated with the sensing/detecting of the one or more items, including price information associated with the one or more items, is transferred to Mr. Jones' wireless communications device via the communications link that is selectively established between Mr. Jones' wireless communications device and shopping cart 8787.

[00035] In the event that Mr. Jones decides to put back on a shelf an item that has been placed in shopping cart 8787, that item is sensed/detected by the shopping cart as having been withdrawn/deleted from the shopping cart and at least some information associated therewith is withdrawn/deleted, or at least changed, from Mr. Jones' wireless communications device via one or more commands/messages sent to the wireless communications device by the shopping cart, via the communications link.

[00036] When Mr. Jones has finished shopping, Mr. Jones can examine the wireless communications device and may instruct the wireless communications device to perform a transaction, such as, for example, to pay for the one or more items that Mr. Jones has placed in shopping cart 8787. In some embodiments, the shopping cart including the one or more items and the wireless communications

device may need to be proximate to a specific location within the grocery and/or super market store (e.g., proximate to a "check-out" counter/location) before the wireless communications device and/or shopping cart (individually and/or jointly in communication therebetween) may enable a "pay" function by detecting a (short-range) signal that may be transmitted by/from the specific location.

[00037] **Other Embodiments:** Figures 1 and 2 illustrate further embodiments of the present invention. Additional embodiments may comprise systems and/or methods. For example, in one embodiment as illustrated in FIG. 1, a method in a system 10 is provided comprising: detecting that a proximity criterion is satisfied between a first device 14, such as a mobile subscriber device, and Entity 1; and enabling a mode of the first device and/or a mode of a second device 15 responsive to the detecting; where, according to some embodiments, the second device 15 is not the Entity 1 and is not associated with the Entity 1 and wherein the Entity 1 is not involved in providing a communications service to the first and/or second device. In one particular embodiment, a mobile subscriber device 14 linked to a communications system 18 via base station 12 can enable a function when the device 14 comes within a proximity of Entity 1. The function enabled can be any number of functions at the mobile subscriber device 14 or even at the mobile subscriber device 15. The mobile subscriber device 15 can also be linked to the communications system 18 via a base station 13. The function enabled can be a financial transaction, the transmission of communications, such as data, and/or some other function that may provision the mobile subscriber device 14 and/or the mobile subscriber device 15 with additional functionality not previously available/activated at the respective devices.

[00038] In one embodiment, the detection by mobile subscriber device 14 of a proximity criterion relative to Entity 1 can enable the mobile subscriber device 14 to authorize and complete a financial transaction such as the payment of a toll and/or of an item at a check out line. The same detection by mobile subscriber device 14 of the proximity criterion relative to Entity 1 can also or alternatively enable the mobile subscriber device 15 to authorize and complete a financial transaction such as the payment of a toll and/or a payment for an item at a check out line. The enablement of

the mobile subscriber device 15 may also be contingent on the mobile subscriber device 15 having satisfied a proximity criterion relative to a second entity, such as Entity 2. Thus, the proximity criterion can include various requirements depending on the particular application. The requirements may include at least one of having the device 14 being within a predetermined distance of Entity 1, the device 14 receiving a predetermined signal strength from Entity 1, being at such predetermined distance for a predetermined time interval and receiving a predetermined signal strength during the predetermined time interval. The requirements can also include having device 15 being within a predetermined distance and/or predetermined signal strength of Entity 2, and/or being within such predetermined distance and/or signal strength during a predetermined time interval. It will be understood that at least one of devices 16 and 17, shown in FIG. 1 as being attached to Entity 1 and Entity 2, respectively, may, according to some embodiments, comprise a wireless transmitter and/or receiver.

[00039] According to some embodiments, the detecting may be performed by the first device (i.e., radioterminal 14), by the second device (i.e., radioterminal 15), by a device that is associated with an entity (i.e., device 16 and/or device 17) and/or by a system that is associated with the first and/or second devices (i.e., system 18, base station 12 and/or base station 13). Also, in some embodiments, the enabling may be performed by the first device, by the second device, by a device that is associated with the entity and/or by a system that is associated with the first and/or second devices.

[00040] In some embodiments, the first device comprises a wireless communications device, the second device comprises a wireless communications device and/or the system that is associated with the first and/or second devices comprises a wireless communications system that is configured to provide a communications service to the first and/or second devices.

[00041] In further embodiments, detecting comprises: using position information associated with the first device; using position information associated with the second device; detecting a signal (and/or a signal strength measurement such as RSSI) that is being radiated by the first device; detecting a signal (and/or a signal strength) that is being radiated by the second device; and/or detecting a signal (and/or a signal

strength) that is being radiated by a device that is associated with the entity, wherein using position information may, according to some embodiments, comprise: evaluating a distance between the position information and one or more position values; and determining whether the distance is less than or equal to a threshold. In some embodiments, the one or more position values is/are predetermined.

[00042] In further embodiments, responsive to the enabling, the method comprises performing a function; wherein the function, according to some embodiments, comprises a financial transaction, receiving data and/or transmitting data. In some embodiments, receiving data comprises receiving data selectively from a first unit and wherein transmitting data comprises transmitting data selectively to a second unit. In some embodiments, the first and second units are the same unit, whereas in other embodiments the first and second units are different units. In further embodiments, the first and/or second units may be predetermined units and the first unit may comprise a wireless communications device and/or the second unit may comprise a wireless communications device. In yet further embodiments, the first unit may be associated with an Internet Protocol (IP) address and/or the second unit may be associated with an IP address.

[00043] Referring to FIG. 2, the first device 14 can traverse a path 23 within an overall coverage area 20 and the second device 15 can traverse a path 25 within the overall coverage area 20. The overall coverage area 20 can include areas 22 and 24 that can be associated with respective entities. The entry of the first device 14 within area 22 can selectively enable a mode and/or a function at device 14 and can optionally enable a mode and/or a function at device 15 based, according to some embodiments, on a proximity criterion to area 24. For example, if device 14 owned and/or operated by a user is at a first store within area 22 and the device 15 owned/operated by, for example, the user's spouse is at a second store within area 24, then the user's spouse at device 15 can complete a purchase within area 24 based on the user's presence with device 14 within area 22. Similarly, if the two users at devices 14 and 15 at respective areas 22 and 24 want to sample music, games and/or even play a game between each other, their respective device can be provisioned for such sampling as long as they stay within the proximity criteria set for each of the

respective devices. Once one or the other device goes beyond the respective proximity criterion, the mode and/or function enabling the sampling will be disabled at one or both devices.

[00044] In some embodiments according to the present invention, receiving data comprises receiving a position, a request and/or an acknowledgement and wherein transmitting data comprises transmitting a position, an authorization and/or an acknowledgement.

[00045] In further embodiments according to the present invention, the financial transaction comprises providing payment associated with a toll and/or providing payment associated with a purchase of one or more items.

[00046] In accordance with additional embodiments of the present invention, receiving data comprises receiving data once or repeatedly and transmitting data comprises transmitting data once or repeatedly.

[00047] It will be understood that relative to any one of the plurality of methods described above, the term "entity" may comprise a person, an animal, a building, a motor vehicle, a shopping cart, a product, a check-out counter, a geographic position, a geographic area and/or one or more locations in time and/or space.

[00048] In a further embodiment according to the present invention, a system is provided comprising: a detector that is configured to enable a mode of a first device and/or to enable a mode of a second device responsive to a detection that a proximity criterion is satisfied between the first device and an entity; wherein, according to some embodiments, the second device is not the entity and is not associated with the entity, and wherein, according to further embodiments, the entity is not involved in providing a communications service to the first and/or second device. In some embodiments, the detector is included in, and the detection is performed by, the first device, the second device, a device that is associated with the entity and/or a system that is associated with the first and/or second devices. Similarly, according to some embodiments, the detector is included in, and the mode is enabled by, the first device, the second device, a device that is associated with the entity and/or a system that is associated with the first and/or second devices.

[00049] Referring to FIG. 3, a flow chart illustrating a method 30 in accordance with an embodiment herein includes detecting that a proximity criterion is satisfied between a first device and an entity at 32. Note, that although the steps described are in a certain order in this embodiment, embodiments contemplated within the scope of the claims are not necessarily limited to a particular order or necessarily include every step described in method 30 and may further include additional steps as may be obvious to one of ordinarily skilled in the art. Method 30 can further include enabling a mode of the first device and/or a mode of a second device responsive to detecting satisfaction of the proximity criterion and while the proximity criterion is satisfied at 34, where the first device and the second device form a part of a communication system providing communications service to the first device and the second device. The second device can be independent of the entity and the entity can be independent of the communications service provided to the first and second device at shown at 36. The method at 38 can enable a mode of the first device and a mode of the second device responsive to detecting that the proximity criterion is satisfied between the first device and the entity. The first device and the second device can be mobile subscriber devices (i.e., radioterminals) and the entity can be a proximity beacon enabling a financial transaction between the first device or the second device and a vendor in communication with the first device or the second device at an access point maintained by the vendor or on behalf of the vendor. The access point can be a toll both, a point of purchase counter, or a check out counter and the first device and the second device can be cellular phones authorized selectively by its user and by satisfying the proximity criterion to proceed with a financial transaction associated with the vendor at the access point. As previously noted, although cellular phones are described, other communication devices are certainly within contemplation of the scope of the claims. The step of detecting can be done in any number of various ways. Detecting can include using position information associated with the first device relative to the entity or using position information of the second device relative to the entity or detecting a signal being radiated by the entity or detecting a signal being radiating by the first device and reflected by the entity or detecting a signal being radiating by the second device and reflected by the entity. In this regard,

the method 30 can further evaluate a distance between the position information and one or more position values and determine whether the distance is less than or equal to a threshold at 39.

[00050] In some embodiments, the first device comprises a wireless communications device and/or the second device comprises a wireless communications device and the system that is associated with the first and/or second devices comprises a wireless communications system.

[00051] In further embodiments, the detection comprises: use of position information associated with the first device; use of position information associated with the second device; a detection of a signal that is being radiated by the first device; a detection of a signal that is being radiated by the second device; and/or a detection of a signal that is being radiated by a device that is associated with the entity. In some embodiments, use of position information comprises: an evaluation of a distance between the position information and one or more position values; and a determination of whether the distance is less than or equal to a threshold. It will be understood, that according to some embodiments of the invention, the one or more position values may be predetermined position values.

[00052] In yet additional embodiments of the present invention, the first device and/or the second device may be configured to perform a function responsive to the mode having been enabled by the detector, wherein, according to some embodiments, the function may comprise a financial transaction, reception of data and/or transmission of data. In some embodiments, reception of data comprises reception of data selectively from a first unit and transmission of data comprises transmission of data selectively to a second unit. In accordance with some embodiments, the first and second units are the same unit and in accordance with other embodiments, the first and second units are different units. It will be understood that in some embodiments the first and/or second units may be first and second predetermined units.

[00053] In yet further embodiments of the invention, the first unit may comprise a wireless communications device and/or the second unit may comprise a wireless communications device. According to additional embodiments, the first unit is

associated with an Internet Protocol (IP) address and/or the second unit is associated with an IP address.

[00054] In some embodiments of the present invention, receiving data comprises receiving a position, a request and/or an acknowledgement and wherein transmitting data comprises transmitting a position, an authorization and/or an acknowledgement. According to other embodiments, the financial transaction comprises a payment of a toll and/or a payment associated with a purchase of one or more items. It will be understood that, in some embodiments, the reception of data comprises reception of data once or repeatedly and that, according to some embodiments, the transmission of data comprises transmission of data once or repeatedly. It will also be understood that according with any one of the embodiments described above (or any combination thereof) the term "entity," as used therein may comprise a person, an animal, a building, a motor vehicle, a shopping cart, a product that is on sale, a check-out counter, a geographic position, a geographic area and/or one or more locations in time and/or space.

[00055] In some embodiments according to the present invention, a system may comprise the detector, the first device, the second device, the entity, the device that is associated with the entity and/or the system that is associated with the first and/or second devices.

[00056] In the specification, there have been disclosed embodiments and, although specific terms are employed, they are used in a generic and descriptive sense only and not for purposes of limitation. The following claims are provided to set forth, at least in part, the scope of the present invention.

Claims:

1. A method of operating a smartphone to provide information to an entity, by communicating with the entity, using a first air interface; and to receive a communications service from a wireless network using a second air interface that differs from the first air interface, the communications service being received exclusively by the smartphone from the wireless network and not from the entity, the method comprising:

providing, using the first air interface, the information to the entity by the smartphone;

receiving by the smartphone, using the second air interface, the communications service exclusively from the wireless network and not from the entity, without communicating by the smartphone with the entity by using the first air interface; and

communicating by the smartphone with the entity, by using the first air interface, without receiving by the smartphone the communications service from the wireless network by using the second air interface.

2. The method of Claim 1, further comprising establishing a communications link between the smartphone and the entity in response to an identity.

3. The method of Claim 1, wherein:

said providing, using the first air interface, the information to the entity by the smartphone is performed over a first time interval;

said receiving by the smartphone, using the second air interface, the communications service exclusively from the wireless network and not from the entity, without communicating by the smartphone with the entity by using the first air interface, is performed over a second time interval;

said communicating by the smartphone with the entity, by using the first air interface, without receiving by the smartphone the communications service from the wireless network by using the second air interface is performed over a third time interval; and

any two of the first, second, and third time intervals are non-overlapping with one another.

4. A system comprising:

a smartphone comprising a processor that is configured to control the smartphone to perform operations comprising:

communicating by the smartphone with an entity using a first air interface;

providing, using the first air interface, information to the entity by the smartphone;

receiving by the smartphone, using a second air interface, a communications service exclusively from a wireless network and not from the entity, without communicating by the smartphone with the entity by using the first air interface; and

communicating by the smartphone with the entity, by using the first air interface, without receiving by the smartphone the communications service from the wireless network by using the second air interface.

5. The system according to Claim 4, further comprising the entity.

6. The system of Claim 4, wherein:

said providing, using the first air interface, information to the entity by the smartphone is performed over a first time interval;

said receiving by the smartphone, using a second air interface, a communications service exclusively from a wireless network and not from the entity, without communicating by the smartphone with the entity by using the first air interface is performed over a second time interval;

said communicating by the smartphone with the entity, by using the first air interface, without receiving by the smartphone the communications service from the wireless network by using the second air interface is performed over a third time interval; and

any two of the first, second, and third time intervals are non-overlapping with one another.

7. The system of Claim 4, wherein the second air interface is based upon an Orthogonal Frequency Division Multiplexed (OFDM) and/or Orthogonal Frequency Division Multiple Access (OFDMA) protocol.

8. The system of Claim 7, wherein the second air interface is based upon the OFDM protocol and the OFDMA protocol.

ABSTRACT

A system (10) and method (30) comprises a detector that is configured to enable a mode of a first device (14) and/or to enable a mode of a second device (15) responsive to a detection that a proximity criterion is satisfied between the first device and an entity (Entity 1) and responsive to at least one of a position, velocity and a Time-of-Day and where the second device is not the entity and is not associated with the entity, and where the entity is not involved in providing a communications service to the first and/or second device.

Attorney Docket No. 9466-24TSCT2 PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re: Karabinis et al.
Application No.: To Be Assigned
Filed: Concurrently Herewith
For: MOBILE DEVICE MODE ENABLEMENT RESPONSIVE TO A PROXIMITY CRITERION

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

REMARKS ACCOMPANYING CONTINUATION APPLICATION

Sir:

The present continuation application is being filed for new Claims 1-8. Support for these claims may be found, for example, in FIGS. 1 and 2, in paragraphs [0003], [0021], [0028]-[0030], [0032], [0034], [0037], [0043], and [0048] of the specification, and in the Abstract of the parent application.

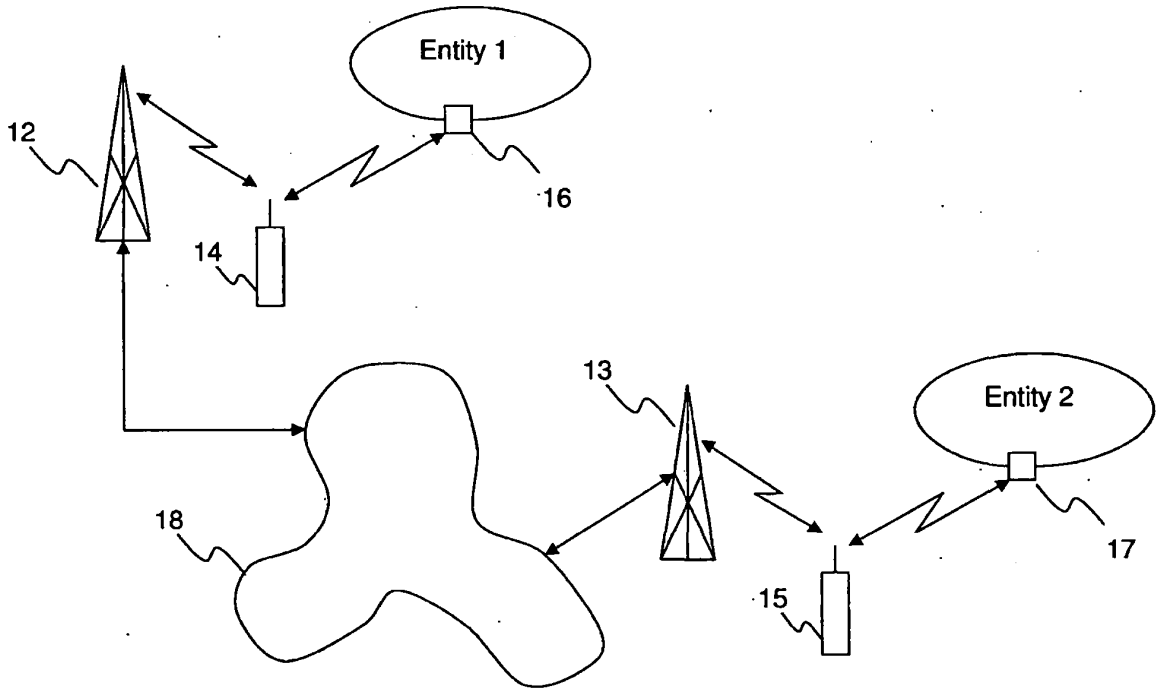
In the present application, the "Cross-Reference" section has been updated, along with the addition of new Claims 1-8. The specification and drawings are otherwise identical to the parent application.

In view of the above, Applicant requests examination and allowance of the present application. If, in the opinion of the Examiner, a telephonic conference would expedite the examination of this matter, the Examiner is invited to call the undersigned attorney at (919) 854-1400.

Respectfully submitted,

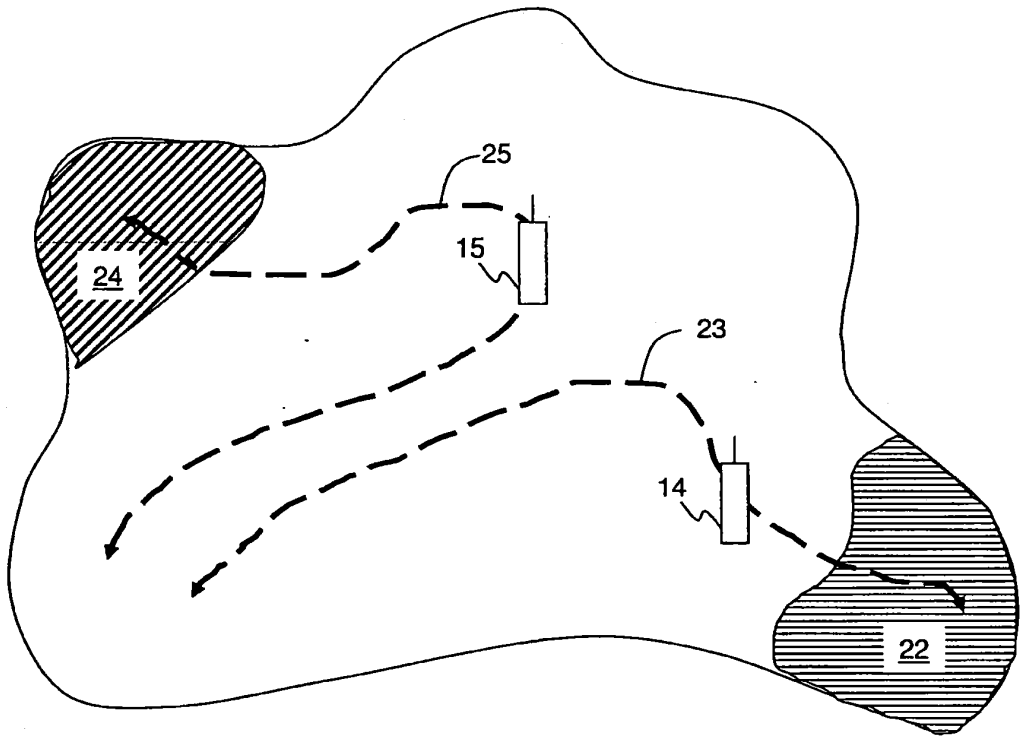
Vernon H. Guthrie
Registration No. 63,798
Attorney for Applicant

Customer Number 20792
Myers Bigel, P.A.
P.O. Box 37428
Raleigh, NC 27627



10

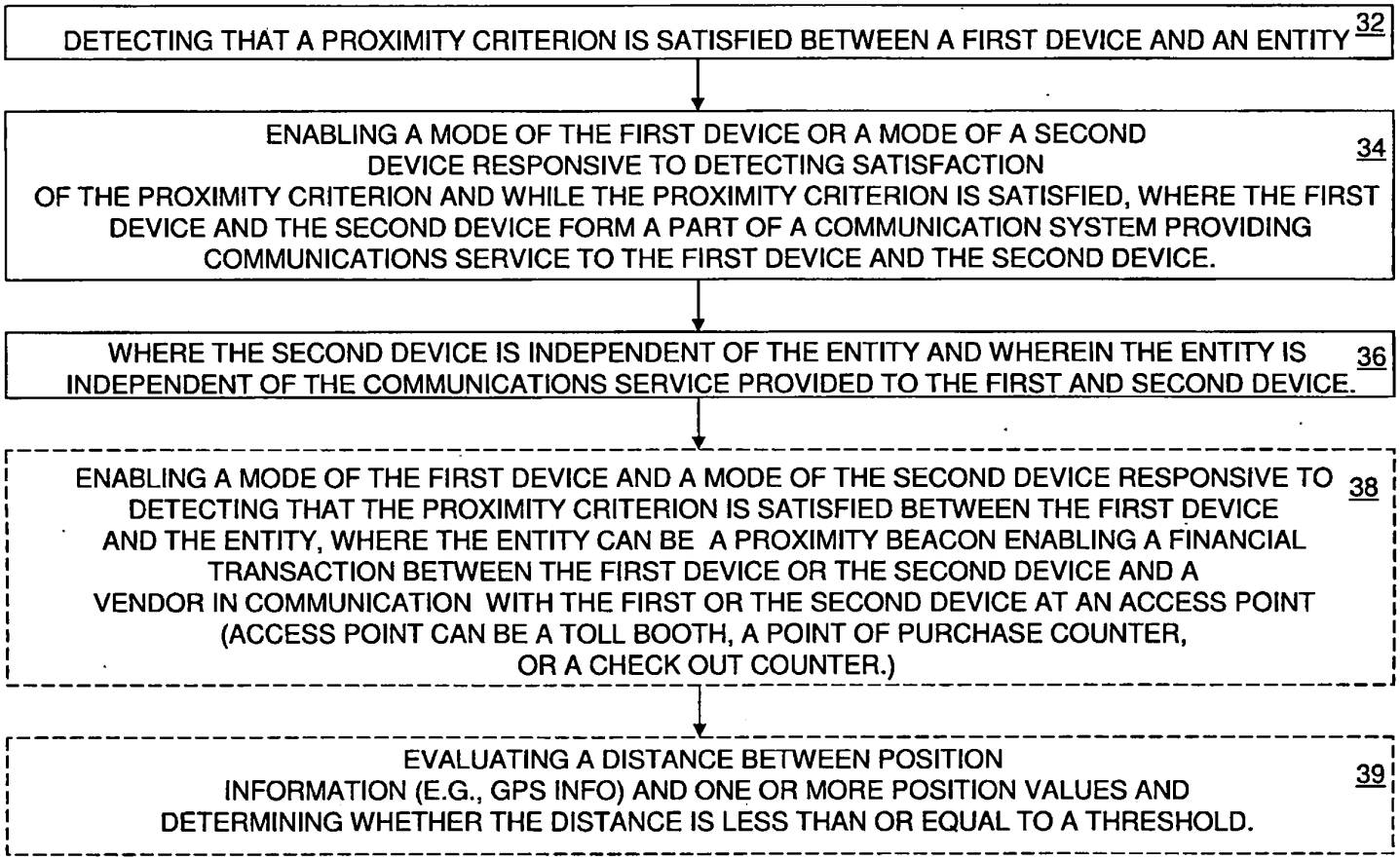
FIG. 1



20

FIG. 2

FIG. 3 30


DETECTING THAT A PROXIMITY CRITERION IS SATISFIED BETWEEN A FIRST DEVICE AND AN ENTITY
32
ENABLING A MODE OF THE FIRST DEVICE OR A MODE OF A SECOND DEVICE RESPONSIVE TO DETECTING SATISFACTION OF THE PROXIMITY CRITERION AND WHILE THE PROXIMITY CRITERION IS SATISFIED, WHERE THE FIRST DEVICE AND THE SECOND DEVICE FORM A PART OF A COMMUNICATION SYSTEM PROVIDING COMMUNICATIONS SERVICE TO THE FIRST DEVICE AND THE SECOND DEVICE.
34
WHERE THE SECOND DEVICE IS INDEPENDENT OF THE ENTITY AND WHEREIN THE ENTITY IS INDEPENDENT OF THE COMMUNICATIONS SERVICE PROVIDED TO THE FIRST AND SECOND DEVICE.
36
ENABLING A MODE OF THE FIRST DEVICE AND A MODE OF THE SECOND DEVICE RESPONSIVE TO DETECTING THAT THE PROXIMITY CRITERION IS SATISFIED BETWEEN THE FIRST DEVICE AND THE ENTITY, WHERE THE ENTITY CAN BE A PROXIMITY BEACON ENABLING A FINANCIAL TRANSACTION BETWEEN THE FIRST DEVICE OR THE SECOND DEVICE AND A VENDOR IN COMMUNICATION WITH THE FIRST OR THE SECOND DEVICE AT AN ACCESS POINT (ACCESS POINT CAN BE A TOLL BOOTH, A POINT OF PURCHASE COUNTER, OR A CHECK OUT COUNTER.)
38
EVALUATING A DISTANCE BETWEEN POSITION INFORMATION (E.G., GPS INFO) AND ONE OR MORE POSITION VALUES AND DETERMINING WHETHER THE DISTANCE IS LESS THAN OR EQUAL TO A THRESHOLD.
39

DECLARATION (37 CFR 1.63) FOR UTILITY OR DESIGN APPLICATION USING AN APPLICATION DATA SHEET (37 CFR 1.76)

Title of Invention	**MOBILE DEVICE MODE ENABLEMENT RESPONSIVE TO A PROXIMITY CRITERION**

As a below named inventor, I hereby declare that:

This declaration is directed to:
- ☐ The attached application, or
- ☐ United States application or PCT international application number _____ filed on _____,
  - ☐ As amended on _____ (if applicable).

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

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

I hereby 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.

LEGAL NAME OF INVENTOR 1

Signature: _____ Date: 7/26/2016

Legal Name: **PETER D. KARABINIS**

APPLICATION DATA SHEET (37 CFR 1.76)

Title of Invention	MOBILE DEVICE MODE ENABLEMENT RESPONSIVE TO A PROXIMITY CRITERION

As a below named inventor, I hereby declare that:

This declaration is directed to: The attached application, or
United States application or PCT international application number
_____ filed on _____,
As amended on _____ (if applicable).

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

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

I hereby 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.

LEGAL NAME OF INVENTOR 2

Signature: Rajendra Singh Date: JULY 26, 2016

Legal Name: **RAJENDRA SINGH**

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)				November 1, 2017	
				Application Number	To Be Assigned
				Filing Date	Concurrently Herewith
				First Named Inventor	Peter D. Karabinis
				Art Unit	
				Examiner Name	
Sheet	A1	of	A2	Attorney Docket Number	9466-24TSCT2

U.S. PATENT DOCUMENTS					
Examiner Initials*	Cite No.	Document Number Number-Kind Code (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
	1.	US- 8,646,060 B1	02-04-2014	Ben Ayed	
	2.	US- 8,532,069 B2	09-10-2013	Balwani	
	3.	US- 8,463,238 B2	06-11-2013	Forstall et al.	
	4.	US- 8,023,580 B2	09-20-2011	Bremer	
	5.	US- 7,912,629 B2	03-22-2011	Sutter et al.	
	6.	US- 7,822,644 B2	10-26-2010	Alberth, Jr. et al.	
	7.	US- 7,539,241 B1	05-26-2009	Dick	
	8.	US- RE39,736 E	07-17-2007	Morrill, Jr.	
	9.	US- 7,155,199 B2	12-26-2006	Zalewski et al.	
	10.	US- 7,133,659 B2	11-07-2006	Zalewski et al.	
	11.	US- 7,028,897 B2	04-18-2006	Fernandes et al.	
	12.	US- 6,957,107 B2	10-18-2005	Rogers et al.	
	13.	US- 6,769,607 B1	08-03-2004	Pitroda et al.	
	14.	US- 6,595,929 B2	07-22-2003	Stivoric et al.	
	15.	US- 2013/0156218 A1	06-20-2013	Annacone et al.	
	16.	US- 2012/0214443 A1	08-23-2012	Daigle	
	17.	US- 2011/0314539 A1	12-22-2011	Horton	
	18.	US- 2010/0265845 A1	10-21-2010	Lampén	
	19.	US- 2010/0067591 A1	03-18-2010	Luo et al.	
	20.	US- 2009/0213947 A1	08-27-2009	Rao et al.	
	21.	US- 2009/0169070 A1	07-02-2009	Fadell	
	22.	US- 2009/0153367 A1	06-18-2009	Lee	
	23.	US- 2009/0113543 A1	04-30-2009	Adams et al.	
	24.	US- 2009/0023474 A1	01-22-2009	Luo et al.	
	25.	US- 2008/0306868 A1	12-11-2008	Robinson et al.	
	26.	US- 2008/0227471 A1	09-18-2008	Dankar et al.	
	27.	US- 2008/0200166 A1	08-21-2008	McCamon	
	28.	US- 2008/0167966 A1	07-10-2008	Ramsdale et al.	
	29.	US- 2008/0146148 A1	06-19-2008	Hulvey	
	30.	US- 2008/0140868 A1	06-12-2008	Kalayjian et al.	
	31.	US- 2008/0040274 A1	02-14-2008	Uzo	
	32.	US- 2007/0285280 A1	12-13-2007	Robinson et al.	
	33.	US- 2007/0243872 A1	10-18-2007	Gallagher et al.	
	34.	US- 2007/0265984 A1	11-15-2007	Santhana	
	35.	US- 2007/0250393 A1	10-25-2007	Alberth, Jr. et al.	
	36.	US- 2007/0197261 A1	08-23-2007	Humbel	
	37.	US- 2007/0184837 A1	08-09-2007	Hohl et al.	
	38.	US- 2007/0178935 A1	08-02-2007	Shim et al.	
	39.	US- 2007/0167147 A1	07-19-2007	Krasner et al.	
	40.	US- 2006/0194538A1	08-31-2006	Palin et al.	
	41.	US- 2006/0172700 A1	08-03-2006	Wu	

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.

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)				November 1, 2017	
				Application Number	To Be Assigned
				Filing Date	Concurrently Herewith
				First Named Inventor	Peter D. Karabinis
				Art Unit	
				Examiner Name	
Sheet	A2	of	A2	Attorney Docket Number	9466-24TSCT2

U.S. PATENT DOCUMENTS					
Examiner Initials*	Cite No.	Document Number Number-Kind Code (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
	42.	US- 2006/0159260 A1	07-20-2006	Pereira et al.	
	43.	US- 2006/0145893 A1	07-06-2006	Hassett	
	44.	US- 2006/0133633 A1	06-22-2006	Hyvonen et al.	
	45.	US- 2006/0009234 A1	01-12-2006	Freer	
	46.	US- 2004/0170430 A1	09-02-2004	Gorokhov	
	47.	US- 2004/0030601 A1	02-12-2004	Pond et al.	
	48.	US- 2003/0220105 A1	11-27-2003	Daigremont et al.	
		US-			

FOREIGN PATENT DOCUMENTS						
Examiner Initials*	Cite No.	Foreign Patent Document Country Code, Number, Kind Code (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

NON PATENT LITERATURE DOCUMENTS			
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, page(s), volume-issue number(s), publisher, city and/or country where published	T
	49.	"Digital wallet" *Wikipedia* (4 pages)(Printed on July 10, 2017)	
	50.	International Search Report and Written Opinion of the International Searching Authority, PCT Application No. PCT/US09/062792 (8 pages) (December 23, 2009)	

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.

Electronic Patent Application Fee Transmittal

Application Number:	
Filing Date:	
Title of Invention:	MOBILE DEVICE MODE ENABLEMENT RESPONSIVE TO A PROXIMITY CRITERION
First Named Inventor/Applicant Name:	Peter D. Karabinis
Filer:	Vernon H. Guthrie Jr./Meredith Downing
Attorney Docket Number:	9466-24TSCT2

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:	30829136
Application Number:	15800885
International Application Number:	
Confirmation Number:	9764
Title of Invention:	MOBILE DEVICE MODE ENABLEMENT RESPONSIVE TO A PROXIMITY CRITERION
First Named Inventor/Applicant Name:	Peter D. Karabinis
Customer Number:	20792
Filer:	Vernon H. Guthrie Jr./Meredith Downing
Filer Authorized By:	Vernon H. Guthrie Jr.
Attorney Docket Number:	9466-24TSCT2
Receipt Date:	01-NOV-2017
Filing Date:	
Time Stamp:	16:39:13
Application Type:	Utility under 35 USC 111(a)

Payment information:

Submitted with Payment	yes
Payment Type	CARD
Payment was successfully received in RAM	$730
RAM confirmation Number	110217INTEFSW16403700
Deposit Account	500220
Authorized User	Meredith Downing
The Director of the USPTO is hereby authorized to charge indicated fees and credit any overpayment as follows: 37 CFR 1.17 (Patent application and reexamination processing fees)	

File Listing:

Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1	Transmittal of New Application	9466-24TSCT2_Transmittal.pdf	121728 142f4dba4b8be786ff4a07e5454863431d70b4f1	no	1
Warnings:					
Information:					
2	Application Data Sheet	9466-24TSCT2_ADS.pdf	777094 ddff40b8b5218e4104a6608881f35527e68cc5de	no	7
Warnings:					
Information:					
This is not an USPTO supplied ADS fillable form					
3		9466-24TSCT2_Specification.pdf	155563 d0e0f83e1b864a38f08ee292939595f3d99d437f	yes	23

Multipart Description/PDF files in .zip description

Document Description	Start	End
Specification	1	19
Claims	20	22
Abstract	23	23

Warnings:					
Information:					
4	Miscellaneous Incoming Letter	9466-24TSCT2_Remarks.pdf	75427 baea578d89c27c3b365d4ee8154a66a5092015c3	no	1
Warnings:					
Information:					

5	Drawings-only black and white line drawings	9466-24TSCT2_Drawings.pdf	59189 4aae9446f2e366a88f6ef4cd3d712ce01303fd6f	no	3
Warnings:					
Information:					
6	Oath or Declaration filed	9466-24TSCT2_Declaration.pdf	78774 d8e3b2c5a01af35439ea5879a3095de9adcf89e1	no	2
Warnings:					
Information:					
7	Power of Attorney	9466-24TSCT2_POA.pdf	249101 23b35e3603666d5dda9bdc26b4bb2c7612ba89b3	no	2
Warnings:					
Information:					
8		9466-24TSCT2_IDS.pdf	437275 0cc9c52a7ec33ddb665f26dd973dc5a08df72331	yes	4
	Multipart Description/PDF files in .zip description				
	Document Description		**Start**	**End**	
	Transmittal Letter		1	2	
	Information Disclosure Statement (IDS) Form (SB08)		3	4	
Warnings:					
Information:					
9	Fee Worksheet (SB06)	fee-info.pdf	35281 5dbcb180a3f034aecea9a509fa589c7e72582173	no	2
Warnings:					
Information:					
		Total Files Size (in bytes):	1989432		

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: PA..
Document Description: Power of Attorney

PTO/AIA/82A (07-13)
Approved for use through 11/30/2014. OMB 0651-0051
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TRANSMITTAL FOR POWER OF ATTORNEY TO ONE OR MORE REGISTERED PRACTITIONERS

NOTE: This form is to be submitted with the Power of Attorney by Applicant form (PTO/AIA/82B) to identify the application to which the Power of Attorney is directed, in accordance with 37 CFR 1.5, unless the application number and filing date are identified in the Power of Attorney by Applicant form. If neither form PTO/AIA/82A nor form PTO/AIA82B identifies the application to which the Power of Attorney is directed, the Power of Attorney will not be recognized in the application.

Application Number	To Be Assigned
Filing Date	Concurrently Herewith
First Named Inventor	PETER D. KARABINIS
Title	MOBILE DEVICE MODE ENABLEMENT RESPONSIVE TO A PROXIMITY CRITERION
Art Unit	
Examiner Name	
Attorney Docket Number	9466-24TSCT2

SIGNATURE of Applicant or Patent Practitioner

Signature	Vernon Guthrie	Date (Optional)	November 1, 2017
Name	Vernon H. Guthrie	Registration Number	63,798
Title (if Applicant is a juristic entity)	Patent Attorney		
Applicant Name (if Applicant is a juristic entity)	Telcom Ventures, LLC		

NOTE: This form must be signed in accordance with 37 CFR 1.33. See 37 CFR 1.4(d) for signature requirements and certifications. If more than one applicant, use multiple forms.

☑ *Total of 1 forms are submitted.

This collection of information is required by 37 CFR 1.131, 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.

Doc Code: PA..
Document Description: Power of Attorney

PTO/AIA/82B(07-12)
Approved for use through 11/30/2014. OMB 0651-0035
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POWER OF ATTORNEY BY APPLICANT

I hereby revoke all previous powers of attorney given in the application identified in the attached transmittal letter.

[x] 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 (form PTO/AIA/82A or equivalent): 20792

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:

[x] 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
[x] 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	Rajendra Singh	Date	28/7/2013
Name	Rajendra Singh	Telephone	703 447 2788
Title and Company	Chairman, Telcom Ventures, L.L.C.		

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 *.

[ ] *Total of _____ forms are submitted.

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.

Attorney Docket No. 9466-24TSCT2 PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re: Karabinis et al.
Application No.: To Be Assigned
Filing Date: Concurrently Herewith
For: MOBILE DEVICE MODE ENABLEMENT RESPONSIVE TO A PROXIMITY CRITERION

Date: November 1, 2017

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

INFORMATION DISCLOSURE STATEMENT TRANSMITTAL

Sir:

Attached is an Information Disclosure Statement listing of documents previously of record in parent Application No. 15/251,882, filed August 30, 2016. As the benefit of this application is claimed under 35 U.S.C. § 120, no copies need to be furnished in accordance with 37 C.F.R. § 1.98(d); however, copies will be furnished on request.

☒ In accordance with **37 CFR 1.97(b)**, the information disclosure statement is being filed:

☒ (1) within three months of the filing date of a national application other than a continued prosecution application under §1.53(d);

☐ (2) within three months of the date of entry of the national stage as set forth in §1.491 in an international application;

☐ (3) before the mailing of a first Office Action on the merits; or

☐ (4) before the mailing of a first Office Action after the filing of a request for continued examination under §1.114.

☐ In accordance with **37 CFR 1.97(c)**, the information disclosure statement is being filed after the period specified in 37 CFR 1.97(b) above, but before the mailing date of any of a final action under §1.113, a notice of allowance under §1.311, or an action that otherwise closes prosecution in the application, and is accompanied by **one** of the following:

☐ (1) The statement specified under **37 CFR 1.97(e)**, as follows:

☐ 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; **or**

☐ 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 §1.56(c) more than three months prior to the filing of the information disclosure statement; **or**

☐ (2) The fee set forth in §1.17(p);

☐ In accordance with **37 CFR 1.97(d)**, the information disclosure statement is being filed after the period specified in 37 CFR 1.97(c) above, but on or before payment of the issue fee, and is accompanied by **both** of the following:

☐ (1) The statement specified under **37 CFR 1.97(e)**, as follows:

☐ 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; **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 §1.56(c) more than three months prior to the filing of the information disclosure statement; **and**

☐ (2) The fee set forth in §1.17(p);

In accordance with **37 CFR 1.97(g)**, the information disclosure statement shall not be construed as a representation that a search has been made.

In accordance with **37 CFR 1.97(h)**, the information disclosure statement shall not be construed to be an admission that the information cited in the statement is, or is considered to be, material to patentability as defined in §1.56(b).

☐ The Director is hereby authorized to charge the fee specified in 37 C.F.R. § 1.17(p), and any fee deficiency or credit any overpayment, to Deposit Account No. 50-0220;

☐ Fees are to be charged to a credit card; or

☒ No fee is believed due. However, the Director is hereby authorized to charge any deficiency or credit any overpayment to Deposit Account No. 50-0220.

Respectfully submitted,

Vernon H. Guthrie
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Customer Number 20792
Myers Bigel, P.A.
P.O. Box 37428, Raleigh, NC 27627
919-854-1400
919-854-1401 (Fax)

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
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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
15/800,885	11/01/2017		730	9466-24TSCT2	8	2

CONFIRMATION NO. 9764

FILING RECEIPT

20792
MYERS BIGEL, P.A.
PO BOX 37428
RALEIGH, NC 27627

OC000000095818540

Date Mailed: 12/04/2017

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)

Peter D. Karabinis, Cary, NC;
Rajendra Singh, Indian Creek Village, FL;

Applicant(s)

Telcom Ventures, LLC, Miami, FL;

Power of Attorney: The patent practitioners associated with Customer Number 20792

Domestic Priority data as claimed by applicant

This application is a CON of 15/251,882 08/30/2016 PAT 9832708
which is a CON of 12/264,711 11/04/2008 PAT 9462411

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.

Permission to Access Application via Priority Document Exchange: Yes

Permission to Access Search Results: Yes

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: 12/01/2017

The country code and number of your priority application, to be used for filing abroad under the Paris Convention, is **US 15/800,885**

Projected Publication Date: 03/15/2018

Non-Publication Request: No

Early Publication Request: No
**** SMALL ENTITY ****
Title

MOBILE DEVICE MODE ENABLEMENT RESPONSIVE TO A PROXIMITY CRITERION

Preliminary Class

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.

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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.

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Title 37, Code of Federal Regulations, 5.11 & 5.15

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PATENT APPLICATION FEE DETERMINATION RECORD

Substitute for Form PTO-875

Application or Docket Number
15/800,885

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))	8 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

		(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($)	OTHER THAN SMALL ENTITY ADDITIONAL FEE($)
AMENDMENT A	Total (37 CFR 1.16(i))	*	Minus	**	=	x =		OR	x =	
AMENDMENT A	Independent (37 CFR 1.16(h))	*	Minus	***	=	x =		OR	x =	
AMENDMENT A	Application Size Fee (37 CFR 1.16(s))									
AMENDMENT A	FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))							OR		
						TOTAL ADD'L FEE		OR	TOTAL ADD'L FEE	

		(Column 1) CLAIMS REMAINING AFTER AMENDMENT		(Column 2) HIGHEST NUMBER PREVIOUSLY PAID FOR	(Column 3) PRESENT EXTRA	RATE($)	ADDITIONAL FEE($)		RATE($)	ADDITIONAL FEE($)
AMENDMENT B	Total (37 CFR 1.16(i))	*	Minus	**	=	x =		OR	x =	
AMENDMENT B	Independent (37 CFR 1.16(h))	*	Minus	***	=	x =		OR	x =	
AMENDMENT B	Application Size Fee (37 CFR 1.16(s))									
AMENDMENT B	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.

Attorney Docket No. 9466-24TSCT2 PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re: Karabinis et al. Confirmation No. 9764
Application No.: 15/800,885
Filed: November 1, 2017
For: MOBILE DEVICE MODE ENABLEMENT RESPONSIVE TO A PROXIMITY CRITERION

Date: January 31, 2018

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

PRELIMINARY AMENDMENT

Sir:

Please enter the present Preliminary Amendment before examination of the present application.

If any extension of time for the accompanying response or submission is required, please consider this a petition therefor. The Commissioner is hereby authorized to charge any additional fee, which may be required, or credit any refund, to our Deposit Account No. 50-0220.

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

Listing of the Claims:

1. (Original) A method of operating a smartphone to provide information to an entity, by communicating with the entity, using a first air interface; and to receive a communications service from a wireless network using a second air interface that differs from the first air interface, the communications service being received exclusively by the smartphone from the wireless network and not from the entity, the method comprising:

providing, using the first air interface, the information to the entity by the smartphone;

receiving by the smartphone, using the second air interface, the communications service exclusively from the wireless network and not from the entity, without communicating by the smartphone with the entity by using the first air interface; and

communicating by the smartphone with the entity, by using the first air interface, without receiving by the smartphone the communications service from the wireless network by using the second air interface.

2. (Original) The method of Claim 1, further comprising establishing a communications link between the smartphone and the entity in response to an identity.

3. (Original) The method of Claim 1, wherein:

said providing, using the first air interface, the information to the entity by the smartphone is performed over a first time interval;

said receiving by the smartphone, using the second air interface, the communications service exclusively from the wireless network and not from the entity, without communicating by the smartphone with the entity by using the first air interface, is performed over a second time interval;

said communicating by the smartphone with the entity, by using the first air interface, without receiving by the smartphone the communications service from the wireless network by using the second air interface is performed over a third time interval; and

any two of the first, second, and third time intervals are non-overlapping with one another.

4. (Original) A system comprising:

a smartphone comprising a processor that is configured to control the smartphone to perform operations comprising:

communicating by the smartphone with an entity using a first air interface;

providing, using the first air interface, information to the entity by the smartphone;

receiving by the smartphone, using a second air interface, a communications service exclusively from a wireless network and not from the entity, without communicating by the smartphone with the entity by using the first air interface; and

communicating by the smartphone with the entity, by using the first air interface, without receiving by the smartphone the communications service from the wireless network by using the second air interface.

5. (Original) The system according to Claim 4, further comprising the entity.

6. (Original) The system of Claim 4, wherein:

said providing, using the first air interface, information to the entity by the smartphone is performed over a first time interval;

said receiving by the smartphone, using a second air interface, a communications service exclusively from a wireless network and not from the entity, without communicating by the smartphone with the entity by using the first air interface is performed over a second time interval;

said communicating by the smartphone with the entity, by using the first air interface, without receiving by the smartphone the communications service from the wireless network by using the second air interface is performed over a third time interval; and

any two of the first, second, and third time intervals are non-overlapping with one another.

7. (Original) The system of Claim 4, wherein the second air interface is based upon an Orthogonal Frequency Division Multiplexed (OFDM) and/or Orthogonal Frequency Division Multiple Access (OFDMA) protocol.

8. (Currently Amended) The method ~~system~~ of Claim 1 [[7]], wherein the second air interface is based upon an Orthogonal Frequency Division Multiplexed (OFDM) and/or Orthogonal Frequency Division Multiple Access (OFDMA) ~~the OFDM protocol and the OFDMA~~ protocol.

9. (New) A method comprising:

detecting by a sensor that an item has been displaced in a store; and

establishing a communications link with an electronic device of a customer associated with the item and, in response to said detecting, providing for display on said electronic device a price associated with the item.

10. (New) The method of Claim 9, wherein said detecting by a sensor that an item has been displaced comprises:

detecting that the item has been placed in a conveyance apparatus.

11. (New) The method of Claim 10, wherein said conveyance apparatus comprises a shopping cart.

12. (New) The method of Claim 11, wherein said detecting is performed by the shopping cart.

13. (New) The method of Claim 9, further comprising:

charging an account associated with said electronic device for the item that has been displaced.

14. (New) The method of Claim 13, wherein said charging an account associated with said electronic device is enabled when said electronic device is proximate to a specific location of said store.

15. (New) The method of Claim 9, wherein said detecting comprises using a Radio Frequency tagging technology, a bar-code technology and/or an image recognition technology.

16. (New) The method of Claim 9,

wherein said detecting comprises detecting that the item has been displaced from a shelf of said store, and

wherein the method further comprises:

further detecting by the sensor that the item that had been displaced has been restored on the shelf of said store and ceasing from displaying on said electronic device said price associated with the item.

17. (New) A system that is configured to perform operations comprising:

detecting by a sensor that an item has been displaced from a shelf of a store; and

establishing a communications link with an electronic device of a customer associated with the item and, in response to said detecting, providing for display on said electronic device a price associated with the item.

18. (New) The system of Claim 17, wherein said detecting by a sensor that an item has been displaced comprises:

detecting that the item has been placed in a conveyance apparatus.

19. (New) The system of Claim 17, wherein said operations further comprise:

charging an account associated with said electronic device for the item that has been displaced.

20. (New) The system of Claim 19, wherein said charging an account associated with said electronic device is enabled when said electronic device is proximate to a specific location of said store.

21. (New) The system of Claim 17, wherein said detecting comprises using a Radio Frequency tagging technology, a bar-code technology and/or an image recognition technology.

22. (New) The system of Claim 17, wherein said operations further comprise:

further detecting by the sensor that the item that had been displaced has been restored on the shelf of said store and ceasing from displaying on said electronic device said price associated with the item.

23. (New) The system of Claim 17, wherein said operations further comprise:

in response to said detecting, providing for display on said electronic device a manufacturer associated with the item.

REMARKS

The present Preliminary Amendment is being filed to amend Claim 8 and to add new Claims 9-23. Support for new Claims 9-23 may be found, for example, in paragraphs [0033]-[0036] of the specification. Favorable examination and allowance of the present application are respectfully requested.

Respectfully submitted,

Vernon H. Guthrie
Registration No. 63,798

USPTO Customer No. 20792
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Telephone: 919/854-1400
Facsimile: 919/854-1401

Electronic Patent Application Fee Transmittal

Application Number:	15800885
Filing Date:	01-Nov-2017
Title of Invention:	MOBILE DEVICE MODE ENABLEMENT RESPONSIVE TO A PROXIMITY CRITERION
First Named Inventor/Applicant Name:	Peter D. Karabinis
Filer:	Vernon H. Guthrie Jr./Meredith Downing
Attorney Docket Number:	9466-24TSCT2

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:				
CLAIMS IN EXCESS OF 20	2202	3	50	150
INDEPENDENT CLAIMS IN EXCESS OF 3	2201	1	230	230
Miscellaneous-Filing:				
Petition:				
Patent-Appeals-and-Interference:				

Description	Fee Code	Quantity	Amount	Sub-Total in USD($)
Post-Allowance-and-Post-Issuance:				
Extension-of-Time:				
Miscellaneous:				
			Total in USD ($)	**380**

Electronic Acknowledgement Receipt

EFS ID:	31662300
Application Number:	15800885
International Application Number:	
Confirmation Number:	9764
Title of Invention:	MOBILE DEVICE MODE ENABLEMENT RESPONSIVE TO A PROXIMITY CRITERION
First Named Inventor/Applicant Name:	Peter D. Karabinis
Customer Number:	20792
Filer:	Vernon H. Guthrie Jr./Meredith Downing
Filer Authorized By:	Vernon H. Guthrie Jr.
Attorney Docket Number:	9466-24TSCT2
Receipt Date:	31-JAN-2018
Filing Date:	01-NOV-2017
Time Stamp:	15:42:56
Application Type:	Utility under 35 USC 111(a)

Payment information:

Submitted with Payment	yes
Payment Type	CARD
Payment was successfully received in RAM	$380
RAM confirmation Number	020118INTEFSW15440500
Deposit Account	500220
Authorized User	Meredith Downing
The Director of the USPTO is hereby authorized to charge indicated fees and credit any overpayment as follows: 37 CFR 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		9466-24TSCT2_Preliminary_Amendment.pdf	490880 a3b5ce20858db4dc7ee7f269e74c7c9e642a80aa	yes	7
	Multipart Description/PDF files in .zip description				
	Document Description		**Start**	**End**	
	Preliminary Amendment		1	1	
	Claims		2	6	
	Applicant Arguments/Remarks Made in an Amendment		7	7	
Warnings:					
Information:					
2	Fee Worksheet (SB06)	fee-info.pdf	32414 583a3fe3465a88de78e17fb02d483ff6f73c7c1e	no	2
Warnings:					
Information:					
		Total Files Size (in bytes):	523294		

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If a new application is being filed and the application includes the necessary components for a filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application.
National Stage of an International Application under 35 U.S.C. 371
If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course.
New International Application Filed with the USPTO as a Receiving Office
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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 15/800,885	Filing Date 11/01/2017	☐ 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 $40 =	
INDEPENDENT CLAIMS (37 CFR 1.16(h))	minus 3 =	*		x $210 =	
☐ APPLICATION SIZE FEE (37 CFR 1.16(s))	If the specification and drawings exceed 100 sheets of paper, the application size fee due is $310 ($155 for small entity) for each additional 50 sheets or fraction thereof. See 35 U.S.C. 41(a)(1)(G) and 37 CFR 1.16(s).				
☐ 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	01/31/2018	(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))	* 23	Minus	** 20	= 3		x $50 =	150
	Independent (37 CFR 1.16(h))	* 4	Minus	*** 3	= 1		x $230 =	230
	☐ Application Size Fee (37 CFR 1.16(s))							
	☐ FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))							
							TOTAL ADD'L FEE	380

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 $0 =	
	Independent (37 CFR 1.16(h))	*	Minus	***	=		x $0 =	
	☐ 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.	HSLIE
** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 20, enter "20".	TRACIE V HARGROVE
*** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 3, enter "3".	
The "Highest Number Previously Paid For" (Total or Independent) is the highest number found in the appropriate box in column 1.	

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

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APPLICATION NUMBER	FILING OR 371(C) DATE	FIRST NAMED APPLICANT	ATTY. DOCKET NO./TITLE
15/800,885	11/01/2017	Peter D. Karabinis	9466-24TSCT2

CONFIRMATION NO. 9764

PUBLICATION NOTICE

20792
MYERS BIGEL, P.A.
PO BOX 37428
RALEIGH, NC 27627

OC000000093088967

Title:MOBILE DEVICE MODE ENABLEMENT RESPONSIVE TO A PROXIMITY CRITERION

Publication No.US-2018-0077627-A1
Publication Date:03/15/2018

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.

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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
15/800,885	11/01/2017	Peter D. Karabinis	9466-24TSCT2	9764

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MYERS BIGEL, P.A.
PO BOX 37428
RALEIGH, NC 27627

EXAMINER
VU, MICHAEL T

ART UNIT	PAPER NUMBER
2641	

MAIL DATE	DELIVERY MODE
05/22/2018	PAPER

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.

PTOL-90A (Rev. 04/07)

Office Action Summary	Application No. 15/800,885	Applicant(s) KARABINIS ET AL.	
	Examiner MICHAEL T. VU	Art Unit 2641	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 2 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 *11/01/2017*.

☐ 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) *1-23* 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) _____ is/are rejected.

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

9)☒ Claim(s) *1-23* 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.

Election/Restrictions

2. Restriction to one of the following inventions is required under 35 U.S.C. 121:

   I. Claims 1-8, drawn to a smartphone to provide information an entity using a first air interface, and a second air interface, classified in class H04W 48/04.

   II. Claims 9-23, drawn to detecting by a sensor that an item has been displaced in a store, and price associated with the item, classified in class G06Q 30/06.

The inventions are distinct, each from the other because of the following reasons:

3. Inventions Group I, and II are related as subcombinations disclosed as usable together in a single combination. The subcombinations are distinct if they do not overlap in scope and are not obvious variants, and if it is shown that at least one subcombination is separately usable. In the instant case, subcombination Group I, and Group II has separate utility such as a smartphone to provide information an entity using a first air interface, and a second air interface and a sensor that an item has been displaced in a store, and price associated with the item. See MPEP § 806.05(d).

The examiner has required restriction between subcombinations usable together. Where applicant elects a subcombination and claims thereto are subsequently found allowable, any claim(s) depending from or otherwise requiring all the limitations of the allowable subcombination will be examined for patentability in accordance with 37 CFR 1.104. See MPEP § 821.04(a). Applicant is advised that if any claim presented in a continuation or divisional application is anticipated by, or includes all the limitations of, a claim that is allowable in the present application, such claim may be subject to provisional statutory and/or nonstatutory double patenting rejections over the claims of the instant application.

Restriction for examination purposes as indicated is proper because all these inventions listed in this action are independent or distinct for the reasons given above and there would be a serious search and examination burden if restriction were not required because one or more of the following reasons apply:

(a) the inventions have acquired a separate status in the art in view of their different classification;

(b) the inventions have acquired a separate status in the art due to their recognized divergent subject matter;

(c) the inventions require a different field of search (for example, searching different classes/subclasses or electronic resources, or employing different search queries);

(d) the prior art applicable to one invention would not likely be applicable to another invention;

(e) the inventions are likely to raise different non-prior art issues under 35 U.S.C. 101 and/or 35 U.S.C. 112, first paragraph.

Applicant is advised that the reply to this requirement to be complete <u>must</u> include (i) an election of a invention to be examined even though the requirement may be traversed (37 CFR 1.143) **and (ii) identification of the claims encompassing the elected invention**.

The election of an invention may be made with or without traverse. To reserve a right to petition, the election must be made with traverse. If the reply does not distinctly and specifically point out supposed errors in the restriction requirement, the election shall be treated as an election without traverse. Traversal must be presented at the time of election in order to be considered timely. Failure to timely traverse the requirement will result in the loss of right to petition under 37 CFR 1.144. If claims are added after the election, applicant must indicate which of these claims are readable on the elected invention.

If claims are added after the election, applicant must indicate which of these claims are readable upon the elected invention.

Should applicant traverse on the ground that the inventions are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the inventions to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other invention.

The examiner has required restriction between product and process claims. Where applicant elects claims directed to the product, and the product claims are subsequently found allowable, withdrawn process claims that depend from or otherwise require all the limitations of the allowable product claim will be considered for rejoinder. All claims directed to a nonelected process invention must require all the limitations of an allowable product claim for that process invention to be rejoined.

In the event of rejoinder, the requirement for restriction between the product claims and the rejoined process claims will be withdrawn, and the rejoined process claims will be fully examined for patentability in accordance with 37 CFR 1.104. Thus, to be allowable, the rejoined claims must meet all criteria for patentability including the requirements of 35 U.S.C. 101, 102, 103 and 112. Until all claims to the elected product are found allowable, an otherwise proper restriction requirement between product claims and process claims may be maintained. Withdrawn process claims that are not commensurate in scope with an allowable product claim will not be rejoined. See MPEP § 821.04(b). Additionally, in order to retain the right to rejoinder in accordance with the above policy, applicant is advised that the process claims should be amended during prosecution to require the limitations of the product claims. **Failure to do so may result in a loss of the right to rejoinder**. Further, note that the prohibition against double patenting rejections of 35 U.S.C. 121 does not apply where the restriction requirement is withdrawn by the examiner before the patent issues. See MPEP § 804.01.

Conclusion

4. The examiner made a telephone call to an attorney Vernon H. Guthrie on May 16, 2018 for the restriction; however, there was not response to the telephone call.

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to MICHAEL T. VU whose telephone number is (571) 272-8131. The examiner can normally be reached on 8:00am - 6:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Charles N. Appiah can be reached on 571-272-7904. 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.

/MICHAEL T VU/
Primary Examiner, Art Unit 2641

Attorney Docket No. 9466-24TSCT2 PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re: Karabinis et al.
Application No.: 15/800,885
Filed: November 1, 2017
For: MOBILE DEVICE MODE ENABLEMENT RESPONSIVE TO A PROXIMITY CRITERION

Confirmation No. 9764
Group Art Unit: 2641
Examiner: Vu, Michael T.

Date: June 19, 2018

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

RESPONSE TO RESTRICTION REQUIREMENT

The present response is provided in reply to the restriction requirement set forth in the Office Action of May 22, 2018.

It is not believed that an extension of time and/or additional fee(s)-including fees for net addition of claims-are required, beyond those that may otherwise be provided for in documents accompanying this paper. In the event, however, that an extension of time is necessary to allow consideration of this paper, such an extension is hereby petitioned under 37 C.F.R. §1.136(a). Any additional fees believed to be due in connection with this paper may be charged to our Deposit Account No. 50-0220.

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

Listing of the Claims:

1. (Currently Amended) A method of operating a smartphone to wirelessly provide information to an entity using a first air interface, to wirelessly receive information from ~~by communicating with~~ the entity[[,]] using [[a]] the first air interface; and to wirelessly receive a communications service from a wireless network using a second air interface that differs from the first air interface, wherein the communications service ~~being~~ is received ~~exclusively~~ by the smartphone from the wireless network ~~and not from~~ absent involving the entity and wherein the entity functions independently of the communications service, the method comprising:

wirelessly providing by the smartphone, using the first air interface, [[the]] information to the entity ~~by the smartphone~~ and wirelessly receiving by the smartphone, using the first air interface, information from the entity independently of, and absent involving the entity in, receiving by the smartphone the communications service from the wireless network using the second air interface; and

wirelessly receiving by the smartphone, using the second air interface, the communications service ~~exclusively~~ from the wireless network ~~and not from~~ absent involving the entity, absent providing~~, without communicating~~ by the smartphone information ~~with~~ to the entity, and absent receiving by ~~using~~ the ~~first air interface~~ smartphone information from the entity~~; and~~

~~communicating by the smartphone with the entity, by using the first air interface, without receiving by the smartphone the communications service from the wireless network by using the second air interface~~.

2. (Currently Amended) The method of Claim 1, further comprising establishing a short-range communications link between the smartphone and the entity to provide by the smartphone, using the first air interface, information to the entity and to receive by the smartphone information from the entity, in response to ~~an identity~~ a proximity condition having been satisfied between the smartphone and the entity and in response to a physiological parameter.

3. (Currently Amended) The method of Claim 1, ~~wherein:~~

wherein said wirelessly providing by the smartphone, using the first air interface, [[the]] information to the entity ~~by the smartphone~~ and wirelessly receiving by the smartphone, using the first air interface, information from the entity independently of, and absent involving the entity in, receiving by the smartphone the communications service from the wireless network using the second air interface is performed over a first time interval;

wherein said wirelessly receiving by the smartphone, using the second air interface, the communications service ~~exclusively~~ from the wireless network ~~and not from the entity, without communicating by the smartphone with the entity by using the first air interface,~~ absent involving the entity, absent providing by the smartphone information to the entity, and absent receiving by the smartphone information from the entity is performed over a second time interval;

~~said communicating by the smartphone with the entity, by using the first air interface, without receiving by the smartphone the communications service from the wireless network by using the second air interface is performed over a third time interval;~~ and

wherein ~~any two of~~ the first[[,]] and second~~, and third~~ time intervals are non-overlapping with one another.

4. (Currently Amended) A system comprising:

a smartphone ~~comprising a processor~~ that is configured to ~~control the smartphone to~~ perform operations comprising:

~~communicating by the smartphone with an entity using a first air interface;~~

wirelessly providing, using [[the]] a first air interface, information to [[the]] an entity ~~by the smartphone~~ and wirelessly receiving, using the first air interface, information from the entity independently of, and absent involving the entity in, receiving a communications service from a wireless network using a second air interface that differs from the first air interface; and

wirelessly receiving ~~by the smartphone~~, using [[a]] the second air interface, [[a]] the communications service ~~exclusively~~ from [[a]] the wireless network ~~and not from~~ absent involving the entity, absent providing~~, without communicating by the smartphone~~ information ~~with~~ to the entity, and absent receiving ~~by using the~~ information from the entity ~~first air interface; and~~

~~communicating by the smartphone with the entity, by using the first air interface, without receiving by the smartphone the communications service from the wireless network by using the second air interface~~.

5. (Original) The system according to Claim 4, further comprising the entity.

6. (Currently Amended) The system of Claim 4, ~~wherein:~~

wherein said wirelessly providing, using [[the]] a first air interface, information to [[the]] an entity ~~by the smartphone~~ and wirelessly receiving, using the first air interface, information from the entity independently of, and absent involving the entity in, receiving a communications service from a wireless network using a second air interface that differs from the first air interface is performed over a first time interval;

wherein said wirelessly receiving ~~by the smartphone~~, using [[a]] the second air interface, [[a]] the communications service ~~exclusively~~ from [[a]] the wireless network ~~and not from the entity, without communicating by the smartphone with the entity by using the first air interface~~ absent involving the entity, absent providing information to the entity, and absent receiving information from the entity is performed over a second time interval;

~~said communicating by the smartphone with the entity, by using the first air interface, without receiving by the smartphone the communications service from the wireless network by using the second air interface is performed over a third time interval;~~ and

wherein ~~any two of~~ the first[[,]] and second~~, and third~~ time intervals are non-overlapping with one another.

7. (Original) The system of Claim 4, wherein the second air interface is based upon an Orthogonal Frequency Division Multiplexed (OFDM) and/or Orthogonal Frequency Division Multiple Access (OFDMA) protocol.

8. (Currently Amended) The method of Claim [[1]] 24,

wherein the wireless short-range communications link that is based upon unlicensed frequencies is further based upon a Time Division Duplex (TDD) protocol, and

wherein the second air interface that uses a wireless communications link that is based upon licensed frequencies is further based upon an Orthogonal Frequency Division Multiplexed (OFDM) and/or Orthogonal Frequency Division Multiple Access (OFDMA) protocol.

9-23. (Canceled)

24. (New) The method of Claim 1,

wherein the first air interface uses a wireless short-range communications link that is based upon unlicensed frequencies, and

wherein the second air interface uses a wireless communications link that is based upon licensed frequencies.

25. (New) A method of operating a smartphone, the method comprising:

receiving, at the smartphone, a communications service from a base station of a wireless network, using a first communications link comprising an Orthogonal Frequency Division Multiplexed (OFDM) and/or Orthogonal Frequency Division Multiple Access (OFDMA) protocol; and

responsive to satisfying a proximity criterion between the smartphone and an entity and responsive to an authorization by a user of the smartphone, performing a function by the smartphone comprising sending data to the entity and receiving data from the entity, using a short-range second communications link between the smartphone and the entity that differs in air interface protocol from the first communications link,

wherein the entity is not involved in providing the communications service, and

wherein the entity functions independently of the communications service.

26. (New) The method of Claim 25,

wherein the short-range second communications link comprises a wireless short-range communications link that is based upon unlicensed frequencies, and

wherein the first communications link comprises a wireless communications link that is based upon licensed frequencies.

27. (New) The method of Claim 26, wherein the short-range second communications link that is based upon unlicensed frequencies is further based upon a Time Division Duplex (TDD) protocol.

28. (New) The method of Claim 25, wherein performing the function comprises:

enabling a mode of the smartphone responsive to satisfying the proximity criterion between the smartphone and the entity; and

performing the function responsive to enabling the mode of the smartphone and responsive to the authorization by the user.

29. (New) The method of Claim 25, wherein performing the function comprises performing a financial transaction by the smartphone, responsive to satisfying the proximity criterion between the smartphone and the entity and responsive to the authorization by the user.

30. (New) The method of Claim 29, wherein performing the financial transaction comprises providing payment associated with a toll and/or providing payment associated with a purchase of one or more items, responsive to satisfying the proximity criterion between the smartphone and the entity and responsive to the authorization by the user.

31. (New) A method of operating a smartphone, the method comprising:

receiving, at the smartphone, a communications service from a wireless network, using a first communications link; and

responsive to satisfying a proximity criterion between the smartphone and an entity, enabling a mode of the smartphone that uses a short-range second communications link between the smartphone and the entity that differs in air interface protocol from the first communications link,

wherein the entity is not involved in providing the communications service that is received from the wireless network, and

wherein the entity is independent of the communications service that is received from the wireless network.

32. (New) The method of Claim 31, further comprising:

performing a function via the smartphone, using the short-range second communications link, responsive to enabling the mode of the smartphone and responsive to a physiological parameter.

33. (New) The method of Claim 32, wherein performing the function comprises performing a financial transaction and/or transmission of data via the smartphone, responsive to enabling the mode of the smartphone and responsive to the physiological parameter.

34. (New) The method of Claim 33, wherein performing the financial transaction comprises providing payment associated with a toll and/or providing payment associated with a purchase of one or more items, responsive to enabling the mode of the smartphone and responsive to the physiological parameter.

35. (New) A method of operating a smartphone to exchange data with an entity using a first air interface and to receive a communications service from a wireless network using a second air interface that differs from the first air interface, the method comprising:

receiving by the smartphone, using the second air interface, the communications service from the wireless network devoid of any involvement by the entity in providing the communications service to the smartphone; and

independently of said receiving by the smartphone the communications service from the wireless network:

determining whether a proximity criterion is satisfied between the smartphone and the entity;

responsive to the proximity criterion being satisfied between the smartphone and the entity, enabling a communications mode between the smartphone and the entity; and

responsive to both said enabling a communications mode and a physiological parameter, exchanging data with the entity over the first air interface.

36. (New) The method of Claim 35, wherein said determining is based, at least in part, on receiving a short-range signal from the entity over the first air interface.

37. (New) The method of Claim 36, wherein said determining is based, at least in part, on a measurement of signal strength of the short-range signal.

38. (New) The method of Claim 35, wherein the second air interface is based upon an Orthogonal Frequency Division Multiplexed (OFDM) and/or Orthogonal Frequency Division Multiple Access (OFDMA) protocol.

39. (New) The method of Claim 35,

wherein a value of the physiological parameter is provided by using a sensor of the smartphone, and

wherein said exchanging data with the entity over the first air interface is performed in response to both the proximity criterion and the value of the physiological parameter.

40. (New) A smartphone configured to perform operations comprising:

receiving, at the smartphone, a communications service from a base station of a wireless network, using a first communications link comprising an Orthogonal Frequency Division Multiplexed (OFDM) and/or Orthogonal Frequency Division Multiple Access (OFDMA) protocol; and

responsive to satisfying a proximity criterion between the smartphone and an entity and responsive to an authorization by a user of the smartphone, performing a function by the smartphone comprising sending data to the entity and receiving data from the entity, using a short-range second communications link between the smartphone and the entity that differs in air interface protocol from the first communications link,

wherein the entity is not involved in providing the communications service, and

wherein the entity functions independently of the communications service.

41. (New) The smartphone of Claim 40,

wherein the short-range second communications link comprises a wireless short-range communications link that is based upon unlicensed frequencies, and

wherein the first communications link comprises a wireless communications link that is based upon licensed frequencies.

42. (New) The smartphone of Claim 41, wherein the short-range communications link that is based upon unlicensed frequencies is further based upon a Time Division Duplex (TDD) protocol.

43. (New) The smartphone of Claim 40, wherein performing the function comprises:

enabling a mode of the smartphone responsive to satisfying the proximity criterion between the smartphone and the entity; and

performing the function responsive to enabling the mode of the smartphone and responsive to the authorization by the user.

44. (New) The smartphone of Claim 40, wherein performing the function comprises performing a financial transaction by the smartphone, responsive to satisfying the proximity criterion between the smartphone and the entity and responsive to the authorization by the user.

45. (New) The smartphone of Claim 44, wherein performing the financial transaction comprises providing payment associated with a toll and/or providing payment associated with a purchase of one or more items, responsive to satisfying the proximity criterion between the smartphone and the entity and responsive to the authorization by the user.

46. (New) A smartphone configured to perform operations comprising:

receiving, at the smartphone, a communications service from a wireless network, using a first communications link; and

responsive to satisfying a proximity criterion between the smartphone and an entity, enabling a mode of the smartphone that uses a short-range second communications link between the smartphone and the entity that differs in air interface protocol from the first communications link,

wherein the entity is not involved in providing the communications service that is received from the wireless network, and

wherein the entity is independent of the communications service that is received from the wireless network.

47. (New) The smartphone of Claim 46, wherein the operations further comprise:

performing a function via the smartphone, using the short-range second communications link, responsive to enabling the mode of the smartphone and responsive to a physiological parameter.

48. (New) The smartphone of Claim 47, wherein performing the function comprises performing a financial transaction and/or transmission of data via the smartphone, responsive to enabling the mode of the smartphone and responsive to the physiological parameter.

49. (New) The smartphone of Claim 48, wherein performing the financial transaction comprises providing payment associated with a toll and/or providing payment associated with a purchase of one or more items, responsive to enabling the mode of the smartphone and responsive to the physiological parameter.

50. (New) A smartphone configured to exchange data with an entity using a first air interface and to receive a communications service from a wireless network using a second air interface that differs from the first air interface, by performing operations comprising:

receiving by the smartphone, using the second air interface, the communications service from the wireless network, devoid of any involvement by the entity in providing the communications service to the smartphone; and

independently of said receiving by the smartphone the communications service from the wireless network:

determining whether a proximity criterion is satisfied between the smartphone and the entity;

responsive to the proximity criterion being satisfied between the smartphone and the entity, enabling a communications mode between the smartphone and the entity; and

responsive to both said enabling a communications mode and a physiological parameter, exchanging data with the entity over the first air interface.

51. (New) The smartphone of Claim 50, wherein said determining is based, at least in part, on receiving a short-range signal from the entity over the first air interface.

52. (New) The smartphone of Claim 51, wherein said determining is based, at least in part, on a measurement of signal strength of the short-range signal.

53. (New) The smartphone of Claim 50, wherein the second air interface is based upon an Orthogonal Frequency Division Multiplexed (OFDM) and/or Orthogonal Frequency Division Multiple Access (OFDMA) protocol.

54. (New) The smartphone of Claim 50,

wherein a value of the physiological parameter is provided by using a sensor of the smartphone, and

wherein said exchanging data with the entity over the first air interface is performed in response to both the proximity criterion having been satisfied and the value of the physiological parameter.

REMARKS

In the Office Action of May 22, 2018 ("Office Action"), Claims 1-23 have been subjected to restriction as follows:

I. Claims 1-8, "drawn to a smartphone to provide information [to] an entity using a first air interface, and a second air interface, classified in class H04W 48/04."

II. Claims 9-23, "drawn to detecting by a sensor that an item has been displaced in a store, and price associated with the item, classified in class G06Q 30/06."

(*See* Office Action, page 2.)

In response to the Office Action, Applicant hereby elects **Group I, including Claims 1-8, without traverse**. Applicant has canceled non-elected Claims 9-23, without prejudice or disclaimer toward pursuit of the subject matter of any non-elected claims in a divisional or other continuing application.

Moreover, Applicant has amended Claims 1-4, 6, and 8, and has added new Claims 24-54. Applicant submits that new Claims 24-54 are readable on the elected Group 1 that is "drawn to a smartphone to provide information [to] an entity using a first air interface, and a second air interface, classified in class H04W 48/04." (*See* Office Action, page 2.)

Support for new Claims 24-54, and for the amendments to Claims 1-4, 6, and 8, may be found, for example, in FIGS. 1 and 2 and paragraphs [0026], [0029], [0034], [0036]-[0038], [0042], [0043], [0045], [0048], [0049], [0052], and [0054] of the specification.

For example, amended Claim 1 recites that "the communications service is received by the smartphone from the wireless network absent involving the entity and wherein the entity functions independently of the communications service." Support for these amended recitations of Claim 1 is provided, for example, in paragraph [0037] of the specification, which states that "the Entity 1 is not involved in providing a communications service to the first and/or second device," and in paragraph [0049] of the specification, which states that "the entity can be independent of the communications service provided to the first and second device."

As another example, amended Claim 2 recites "establishing a short-range communications link between the smartphone and the entity to provide by the smartphone, using the first air interface, information to the entity and to receive by the smartphone information from the entity, responsive to a proximity condition having been satisfied between the smartphone and the entity and responsive to a physiological parameter." Support for amended Claim 2 is provided, for example, in paragraph [0034] of the specification, which states that "the wireless communications device may be configured to selectively establish a communications link, that may, in some embodiments, be a short-range communications link." Support is also provided by paragraph [0026] of the specification, which states that "[a] wireless communications device may be configured to estimate a location associated therewith and may also be configured to estimate a value of at least one other parameter that may be associated with the wireless communications device, an environment thereof and/or an entity (living or otherwise) that is associated with and/or is proximate to the wireless communications device," and that "[t]he 'at least one other parameter' may, for example, be…a physiological state." Moreover, paragraph [0027] of the specification states that "the wireless communications device may be configured to selectively enable the first communications mode/function responsive to the outcome of the comparison [of location] and/or responsive to a value of another parameter, such as, for example, a value associated with the 'at least one other parameter.'" Also, paragraph [0049] of the specification discusses an example in which "the first device and the second device can be cellular phones authorized selectively by its user and by satisfying the proximity criterion to proceed with a financial transaction associated with the vendor at the access point."

In a further example, amended Claim 3 recites "using the first air interface…over a first interval of time," "using the second air interface…over a second interval of time; and wherein the first and second intervals of time are non-overlapping with one another." Support for these recitations of amended Claim 3 is provided, for example, in FIG. 2 and paragraph [0043] of the specification, which states:

> [0043] Referring to FIG. 2, the first device 14 can traverse a path 23 within an overall coverage area 20 and the second device 15 can traverse a path 25 within the overall coverage area 20. The overall coverage area 20 can include areas 22 and 24 that can be associated with respective entities. The entry of the first device

> 14 within area 22 can selectively enable a mode and/or a function at device 14 and can optionally enable a mode and/or a function at device 15 based, according to some embodiments, on a proximity criterion to area 24. For example, if device 14 owned and/or operated by a user is at a first store within area 22 and the device 15 owned/operated by, for example, the user's spouse is at a second store within area 24, then the user's spouse at device 15 can complete a purchase within area 24 based on the user's presence with device 14 within area 22. Similarly, if the two users at devices 14 and 15 at respective areas 22 and 24 want to sample music, games and/or even play a game between each other, their respective device can be provisioned for such sampling as long as they stay within the proximity criteria set for each of the respective devices. Once one or the other device goes beyond the respective proximity criterion, the mode and/or function enabling the sampling will be disabled at one or both devices.

In another example, new Claim 25 recites "responsive to satisfying a proximity criterion between the smartphone and an entity and responsive to an authorization by a user of the smartphone, performing a function by the smartphone comprising sending data to the entity and receiving data from the entity." Support for this recitation of Claim 25 is provided, for example, in paragraph [0037] of the specification, which states that "a mobile subscriber device 14 linked to a communications system 18 via base station 12 can enable a function when the device 14 comes within a proximity of Entity 1," where "[t]he function enabled can be a financial transaction, the transmission of communications, such as data, and/or some other function that may provision the mobile subscriber device 14 and/or the mobile subscriber device 15 with additional functionality not previously available/activated at the respective devices." Support is also provided by paragraph [0049] of the specification, which discusses an example in which "the first device and the second device can be cellular phones authorized selectively by its user and by satisfying the proximity criterion to proceed with a financial transaction associated with the vendor at the access point."

Claim 25 further recites that "the entity is not involved in providing the communications service," and that "the entity functions independently of the communications service." Support for these recitations of new Claim 25 is provided, for example, in paragraph [0037] of the specification, which states that "the Entity 1 is not involved in providing a communications service to the first and/or second device," and in paragraph [0049] of the specification, which

states that "the entity can be independent of the communications service provided to the first and second device."

In another example, new Claim 28 recites that "performing the function comprises: enabling a mode of the smartphone responsive to satisfying the proximity criterion between the smartphone and the entity; and performing the function responsive to enabling the mode of the smartphone and responsive to the authorization by the user." Support for new Claim 28 is provided, for example, in paragraph [0027] of the specification, which states that "the wireless communications device may be configured to selectively enable the first communications mode/function responsive to the outcome of the comparison [of location] and/or responsive to a value of another parameter, such as, for example, a value associated with the 'at least one other parameter.'" Also, paragraph [0049] of the specification discusses an example in which "the first device and the second device can be cellular phones authorized selectively by its user and by satisfying the proximity criterion to proceed with a financial transaction associated with the vendor at the access point." Moreover, paragraph [0052] of the specification states that "the first device and/or the second device may be configured to perform a function responsive to the mode having been enabled by the detector, wherein, according to some embodiments, the function may comprise a financial transaction, reception of data and/or transmission of data."

As a further example, new Claim 29 recites that "performing the function comprises performing a financial transaction by the smartphone, responsive to satisfying the proximity criterion between the smartphone and the entity and responsive to the authorization by the user." Support for new Claim 29 is provided, for example, by paragraph [0049] of the specification, which discusses an example in which "the first device and the second device can be cellular phones authorized selectively by its user and by satisfying the proximity criterion to proceed with a financial transaction associated with the vendor at the access point."

As another example, new Claim 31 recites that "the entity is not involved in providing the communications service that is received from the wireless network," and that "the entity is independent of the communications service that is received from the wireless network." Support for these recitations of new Claim 31 is provided, for example, in paragraph [0037] of the specification, which states that "the Entity 1 is not involved in providing a communications service to the first and/or second device," and in paragraph [0049] of the specification, which

states that "the entity can be independent of the communications service provided to the first and second device."

In a further example, new Claim 32 recites "performing a function via the smartphone, using the short-range second communications link, responsive to enabling the mode of the smartphone and responsive to a physiological parameter." Support for new Claim 32 is provided, for example, in paragraph [0034] of the specification, which states that "the wireless communications device may be configured to selectively establish a communications link, that may, in some embodiments, be a short-range communications link." Support is also provided by paragraph [0026] of the specification, which states that "[a] wireless communications device may be configured to estimate a location associated therewith and may also be configured to estimate a value of at least one other parameter that may be associated with the wireless communications device, an environment thereof and/or an entity (living or otherwise) that is associated with and/or is proximate to the wireless communications device," and that "[t]he 'at least one other parameter' may, for example, be…a physiological state." Moreover, paragraph [0027] of the specification states that "the wireless communications device may be configured to selectively enable the first communications mode/function responsive to the outcome of the comparison [of location] and/or responsive to a value of another parameter, such as, for example, a value associated with the 'at least one other parameter.'" Also, paragraph [0052] of the specification states that "the first device and/or the second device may be configured to perform a function responsive to the mode having been enabled by the detector, wherein, according to some embodiments, the function may comprise a financial transaction, reception of data and/or transmission of data."

As another example, new Claim 33 recites that "performing the function comprises performing a financial transaction and/or transmission of data via the smartphone, responsive to enabling the mode of the smartphone and responsive to the physiological parameter." Support for new Claim 33 is provided, for example, in paragraph [0052] of the specification, which states that "the first device and/or the second device may be configured to perform a function responsive to the mode having been enabled by the detector, wherein, according to some embodiments, the function may comprise a financial transaction, reception of data and/or transmission of data."

In a further example, new Claim 35 includes operations that are performed "independently of said receiving by the smartphone the communications service from the wireless network." Support for this recitation of new Claim 35 is provided, for example, in paragraph [0049] of the specification, which states that "the entity can be independent of the communications service provided to the first and second device." New Claim 35 further recites "responsive to both said enabling a communications mode and a physiological parameter, exchanging data with the entity over the first air interface." Support for this recitation of new Claim 35 is provided, for example, in paragraph [0026] of the specification, which states that "[a] wireless communications device may be configured to estimate a location associated therewith and may also be configured to estimate a value of at least one other parameter that may be associated with the wireless communications device, an environment thereof and/or an entity (living or otherwise) that is associated with and/or is proximate to the wireless communications device," and that "[t]he 'at least one other parameter' may, for example, be…a physiological state." Moreover, paragraph [0027] of the specification states that "the wireless communications device may be configured to selectively enable the first communications mode/function responsive to the outcome of the comparison [of location] and/or responsive to a value of another parameter, such as, for example, a value associated with the 'at least one other parameter.'" Also, paragraph [0049] of the specification discusses an example in which "the first device and the second device can be cellular phones authorized selectively by its user and by satisfying the proximity criterion to proceed with a financial transaction associated with the vendor at the access point."

In another example, new Claim 39 recites that "a value of the physiological parameter is provided by using a sensor of the smartphone," and that "said exchanging data with the entity over the first air interface is performed in response to both the proximity criterion and the value of the physiological parameter." Support for new Claim 39 is provided for example, in paragraph [0026] of the specification, which states that "[a] wireless communications device may be configured to estimate a location associated therewith and may also be configured to estimate a value of at least one other parameter that may be associated with the wireless communications device, an environment thereof and/or an entity (living or otherwise) that is associated with and/or is proximate to the wireless communications device," and that "[t]he 'at least one other

parameter' may, for example, be...a physiological state." Moreover, paragraph [0027] of the specification states that "the wireless communications device may be configured to selectively enable the first communications mode/function responsive to the outcome of the comparison [of location] and/or responsive to a value of another parameter, such as, for example, a value associated with the 'at least one other parameter.'" Also, paragraph [0049] of the specification discusses an example in which "the first device and the second device can be cellular phones authorized selectively by its user and by satisfying the proximity criterion to proceed with a financial transaction associated with the vendor at the access point."

Claims 40-54 are smartphone claims that correspond to method Claims 25-39, respectively. Applicant submits that the smartphone claims supported for at least similar reasons to those discussed above regarding corresponding ones of the method claims. Similarly, Claims 4 and 6 are system claims that correspond to method Claims 1 and 3, respectively, and that are supported for at least similar reasons to those discussed above regarding corresponding ones of the method claims.

In view of the above, Applicant respectfully requests favorable examination on the merits and the allowance of all the pending claims. The Examiner is encouraged to contact the undersigned directly if such contact will expedite the examination and allowance of the pending claims.

Respectfully submitted,

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Electronic Patent Application Fee Transmittal

Application Number:	15800885
Filing Date:	01-Nov-2017
Title of Invention:	MOBILE DEVICE MODE ENABLEMENT RESPONSIVE TO A PROXIMITY CRITERION
First Named Inventor/Applicant Name:	Peter D. Karabinis
Filer:	Vernon H. Guthrie Jr./Meredith Downing
Attorney Docket Number:	9466-24TSCT2

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:				
CLAIMS IN EXCESS OF 20	2202	16	50	800
INDEPENDENT CLAIMS IN EXCESS OF 3	2201	4	230	920
Miscellaneous-Filing:				
Petition:				
Patent-Appeals-and-Interference:				

Description	Fee Code	Quantity	Amount	Sub-Total in USD($)
Post-Allowance-and-Post-Issuance:				
Extension-of-Time:				
Miscellaneous:				
			Total in USD ($)	**1720**

Electronic Acknowledgement Receipt	
EFS ID:	32943380
Application Number:	15800885
International Application Number:	
Confirmation Number:	9764
Title of Invention:	MOBILE DEVICE MODE ENABLEMENT RESPONSIVE TO A PROXIMITY CRITERION
First Named Inventor/Applicant Name:	Peter D. Karabinis
Customer Number:	20792
Filer:	Vernon H. Guthrie Jr./Meredith Downing
Filer Authorized By:	Vernon H. Guthrie Jr.
Attorney Docket Number:	9466-24TSCT2
Receipt Date:	19-JUN-2018
Filing Date:	01-NOV-2017
Time Stamp:	18:52:55
Application Type:	Utility under 35 USC 111(a)

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Payment Type	CARD
Payment was successfully received in RAM	$1720
RAM confirmation Number	062018INTEFSW18532400
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		9466-24TSCT2_Response.pdf	1837176 989d95670db5734bdb30a6b96c9b763b05c7fa9c	yes	20
	Multipart Description/PDF files in .zip description				
	Document Description		**Start**	**End**	
	Response to Election / Restriction Filed		1	1	
	Claims		2	13	
	Applicant Arguments/Remarks Made in an Amendment		14	20	
Warnings:					
Information:					
2	Fee Worksheet (SB06)	fee-info.pdf	32380 c0255cf6e100c66f120dfeb3b4c4f3b24a0d9d26	no	2
Warnings:					
Information:					
		Total Files Size (in bytes):	1869556		

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
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PATENT APPLICATION FEE DETERMINATION RECORD

Substitute for Form PTO-875

Application or Docket Number	Filing Date	
15/800,885	11/01/2017	☐ 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

06/19/2018	(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))	* 39	Minus	** 23	= 16	X $50 =	800
Independent (37 CFR 1.16(h))	* 8	Minus	***4	= 4	X $230 =	920
☐ Application Size Fee (37 CFR 1.16(s))						
☐ FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))						
					TOTAL ADD'L FEE	1720

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.

SLIE
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.**

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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
15/800,885	11/01/2017	Peter D. Karabinis	9466-24TSCT2	9764

20792 7590 08/09/2018
MYERS BIGEL, P.A.
PO BOX 37428
RALEIGH, NORTH CAROLINA 27627
UNITED STATES OF AMERICA

EXAMINER
VU, MICHAEL T

ART UNIT	PAPER NUMBER
2641	

MAIL DATE	DELIVERY MODE
08/09/2018	PAPER

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.

PTOL-90A (Rev. 04/07)

Office Action Summary	Application No. 15/800,885	Applicant(s) Karabinis et al.	
	Examiner MICHAEL T VU	Art Unit 2641	AIA 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 06/19/2018.

☐ 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) 1-8 and 24 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) 1-8 and 24 is/are rejected.

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

9) ☑ Claim(s) 25-54 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 11/01/2017 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

Information Disclosure Statement

1. The information disclosure statement (IDS) submitted on 11/01/2017 is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement is being considered by the examiner.

Drawings

2. The drawings were received on 11/01/2017. These drawings are considered by examiner.

Election/Restrictions

3. Applicant's election Group I without traverse of claims 1-8, and added claim 24 which is depending on claim 1 in the reply filed on 06/19/2018 is acknowledged. The examiner only reject the original presentation of claims 1-8 and 24 because of the claims 25-54 are required of the election/restriction between subcombinations usable together.

4. The Applicant newly added claims 25-54 that have the separate utilities and/or different inventive. The examiner has required restriction between subcombinations usable together of the independent claims 25, 31, 35, 40, 46, and 50 (See election/restriction as below).

Election/Restrictions

5. Restriction to one of the following inventions is required under 35 U.S.C. 121:

I. Claims 1-8, and 24, drawn to a first air interface and a second air interface, classified in H04W 48/04.

II. Claims 25-30, 40-45, drawn to responsive to an authorization by a user of the smartphone, performing a function, classified in H04W 12/06.

III. Claims 31-34, 35-39, 35-39, 46-49, 50-54 drawn to responsive to satisfying a proximity criterion, and enabling a mode, classified in H04W 4/00.

The inventions are distinct, each from the other because of the following reasons:

Inventions Group I, II and III are related as subcombinations disclosed as usable together in a single combination. The subcombinations are distinct if they do not overlap in scope and are not obvious variants, and if it is shown that at least one subcombination is separately usable. In the instant case, subcombination Group I, Group II and Group III has separate utility such as a first air interface and a second air interface, responsive to an authorization by a user of the smartphone, performing a function, and responsive to satisfying a proximity criterion, and enabling a mode. See MPEP § 806.05(d).

The examiner has required restriction between subcombinations usable together. Where applicant elects a subcombination and claims thereto are subsequently found allowable, any claim(s) depending from or otherwise requiring all the limitations of the allowable subcombination will be examined for patentability in accordance with 37 CFR 1.104. See MPEP § 821.04(a). Applicant is advised that if any claim presented in a

continuation or divisional application is anticipated by, or includes all the limitations of, a claim that is allowable in the present application, such claim may be subject to provisional statutory and/or nonstatutory double patenting rejections over the claims of the instant application.

Restriction for examination purposes as indicated is proper because all these inventions listed in this action are independent or distinct for the reasons given above and there would be a serious search and examination burden if restriction were not required because one or more of the following reasons apply:

(a) the inventions have acquired a separate status in the art in view of their different classification;

(b) the inventions have acquired a separate status in the art due to their recognized divergent subject matter;

(c) the inventions require a different field of search (for example, searching different classes/subclasses or electronic resources, or employing different search queries);

(d) the prior art applicable to one invention would not likely be applicable to another invention;

(e) the inventions are likely to raise different non-prior art issues under 35 U.S.C. 101 and/or 35 U.S.C. 112, first paragraph.

Applicant is advised that the reply to this requirement to be complete <u>must</u> include (i) an election of a invention to be examined even though the requirement may be traversed (37 CFR 1.143) **and (ii) identification of the claims encompassing the elected invention**.

The election of an invention may be made with or without traverse. To reserve a right to petition, the election must be made with traverse. If the reply does not distinctly and specifically point out supposed errors in the restriction requirement, the election shall be treated as an election without traverse. Traversal must be presented at the time of election in order to be considered timely. Failure to timely traverse the requirement will result in the loss of right to petition under 37 CFR 1.144. If claims are added after the election, applicant must indicate which of these claims are readable on the elected invention.

If claims are added after the election, applicant must indicate which of these claims are readable upon the elected invention.

Should applicant traverse on the ground that the inventions are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the inventions to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other invention.

The examiner has required restriction between product and process claims. Where applicant elects claims directed to the product, and the product claims are subsequently found allowable, withdrawn process claims that depend from or otherwise require all the limitations of the allowable product claim will be considered for rejoinder. All claims directed to a nonelected process invention must require all the limitations of an allowable product claim for that process invention to be rejoined.

In the event of rejoinder, the requirement for restriction between the product claims and the rejoined process claims will be withdrawn, and the rejoined process claims will be fully examined for patentability in accordance with 37 CFR 1.104. Thus, to be allowable, the rejoined claims must meet all criteria for patentability including the requirements of 35 U.S.C. 101, 102, 103 and 112. Until all claims to the elected product are found allowable, an otherwise proper restriction requirement between product claims and process claims may be maintained. Withdrawn process claims that are not commensurate in scope with an allowable product claim will not be rejoined. See MPEP § 821.04(b). Additionally, in order to retain the right to rejoinder in accordance with the above policy, applicant is advised that the process claims should be amended during prosecution to require the limitations of the product claims. **Failure to do so may result in a loss of the right to rejoinder**. Further, note that the prohibition against double patenting rejections of 35 U.S.C. 121 does not apply where the restriction requirement is withdrawn by the examiner before the patent issues. See MPEP § 804.01.

Terminal Disclaimer

6. Examiner suggests the Assignee must submit the Terminal Disclaimer accordingly, in order to process of the application promptly.

Double Patenting

7. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225

USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington,* 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

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

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

8. Claims 1, 4 are rejected on the ground of non-statutory obviousness-type double patenting as being unpatentable over claims 1, 11, 16, 18 of Patent No. **9,832,708**. Although the conflicting claims are not identical, they are not patentably distinct from each other because the claims in the instant application was filed on May 06, 2013 is non-statutory and is broader than the ones in the patent and encompasses a similar invention as recited in the patent claims, i.e., a method of operating a smartphone to wirelessly provide information to an entity using a first air interface, to wirelessly receive information); therefore, the claims are obviousness-type by the claims in U.S Patent No. **9,832,708** (See In re Goodman).

It is important to note that claimed features recited in claims 1, 11, 16, 18 of U.S. Patent No. **9,832,708** are more specific than claimed features recited in claims 1, 4 of the Instant Application. Hence, the scope of claims of present application is now broader than U.S. Patent No **9,832,708**.

Many decisions support the fact that a broad or generic claim is obvious from a specific claim, i.e., an obvious variation. See In re Van Ornum and Stang, 214 USPQ 761 (CCPA 1982); In re Goodman (CA FC) 29 USPQ2d 2010 (12/3/1993); In re Vogel

and Vogel; 164 USPQ 619 (CCPA 1970); In re Berg (CA FC) 46 USPQ2d 1226 (3/30/1998); Eli Lilly and Co. v. Barr Laboratories Inc., 58 USPQ2d 1865 (CA FC 2001). It is well settled that omission of an element and its function in a combination is an obvious expedient if the remaining elements perform the same functions as before. This notion is supported by In re KARLSON, 136 USPQ 184 (1963); In re Nelson, 95 USPQ 82 (CCPA 1952); and In re Eliot, 25 USPQ 111 (CCPA 1935).

Dependent claims 2-3, 5-8, and 24 depend either directly or indirectly upon independent claims 1, 4 of patent applications **9,832,708** is also rejected at least for the same reasons discussed above.

Claim Rejections - 35 USC § 103

9. In the event the determination of the status of the application as subject to AIA 35 U.S.C. 102 and 103 (or as subject to pre-AIA 35 U.S.C. 102 and 103) is incorrect, any correction of the statutory basis for the rejection will not be considered a new ground of rejection if the prior art relied upon, and the rationale supporting the rejection, would be the same under either status.

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

> A patent for a claimed invention may not be obtained, notwithstanding that the claimed invention is not identically disclosed as set forth in section 102, if the differences between the claimed invention and the prior art are such that the claimed invention as a whole would have been obvious before the effective filing date of the claimed invention to a person having ordinary skill in the art to which the claimed invention pertains. Patentability shall not be negated by the manner in which the invention was made.

11. Claims 1-8, 24 are rejected under 35 U.S.C. 103 as being unpatentable over Dowling (US 2007/0260710), hereinafter "Dowling", in view of Iguchi et al (US 2007/0129077), hereinafter "Iguchi".

Regarding **claim 1,** Dowling teaches a method of operating a smartphone to wirelessly provide information to an entity using a first air interface (pars [0008] [0016] teach a dual mode cellular phone that using a first air interface), to wirelessly receive information from by the entity using the first air interface (pars [0008] 0016]); and to wirelessly receive a communications service from a wireless network using a second air interface that differs from the first air interface (pars [0016-0017] teach receive a communication service using the second air interface is differ from the first air interface), wherein the communications service is received by the smartphone from the wireless network absent involving the entity and wherein the entity functions independently of the communications service (pars [0008] [0012-0017] teach a mobile device to access different services using different protocols reads on independently of the communication services), the method comprising:

wirelessly providing by the smartphone (pars [0012-0017] providing wirelessly by the mobile device), using the first air interface (pars [0008] [0012-0017] teach the first air interface), information to the entity and wirelessly receiving by the smartphone (pars [0008] [0012-0017] teach the mobile device received the set of parameters for accessing the wireless network), using the first air interface (pars [0008] [0016-0017] using the first air interface), information from the entity independently of, and absent involving the entity in, receiving by the smartphone the communications service from the wireless network using the second air interface service (pars [0008] [0012-0017] teach a

mobile device to access different services using different protocols reads on independently of the communication services such as the first air interface and the second air interface); and

wirelessly receiving by the smartphone (pars [0012-0017]), using the second air interface (pars [0012-0017] teach using the second air interface), the communications service from the wireless network absent involving the entity, absent providing by the smartphone information with to the entity, and absent receiving by smartphone information from the entity (pars [0012-0017] [0043-0047] teach the configuration and the operation of providing the first air interface and the second air interface between the mobile device and the entity, see pars [0073-0074] teach provide wireless access services) .

Dowling does not explicitly teach absent involving the entity in receiving or transmitting the communication service.

Iguchi, in the same field of endeavor, teaches absent involving the entity in receiving or transmitting the communication service (Iguchi teaches a processing method for handover in base station involves stopping transmission for handover where handover source and target base stations (See Abstract and claim 1).

Therefore, it would have been obvious before the effective filing date of the claimed invention to one of ordinary skill in the art to provide the above teaching of Dowling to Iguchi, in order to provide an efficient use of channels assigned with a variable bandwidth in a mobile communication system during handoff (as suggested by Iguchi in paragraphs [0012-0014]).

Regarding **claim 2,** the combination of Dowling and Iguchi teach the method of Claim 1, Dowling further teaches comprising establishing a short-range communications link between the smartphone and the entity to provide by the smartphone (pars [0012] [0030] teach the short range technologies), using the first air interface (pars [0016-0017]), information to the entity and to receive by the smartphone information from the entity (pars [0016-0017] teach transmit/receive the information between the mobile device and the base station/AP reads on the entity), in response to a proximity condition having been satisfied between the smartphone and the entity and in response to a physiological parameter (pars [0016-0017] teach a set of parameters for accessing the networks reads on a physiological).

Regarding **claim 3,** the combination of Dowling and Iguchi teach the method of Claim 1, Dowling further teaches wherein said wirelessly providing by the smartphone, using the first air interface, information to the entity and wirelessly receiving by the smartphone, using the first air interface (pars [0016-0017] teach transmit/receive the information between the mobile device and the base station/AP reads on the entity), information from the entity independently of, and absent involving the entity in, receiving by the smartphone the communications service from the wireless network using the second air interface is performed over a first time interval (pars [0008-0010] teach the time interval); wherein said wirelessly receiving by the smartphone (pars [0016-0017]), using the second air interface (pars [0016-0017]), the communications service from the wireless absent involving the entity (pars [0016-0017] teach transmit/receive the information between the mobile device and the base station/AP reads on the entity),

absent providing by the smartphone information to the entity (pars [0016-0017]), and absent receiving by the smartphone information from the entity is performed over a second time interval (pars [0008-0010]); and wherein the first and second time intervals are non-overlapping with one another (pars [0008-0010]).

Dowling does not explicitly teach absent involving the entity.

Iguchi, in the same field of endeavor, teaches absent involving the entity (Iguchi teaches a processing method for handover in base station involves stopping transmission for handover where handover source and target base stations (See Abstract and claim 1).

Therefore, it would have been obvious before the effective filing date of the claimed invention to one of ordinary skill in the art to provide the above teaching of Dowling to Iguchi, in order to provide an efficient use of channels assigned with a variable bandwidth in a mobile communication system during handoff (as suggested by Iguchi in paragraphs [0012-0014]).

Regarding to **claim 4**, the claim is interpreted and rejected for the same reason as set forth in claim 1.

Regarding **claim 5,** the combination of Dowling and Iguchi teach the system according to Claim 4, Dowling further teaches comprising the entity (pars [0073-0074] teach the entity).

Regarding **claim 6,** the combination of Dowling and Iguchi teach the system of Claim 4, Dowling further teaches wherein said wirelessly providing, using a first air interface (pars [0016-0017] teach the first and the second air interface), information to an entity and wirelessly receiving (pars [0016-0017] [0073-0074]), using the first air interface (pars [0016-0017]), information from the entity independently of and absent involving the entity in, receiving a communications service from a wireless network using a second air interface that differs from the first air interface is performed over a first time interval (pars [0008-0010] [0016-0017]); wherein said wirelessly receiving, using the second air interface (pars [0016-0017]), the communications service from the wireless network absent involving the entity (pars [0016-0017] teach transmit/receive the information between the mobile device and the base station/AP reads on the entity), absent providing information to the entity (pars [0016-0017] [0073-0074]), and absent receiving information from the entity is performed over a second time interval (pars [0008-0010] [0016-0017] teach the first and the second time interval); and wherein the first and second-time intervals are non-overlapping with one another (pars [0008-0010] [0016-0017] teach the time intervals that not overlapping with each other).

Iguchi, in the same field of endeavor, teaches the communications service from the wireless network absent involving the entity.

Iguchi, in the same field of endeavor, teaches the communications service from the wireless network absent involving the entity (Iguchi teaches a processing method for handover in base station involves stopping transmission for handover where handover source and target base stations (See Abstract and claim 1).

Therefore, it would have been obvious before the effective filing date of the claimed invention to one of ordinary skill in the art to provide the above teaching of Dowling to Iguchi, in order to provide an efficient use of channels assigned with a variable bandwidth in a mobile communication system during handoff (as suggested by Iguchi in paragraphs [0012-0014]).

Regarding **claim 7,** the combination of Dowling and Iguchi teach the system of Claim 4, Dowling further teaches wherein the second air interface is based upon an Orthogonal Frequency Division Multiplexed (OFDM) and/or Orthogonal Frequency Division Multiple Access (OFDMA) protocol (pars [0016-0017] teach a CDMA macro cellular network reads on OFDMA, and/or pars [0004] [0011] teach inter-system roaming for the wireless access service providers that used the OFDMA technology).

Regarding **claim 8,** the combination of Dowling and Iguchi teach the method of Claim 24, Dowling further teaches wherein the wireless short-range communications link that is based upon unlicensed frequencies is further based upon a Time Division Duplex (TDD) protocol (pars [0012-0017] teach a TDD protocol), and wherein the second air interface that uses a wireless communications link that is based upon licensed frequencies is further based upon an Orthogonal Frequency Division Multiplexed (OFDM) and/or Orthogonal Frequency Division Multiple Access (OFDMA) protocol (pars [0016-0017] teach a CDMA macro cellular network, and pars [0004] [0011] teach inter-system roaming for the wireless access service providers that used the OFDMA technology).

Regarding **claim 24,** the combination of Dowling and Iguchi teach the method of Claim 1, Dowling further teaches wherein the first air interface uses a wireless short-range communications link that is based upon unlicensed frequencies (pars [0012-0017]), and wherein the second air interface uses a wireless communications link that is based upon licensed frequencies (pars [0004] [0011] teach inter-system roaming for the wireless access service providers which reads on upon licensed frequencies, and pars [0012-0017] teach the involve different protocols and teach a variety of air interface protocols based on the roaming process and/or bandwidth).

Conclusion

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to MICHAEL T VU whose telephone number is (571)272-8131. The examiner can normally be reached on 8:00AM to 6:00PM.

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, Charles Appiah can be reached on (571-272-7904. 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.

/MICHAEL T VU/

Primary Examiner, Art Unit 2641

Notice of References Cited	Application/Control No. 15/800,885	Applicant(s)/Patent Under Reexamination Karabinis et al.	
	Examiner MICHAEL T VU	Art Unit 2641	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-20070260710-A1	11-2007	Dowling; Eric Morgan	G06Q20/04	709/219
*	B	US-20070129077-A1	06-2007	Iguchi; Masayuki	H04W28/20	455/442
	C					
	D					
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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
	15/800,885	Karabinis et al.
	Examiner	**Art Unit**
	MICHAEL T VU	2641

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

CLAIMS

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

CLAIM		DATE								
Final	Original	08/07/2018								
	1	✓								
	2	✓								
	3	✓								
	4	✓								
	5	✓								
	6	✓								
	7	✓								
	8	✓								
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Index of Claims	Application/Control No.	Applicant(s)/Patent Under Reexamination
	15/800,885	Karabinis et al.
	Examiner	**Art Unit**
	MICHAEL T VU	2641

CLAIM		DATE								
Final	Original	08/07/2018								
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	44	÷								
	45	÷								
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	47	÷								
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	52	÷								
	53	÷								
	54	÷								

Search Notes	Application/Control No.	Applicant(s)/Patent Under Reexamination
	15/800,885	Karabinis et al.
	Examiner	**Art Unit**
	MICHAEL T VU	2641

CPC - Searched*		
Symbol	**Date**	**Examiner**
H04W 48/04	08/07/2018	MTV

CPC Combination Sets - Searched*		
Symbol	**Date**	**Examiner**
H04W84/12 OR H04W88/04 OR H04W48/18 OR H04W28/0231 OR H04W52/0229 OR H04W52/0274 OR H04W84/042 OR H04W88/06 OR H04W88/16 OR H04W92/02	08/07/2018	MTV

US Classification - Searched*			
Class	**Subclass**	**Date**	**Examiner**

* 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 Name: Peter Karabinis	08/07/2018	MTV
Assignee: Telcom Ventures	08/07/2018	MTV
Double Patent Rejected	08/07/2018	MTV
EAST Searched System	08/07/2018	MTV

Interference Search			
US Class/CPC Symbol	**US Subclass/CPC Group**	**Date**	**Examiner**

	/MICHAEL T VU/ Primary Examiner, Art Unit 2641

EAST Search History

EAST Search History (Prior Art)

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L1	48	("20030220105" | "20040030601" | "20040170430" | "20060009234" | "20060133633" | "20060145893" | "20060159260" | "20060172700" | "20060194538" | "20070167147" | "20070178935" | "20070184837" | "20070197261" | "20070243872" | "20070250393" | "20070265984" | "20070285280" | "20080040274" | "20080140868" | "20080146148" | "20080167966" | "20080200166" | "20080227471" | "20080306868" | "20090023474" | "20090113543" | "20090153367" | "20090169070" | "20090213947" | "20100067591" | "20100265845" | "20110314539" | "20120214443" | "20130156218" | "6595929" | "6769607" | "6957107" | "7028897" | "7133659" | "7155199" | "7539241" | "7822644" | "7912629" | "8023580" | "8463238" | "8532069" | "8646060" | "RE39736").PN.	US-PGPUB; USPAT	OR	OFF	2018/08/08 12:53
S1	29754	local near8 activat$3	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2017/05/30 15:57
S2	5	local near8 activat$3 same (terminat$3 stop$4 end$3) with wide near4 network	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2017/05/30 15:58
S4	2694	(local WLAN) same (terminat$3 stop$4 end$3) with wide near4 network	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2017/05/31 06:10
S5	460	connect$4 near6 (local WLAN) same (terminat$3 stop$4 end$3) with wide near4 network	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2017/05/31 06:11
S6	11	connect$4 near6 (local WLAN) same	US-PGPUB;	OR	OFF	2017/05/31

		determin$4 with (terminat$3 stop$4 end$3) with wide near4 network	USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB			06:11
S7	87	S5 AND ((H04W84/12 OR H04W12/08 OR H04W24/02 OR H04W24/08 OR H04W4/26 OR H04W28/0215 OR H04W28/0268 OR H04W28/0289 OR H04W28/12 OR H04W36/14 OR H04W4/001 OR H04W80/04 OR H04W84/042 OR H04W24/00 OR H04W28/021 OR H04W28/0221 OR H04W28/0247 OR H04W28/0257 OR H04W28/0284 OR H04W28/20 OR H04W48/04 OR H04W48/06 OR H04W48/16 OR H04W52/0212 OR H04W52/0264 OR H04W12/00 OR H04W28/02 OR H04W4/24 OR H04W88/06 OR H04W88/08 OR H04W40/02 OR H04W4/008 OR H04W76/02 OR H04W88/12 OR H04W8/02 OR H04W12/02 OR H04W12/06 OR H04W24/04 OR H04W28/08 OR H04W28/10 OR H04W36/26 OR H04W40/12 OR H04W48/14 OR H04W48/20 OR H04W4/005 OR H04W4/006 OR H04W4/02 OR H04W4/023 OR H04W4/06 OR H04W4/12 OR H04W4/18 OR H04W4/20 OR H04W52/0203 OR H04W72/0453 OR H04W76/022 OR H04W80/06 OR H04W84/04 OR H04W84/20 OR H04W88/02 OR H04W88/04 OR H04W88/085 OR H04W88/10 OR H04W8/18 OR H04W8/20).CPC.)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2017/05/31 06:12
S8	67	(local WLAN) same indicat$4 same activat$3 and (terminat$3 stop$4 end$3) with wide near4 network	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2017/06/01 15:43
S9	21	S8 AND ((H04W76/02 OR H04W88/04 OR H04W4/008 OR H04W88/10 OR H04W12/00 OR H04W88/06 OR H04W16/14 OR H04W28/08 OR H04W28/10 OR H04W40/12 OR H04W48/18 OR H04W4/001 OR H04W4/021 OR H04W4/24 OR H04W88/02 OR H04W88/16 OR H04W12/04 OR H04W12/06 OR H04W12/08 OR H04W28/06 OR H04W4/043 OR H04W52/0209 OR H04W74/00 OR H04W8/26).CPC.)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2017/06/01 15:44
S10	9	S8 AND ((G06Q10/06 OR G06Q30/02 OR G06Q30/0233 OR G06Q30/0601 OR G06Q10/02 OR G06Q30/00 OR G06Q30/04 OR G06Q50/30).CPC.)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT;	OR	OFF	2017/06/01 15:45

			IBM_TDB			
S11	8	S8 AND ((G06F1/3203 OR G06F11/1448 OR G06F11/1458 OR G06F11/2294 OR G06F2009/4557 OR G06F2009/45575 OR G06F9/4443 OR G06F9/45558 OR G06F9/4856).CPC.)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2017/06/01 15:45
S12	2272	((SOUMYA NEAR2 DAS) OR (BONGYONG NEAR2 SONG) OR (SAMIR NEAR3 SOLIMAN)).IN.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2017/06/01 15:46
S13	0	S8 AND S12	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2017/06/01 15:46
S14	85	((sari near2 nielsen) or (antti near2 toskala)).in.	USPAT	OR	OFF	2017/06/01 15:48
S15	0	S8 and S14	USPAT	OR	OFF	2017/06/01 15:48
S16	1360	(UE mobile terminal) same (disconnect$4 terminat$3) with ((wide cellular) adj4 network)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2017/11/13 12:49
S17	26	(UE mobile terminal) same (disconnect$4 terminat$3) with ((wide cellular) adj4 network) same (detect$3 whether) with ((local adj area adj network) WLAN)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2017/11/13 12:50
S18	9	(UE mobile terminal) same (disconnect$4 terminat$3) with ((wide cellular) adj4 network) same (detect$3 whether) same (indicat$3) same ((local adj area adj network) WLAN)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2017/11/13 12:50
S19	6	(UE mobile terminal) same (disconnect$4 terminat$3) with ((wide cellular) adj4 network) and (unlicensed adj band)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2017/11/13 13:08
S21	30	(UE mobile terminal) same (wide adj area adj network) same activat$3 same ((long adj term adj evolution adj network) LTE)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT;	OR	OFF	2017/11/13 14:02

			IBM_TDB			
S22	100	(UE mobile terminal) same (local adj area adj network) same (indicat$3 with activat$3)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2017/11/13 14:33
S23	115	((terminat$3 end$3) near9 (unlicens$3 adj2 band))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/05/16 19:53
S24	43	((terminat$3 end$3) near9 (unlicens$3 adj2 band)) same LTE	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/05/16 19:54
S26	150	((terminat$3 end$3) near9 ((unlicens$3 adj2 band) LTE-U))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/05/16 20:16
S27	31	UE same ((terminat$3 end$3) near9 ((unlicens$3 adj2 band) LTE-U))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/05/16 20:17
S28	18	("20050095986" | "20120113918" | "20120307748" | "20130336156" | "20130343288" | "20140023022" | "20140199992" | "20140254524" | "20150215952" | "20150223077" | "20150256303" | "20160007350" | "20160014610" | "20170141859" | "7363008" | "8126473" | "8565178" | "8767666").PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2018/05/16 20:20
S29	24	((terminat$3) near9 (unlicens$3 adj2 band))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/05/16 20:31
S30	18	S29 AND ((H04W16/14 OR H04W72/0453 OR H04W28/08 OR H04W84/045 OR H04W84/12 OR H04W88/02 OR H04W88/06 OR H04W72/02 OR H04W72/042 OR H04W72/0446 OR H04W76/06 OR H04W76/30 OR H04W28/26 OR H04W72/0406 OR H04W72/14 OR H04W24/08 OR H04W24/10 OR	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/05/16 20:35

		H04W28/18 OR H04W48/16 OR H04W48/18 OR H04W52/04 OR H04W56/0005 OR H04W60/00 OR H04W64/00 OR H04W72/00 OR H04W72/04 OR H04W72/044 OR H04W72/0486 OR H04W72/1289 OR H04W74/006 OR H04W74/0833 OR H04W74/085 OR H04W76/27 OR H04W88/12 OR H04W8/02 OR H04W92/20).CPC.)				
S31	18	("20050095986" | "20120113918" | "20120307748" | "20130336156" | "20130343288" | "20140023022" | "20140199992" | "20140254524" | "20150215952" | "20150223077" | "20150256303" | "20160007350" | "20160014610" | "20170141859" | "7363008" | "8126473" | "8565178" | "8767666").PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2018/05/16 20:36
S32	8	("20060246903" | "20070281704" | "20080002658" | "20080113624" | "20090054058" | "20110289175" | "6850489" | "8509788").PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2018/05/16 20:36
S33	9	S29 AND ((H04L1/00 OR H04L27/0006 OR H04L27/26 OR H04L5/0048 OR H04L5/001 OR H04L5/0023 OR H04L5/0057 OR H04L5/006 OR H04L5/0085 OR H04L5/0091 OR H04L5/14 OR H04L1/0003 OR H04L1/0009 OR H04L1/0061 OR H04L1/18 OR H04L1/1861 OR H04L5/0007 OR H04L5/0044 OR H04L5/0053 OR H04L5/0092).CPC.)	US-PGPUB; USPAT; USOCR	OR	OFF	2018/05/16 20:37
S34	18	("20050095986" | "20120113918" | "20120307748" | "20130336156" | "20130343288" | "20140023022" | "20140199992" | "20140254524" | "20150215952" | "20150223077" | "20150256303" | "20160007350" | "20160014610" | "20170141859" | "7363008" | "8126473" | "8565178" | "8767666").PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2018/05/16 20:37
S35	131	S26 AND ((H04W16/14 OR H04W74/0808 OR H04W72/0453 OR H04W72/1215 OR H04W84/12 OR H04W72/0446 OR H04W74/0816 OR H04W72/042 OR H04W88/06 OR H04W88/10 OR H04W24/08 OR H04W88/02 OR H04W88/08 OR H04W72/082 OR H04W84/045 OR H04W48/16 OR H04W74/006 OR H04W28/26 OR H04W72/00 OR H04W72/02 OR H04W72/044 OR H04W84/042 OR H04W8/005 OR H04W16/16 OR H04W24/02 OR H04W24/10 OR H04W48/12 OR H04W52/0206 OR H04W52/243 OR H04W56/001 OR H04W72/0406 OR H04W72/0413 OR H04W72/085 OR H04W72/14 OR H04W74/08 OR H04W76/28 OR H04W12/06 OR	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/05/16 20:38

		H04W16/32 OR H04W28/08 OR H04W28/18 OR H04W40/16 OR H04W4/24 OR H04W52/04 OR H04W52/241 OR H04W52/244 OR H04W56/00 OR H04W72/04 OR H04W72/0426 OR H04W72/048 OR H04W72/0486 OR H04W72/1252 OR H04W72/1268 OR H04W74/002 OR H04W74/04 OR H04W74/0833 OR H04W76/15 OR H04W76/27 OR H04W88/12 OR H04W92/20 OR H04W12/08 OR H04W24/00 OR H04W28/14 OR H04W28/16 OR H04W36/22 OR H04W36/385 OR H04W40/244 OR H04W48/00 OR H04W48/20 OR H04W4/02 OR H04W4/20 OR H04W52/143 OR H04W52/281 OR H04W52/367 OR H04W56/0005 OR H04W56/0015 OR H04W60/00 OR H04W64/00 OR H04W72/005 OR H04W72/10 OR H04W72/121 OR H04W72/1247 OR H04W72/1263 OR H04W72/1273 OR H04W72/1289 OR H04W74/004 OR H04W74/008 OR H04W74/06 OR H04W74/0841 OR H04W74/085 OR H04W76/046 OR H04W76/048 OR H04W76/06 OR H04W76/30 OR H04W8/02 OR H04W8/22 OR H04W8/24 OR H04W92/10).CPC.)				
S36	5	("20120039284" | "20130201884" | "20130208587" | "20130315152" | "20150016239").PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2018/05/16 20:40
S37	18	("20050095986" | "20120113918" | "20120307748" | "20130336156" | "20130343288" | "20140023022" | "20140199992" | "20140254524" | "20150215952" | "20150223077" | "20150256303" | "20160007350" | "20160014610" | "20170141859" | "7363008" | "8126473" | "8565178" | "8767666").PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2018/05/16 20:40
S38	13	("20040264475" | "20060194540" | "20070171909" | "20110044218" | "20120051342" | "20120069766" | "20130337821" | "20140044105" | "20150124740" | "20150223075" | "20150271226" | "20150334744" | "6526264").PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2018/05/16 20:40
S39	4	("20130170427" | "20130250931" | "20140341024" | "20160066306").PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2018/05/16 20:40
S40	8	("20060223448" | "20080122581" | "20110021153" | "20110128895" | "20130163449" | "20160338019" | "20170127449" | "8155102").PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2018/05/16 20:40
S41	1	("20140044105").PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2018/05/16 20:40
S42	26	("20040162617" | "20080233967" | "20090262785" | "20100046440" | "20100091670" | "20100322287" |	US-PGPUB; USPAT; USOCR	OR	OFF	2018/05/16 20:41

		"20110110251" | "20110170424" | "20110205984" | "20110244904" | "20120120892" | "20120140656" | "20120207040" | "20120264388" | "20130065533" | "20130142059" | "20130143502" | "20130195072" | "20130315152" | "20130322279" | "20130336156" | "20130337821" | "20140133371" | "20150063148" | "8494580" | "9253778").PN.				
S43	8	("20080108366" | "20110228742" | "20130143502" | "20140044105" | "20150189676" | "20150264699" | "20160294516" | "8792900").PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2018/05/16 20:41
S44	10	("20120120892" | "20130196653" | "20140029535" | "20140187287" | "20140213219" | "20140369329" | "20150009850" | "20150063323" | "8290503" | "8767576").PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2018/05/16 20:41
S45	44	("20090129332" | "20090285169" | "20100172254" | "20110128895" | "20120069766" | "20120082140" | "20120093009" | "20120170557" | "20120243498" | "20120250631" | "20120264468" | "20130003591" | "20130010766" | "20130034018" | "20130058245" | "20130083661" | "20130094467" | "20130142059" | "20130178225" | "20130194981" | "20130208587" | "20130235814" | "20130242924" | "20130272260" | "20140036818" | "20140044000" | "20140044105" | "20140045494" | "20140050146" | "20140050170" | "20140087748" | "20140126403" | "20140301351" | "20150055621" | "20150063245" | "20150085683" | "20150085684" | "20150085792" | "20150085841" | "20150163794" | "20150163801" | "20150163823" | "20150208413" | "20150236782").PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2018/05/16 20:41
S46	18	("20090197627" | "20100048234" | "20100208685" | "20100273515" | "20110228666" | "20110299479" | "20110300891" | "20120044898" | "20120052891" | "20120100883" | "20120176998" | "20120231834" | "20130034091" | "20130044662" | "20130343219" | "20140080501" | "20140086195" | "20150087352").PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2018/05/16 20:41
S47	4	("20050207381" | "20120076081" | "20130208587" | "20150215100").PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2018/05/16 20:41
S48	61	S26 AND ((H04L5/0048 OR H04L27/0006 OR H04L5/0053 OR H04L5/001 OR H04L5/0055 OR H04L5/0073 OR H04L5/14 OR H04L1/20 OR H04L5/0098 OR H04L1/00 OR H04L1/0003 OR H04L1/0009 OR H04L1/0015 OR H04L27/2601 OR H04L27/2613 OR H04L41/0803 OR H04L5/0007 OR	US-PGPUB; USPAT; USOCR	OR	OFF	2018/05/16 20:41

		H04L5/0023 OR H04L5/0057 OR H04L5/006 OR H04L5/0085 OR H04L5/0091 OR H04L12/1407 OR H04L1/0026 OR H04L1/0027 OR H04L1/0038 OR H04L1/0061 OR H04L1/0073 OR H04L1/18 OR H04L1/1861 OR H04L1/1887 OR H04L25/0238 OR H04L25/0242 OR H04L27/2605 OR H04L27/2611 OR H04L27/2626 OR H04L27/2656 OR H04L27/2666 OR H04L27/2675 OR H04L41/0893 OR H04L41/5019 OR H04L43/0894 OR H04L43/10 OR H04L43/16 OR H04L47/29 OR H04L47/52 OR H04L5/00 OR H04L5/0005 OR H04L5/0032 OR H04L5/0035 OR H04L5/005 OR H04L5/0051 OR H04L5/0058 OR H04L5/0092 OR H04L5/08 OR H04L65/102 OR H04L65/1073 OR H04L69/22 OR H04L7/00).CPC.)				
S49	74	("20020156897" | "20020167933" | "20020197991" | "20030114158" | "20030119490" | "20030165124" | "20030176186" | "20040001461" | "20040067753" | "20040072581" | "20040090958" | "20040105416" | "20040142693" | "20040203788" | "20040229621" | "20050018637" | "20050090259" | "20050221828" | "20050271008" | "20060020694" | "20060058032" | "20060073826" | "20060095954" | "20060098598" | "20060111112" | "20060116127" | "20060148479" | "20060223498" | "20060268799" | "20070008885" | "20070026862" | "20070083470" | "20070091839" | "20070173251" | "20070268908" | "20080076420" | "20080091612" | "20080189550" | "20080254833" | "20080259886" | "20080311917" | "20090061863" | "20090092081" | "20090110168" | "20090129338" | "20090219826" | "20090220216" | "20090265542" | "20090287922" | "20100093307" | "20100161638" | "20100190492" | "20100214977" | "20100226347" | "20110055574" | "20110076998" | "20110093945" | "20130324115" | "5406615" | "5475677" | "5854982" | "6493437" | "6647426" | "6680923" | "6922559" | "6925074" | "7127250" | "7283822" | "7308263" | "7324818" | "7565145" | "7623486" | "8340711" | "8738084").PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2018/05/16 20:42
S50	37	("20090129332" | "20110128895" | "20120069766" | "20120082140" | "20120093009" | "20120170557" | "20120243498" | "20120250631" | "20120264468" | "20130010766" | "20130034018" | "20130058245" | "20130083661" | "20130094467" | "20130178225" | "20130194981" |	US-PGPUB; USPAT; USOCR	OR	OFF	2018/05/16 20:42

		"20130208587" | "20130235814" | "20130242924" | "20130272260" | "20140036818" | "20140044000" | "20140044105" | "20140045494" | "20140050170" | "20140087748" | "20150055621" | "20150063245" | "20150085683" | "20150085684" | "20150085792" | "20150085841" | "20150163794" | "20150163801" | "20150163823" | "20150208413" | "20150236782").PN.				
S51	22	("20030104849" | "20050089057" | "20060148482" | "20060187952" | "20090122736" | "20100124254" | "20100167742" | "20100177757" | "20100197317" | "20110228666" | "20120015607" | "20120077510" | "20120129522" | "20120207036" | "20130058218" | "20130136097" | "20130344883" | "20140342745" | "20150009871" | "20150156636" | "6295285" | "8478282").PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2018/05/16 20:42
S52	4	("20130203429" | "20140335876" | "20140341135" | "20150223075").PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2018/05/16 20:42
S53	4	("20050207381" | "20120076081" | "20130208587" | "20150215100").PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2018/05/16 20:42
S54	44	("20090129332" | "20090285169" | "20100172254" | "20110128895" | "20120069766" | "20120082140" | "20120093009" | "20120170557" | "20120243498" | "20120250631" | "20120264468" | "20130003591" | "20130010766" | "20130034018" | "20130058245" | "20130083661" | "20130094467" | "20130142059" | "20130178225" | "20130194981" | "20130208587" | "20130235814" | "20130242924" | "20130272260" | "20140036818" | "20140044000" | "20140044105" | "20140045494" | "20140050146" | "20140050170" | "20140087748" | "20140126403" | "20140301351" | "20150055621" | "20150063245" | "20150085683" | "20150085684" | "20150085792" | "20150085841" | "20150163794" | "20150163801" | "20150163823" | "20150208413" | "20150236782").PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2018/05/16 20:42
S55	26	("20040162617" | "20080233967" | "20090262785" | "20100046440" | "20100091670" | "20100322287" | "20110110251" | "20110170424" | "20110205984" | "20110244904" | "20120120892" | "20120140656" | "20120207040" | "20120264388" | "20130065533" | "20130142059" | "20130143502" | "20130195072" | "20130315152" | "20130322279" | "20130336156" | "20130337821" | "20140133371" | "20150063148" |	US-PGPUB; USPAT; USOCR	OR	OFF	2018/05/16 20:42

		"8494580" | "9253778").PN.				
S56	4	("20130170427" | "20130250931" | "20140341024" | "20160066306").PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2018/05/16 20:42
S57	13	("20040264475" | "20060194540" | "20070171909" | "20110044218" | "20120051342" | "20120069766" | "20130337821" | "20140044105" | "20150124740" | "20150223075" | "20150271226" | "20150334744" | "6526264").PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2018/05/16 20:43
S58	18	("20050095986" | "20120113918" | "20120307748" | "20130336156" | "20130343288" | "20140023022" | "20140199992" | "20140254524" | "20150215952" | "20150223077" | "20150256303" | "20160007350" | "20160014610" | "20170141859" | "7363008" | "8126473" | "8565178" | "8767666").PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2018/05/16 20:43
S59	13	S26 AND ((H04B17/318 OR H04B17/336 OR H04B17/345 OR H04B10/272 OR H04B17/18 OR H04B1/40 OR H04B7/0413 OR H04B7/155 OR H04B7/15535 OR H04B7/2656).CPC.)	US-PGPUB; USPAT; USOCR	OR	OFF	2018/05/16 20:43
S60	1	("20140044105").PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2018/05/16 20:43
S61	2	("20120051748" | "20120166819").PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2018/05/16 20:43
S62	2	S26 AND ((H04Q11/0067 OR H04Q2011/0081 OR H04Q2011/0084 OR H04Q2011/0088).CPC.)	US-PGPUB; USPAT; USOCR	OR	OFF	2018/05/16 20:44
S63	2	("20120051748" | "20120166819").PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2018/05/16 20:44
S64	3	S26 AND ((H04M15/00 OR H04M15/41 OR H04M15/55 OR H04M15/66).CPC.)	US-PGPUB; USPAT; USOCR	OR	OFF	2018/05/16 20:44
S65	74	("20020156897" | "20020167933" | "20020197991" | "20030114158" | "20030119490" | "20030165124" | "20030176186" | "20040001461" | "20040067753" | "20040072581" | "20040090958" | "20040105416" | "20040142693" | "20040203788" | "20040229621" | "20050018637" | "20050090259" | "20050221828" | "20050271008" | "20060020694" | "20060058032" | "20060073826" | "20060095954" | "20060098598" | "20060111112" | "20060116127" | "20060148479" | "20060223498" | "20060268799" | "20070008885" | "20070026862" | "20070083470" | "20070091839" | "20070173251" | "20070268908" | "20080076420" | "20080091612" | "20080189550" |	US-PGPUB; USPAT; USOCR	OR	OFF	2018/05/16 20:44

		"20080254833" | "20080259886" | "20080311917" | "20090061863" | "20090092081" | "20090110168" | "20090129338" | "20090219826" | "20090220216" | "20090265542" | "20090287922" | "20100093307" | "20100161638" | "20100190492" | "20100214977" | "20100226347" | "20110055574" | "20110076998" | "20110093945" | "20130324115" | "5406615" | "5475677" | "5854982" | "6493437" | "6647426" | "6680923" | "6922559" | "6925074" | "7127250" | "7283822" | "7308263" | "7324818" | "7565145" | "7623486" | "8340711" | "8738084").PN.				
S66	131	S26 AND ((H04W16/14 OR H04W74/0808 OR H04W72/0453 OR H04W72/1215 OR H04W84/12 OR H04W72/0446 OR H04W74/0816 OR H04W72/042 OR H04W88/06 OR H04W88/10 OR H04W24/08 OR H04W88/02 OR H04W88/08 OR H04W72/082 OR H04W84/045 OR H04W48/16 OR H04W74/006 OR H04W28/26 OR H04W72/00 OR H04W72/02 OR H04W72/044 OR H04W84/042 OR H04W8/005 OR H04W16/16 OR H04W24/02 OR H04W24/10 OR H04W48/12 OR H04W52/0206 OR H04W52/243 OR H04W56/001 OR H04W72/0406 OR H04W72/0413 OR H04W72/085 OR H04W72/14 OR H04W74/08 OR H04W76/28 OR H04W12/06 OR H04W16/32 OR H04W28/08 OR H04W28/18 OR H04W40/16 OR H04W4/24 OR H04W52/04 OR H04W52/241 OR H04W52/244 OR H04W56/00 OR H04W72/04 OR H04W72/0426 OR H04W72/048 OR H04W72/0486 OR H04W72/1252 OR H04W72/1268 OR H04W74/002 OR H04W74/04 OR H04W74/0833 OR H04W76/15 OR H04W76/27 OR H04W88/12 OR H04W92/20 OR H04W12/08 OR H04W24/00 OR H04W28/14 OR H04W28/16 OR H04W36/22 OR H04W36/385 OR H04W40/244 OR H04W48/00 OR H04W48/20 OR H04W4/02 OR H04W4/20 OR H04W52/143 OR H04W52/281 OR H04W52/367 OR H04W56/0005 OR H04W56/0015 OR H04W60/00 OR H04W64/00 OR H04W72/005 OR H04W72/10 OR H04W72/121 OR H04W72/1247 OR H04W72/1263 OR H04W72/1273 OR H04W72/1289 OR H04W74/004 OR H04W74/008 OR H04W74/06 OR H04W74/0841 OR H04W74/085 OR H04W76/046 OR H04W76/048 OR H04W76/06 OR H04W76/30 OR H04W8/02 OR H04W8/22 OR	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/05/16 20:46

		H04W8/24 OR H04W92/10).CPC.)				
S67	10	("20120120892" | "20130196653" | "20140029535" | "20140187287" | "20140213219" | "20140369329" | "20150009850" | "20150063323" | "8290503" | "8767576").PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2018/05/16 20:47
S68	26	("20040162617" | "20080233967" | "20090262785" | "20100046440" | "20100091670" | "20100322287" | "20110110251" | "20110170424" | "20110205984" | "20110244904" | "20120120892" | "20120140656" | "20120207040" | "20120264388" | "20130065533" | "20130142059" | "20130143502" | "20130195072" | "20130315152" | "20130322279" | "20130336156" | "20130337821" | "20140133371" | "20150063148" | "8494580" | "9253778").PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2018/05/16 20:47
S69	8	("20060223448" | "20080122581" | "20110021153" | "20110128895" | "20130163449" | "20160338019" | "20170127449" | "8155102").PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2018/05/16 20:47
S70	4	("20130170427" | "20130250931" | "20140341024" | "20160066306").PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2018/05/16 20:47
S71	18	("20050095986" | "20120113918" | "20120307748" | "20130336156" | "20130343288" | "20140023022" | "20140199992" | "20140254524" | "20150215952" | "20150223077" | "20150256303" | "20160007350" | "20160014610" | "20170141859" | "7363008" | "8126473" | "8565178" | "8767666").PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2018/05/16 20:47
S72	61	S26 AND ((H04L5/0048 OR H04L27/0006 OR H04L5/0053 OR H04L5/001 OR H04L5/0055 OR H04L5/0073 OR H04L5/14 OR H04L1/20 OR H04L5/0098 OR H04L1/00 OR H04L1/0003 OR H04L1/0009 OR H04L1/0015 OR H04L27/2601 OR H04L27/2613 OR H04L41/0803 OR H04L5/0007 OR H04L5/0023 OR H04L5/0057 OR H04L5/006 OR H04L5/0085 OR H04L5/0091 OR H04L12/1407 OR H04L1/0026 OR H04L1/0027 OR H04L1/0038 OR H04L1/0061 OR H04L1/0073 OR H04L1/18 OR H04L1/1861 OR H04L1/1887 OR H04L25/0238 OR H04L25/0242 OR H04L27/2605 OR H04L27/2611 OR H04L27/2626 OR H04L27/2656 OR H04L27/2666 OR H04L27/2675 OR H04L41/0893 OR H04L41/5019 OR H04L43/0894 OR H04L43/10 OR H04L43/16 OR H04L47/29 OR H04L47/52 OR H04L5/00 OR H04L5/0005 OR H04L5/0032 OR H04L5/0035 OR H04L5/005 OR H04L5/0051 OR H04L5/0058 OR	US-PGPUB; USPAT; USOCR	OR	OFF	2018/05/16 20:49

		H04L5/0092 OR H04L5/08 OR H04L65/102 OR H04L65/1073 OR H04L69/22 OR H04L7/00).CPC.)				
S73	74	("20020156897" | "20020167933" | "20020197991" | "20030114158" | "20030119490" | "20030165124" | "20030176186" | "20040001461" | "20040067753" | "20040072581" | "20040090958" | "20040105416" | "20040142693" | "20040203788" | "20040229621" | "20050018637" | "20050090259" | "20050221828" | "20050271008" | "20060020694" | "20060058032" | "20060073826" | "20060095954" | "20060098598" | "20060111112" | "20060116127" | "20060148479" | "20060223498" | "20060268799" | "20070008885" | "20070026862" | "20070083470" | "20070091839" | "20070173251" | "20070268908" | "20080076420" | "20080091612" | "20080189550" | "20080254833" | "20080259886" | "20080311917" | "20090061863" | "20090092081" | "20090110168" | "20090129338" | "20090219826" | "20090220216" | "20090265542" | "20090287922" | "20100093307" | "20100161638" | "20100190492" | "20100214977" | "20100226347" | "20110055574" | "20110076998" | "20110093945" | "20130324115" | "5406615" | "5475677" | "5854982" | "6493437" | "6647426" | "6680923" | "6922559" | "6925074" | "7127250" | "7283822" | "7308263" | "7324818" | "7565145" | "7623486" | "8340711" | "8738084").PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2018/05/16 20:50
S74	37	("20090129332" | "20110128895" | "20120069766" | "20120082140" | "20120093009" | "20120170557" | "20120243498" | "20120250631" | "20120264468" | "20130010766" | "20130034018" | "20130058245" | "20130083661" | "20130094467" | "20130178225" | "20130194981" | "20130208587" | "20130235814" | "20130242924" | "20130272260" | "20140036818" | "20140044000" | "20140044105" | "20140045494" | "20140050170" | "20140087748" | "20150055621" | "20150063245" | "20150085683" | "20150085684" | "20150085792" | "20150085841" | "20150163794" | "20150163801" | "20150163823" | "20150208413" | "20150236782").PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2018/05/16 20:50
S75	44	("20090129332" | "20090285169" | "20100172254" | "20110128895" | "20120069766" | "20120082140" | "20120093009" | "20120170557" | "20120243498" | "20120250631" | "20120264468" | "20130003591" |	US-PGPUB; USPAT; USOCR	OR	OFF	2018/05/16 20:50

		"20130010766" | "20130034018" | "20130058245" | "20130083661" | "20130094467" | "20130142059" | "20130178225" | "20130194981" | "20130208587" | "20130235814" | "20130242924" | "20130272260" | "20140036818" | "20140044000" | "20140044105" | "20140045494" | "20140050146" | "20140050170" | "20140087748" | "20140126403" | "20140301351" | "20150055621" | "20150063245" | "20150085683" | "20150085684" | "20150085792" | "20150085841" | "20150163794" | "20150163801" | "20150163823" | "20150208413" | "20150236782").PN.				
S76	26	("20040162617" | "20080233967" | "20090262785" | "20100046440" | "20100091670" | "20100322287" | "20110110251" | "20110170424" | "20110205984" | "20110244904" | "20120120892" | "20120140656" | "20120207040" | "20120264388" | "20130065533" | "20130142059" | "20130143502" | "20130195072" | "20130315152" | "20130322279" | "20130336156" | "20130337821" | "20140133371" | "20150063148" | "8494580" | "9253778").PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2018/05/16 20:50
S77	4	("20130170427" | "20130250931" | "20140341024" | "20160066306").PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2018/05/16 20:50
S78	18	("20050095986" | "20120113918" | "20120307748" | "20130336156" | "20130343288" | "20140023022" | "20140199992" | "20140254524" | "20150215952" | "20150223077" | "20150256303" | "20160007350" | "20160014610" | "20170141859" | "7363008" | "8126473" | "8565178" | "8767666").PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2018/05/16 20:50
S79	18	S29 AND ((H04W16/14 OR H04W72/0453 OR H04W28/08 OR H04W84/045 OR H04W84/12 OR H04W88/02 OR H04W88/06 OR H04W72/02 OR H04W72/042 OR H04W72/0446 OR H04W76/06 OR H04W76/30 OR H04W28/26 OR H04W72/0406 OR H04W72/14 OR H04W24/08 OR H04W24/10 OR H04W28/18 OR H04W48/16 OR H04W48/18 OR H04W52/04 OR H04W56/0005 OR H04W60/00 OR H04W64/00 OR H04W72/00 OR H04W72/04 OR H04W72/044 OR H04W72/0486 OR H04W72/1289 OR H04W74/006 OR H04W74/0833 OR H04W74/085 OR H04W76/27 OR H04W88/12 OR H04W8/02 OR H04W92/20).CPC.)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/05/16 20:51
S80	8	("20060246903" | "20070281704" | "20080002658" | "20080113624" |	US-PGPUB; USPAT;	OR	OFF	2018/05/16 20:51

		"20090054058" | "20110289175" | "6850489" | "8509788").PN.	USOCR			
S81	18	("20050095986" | "20120113918" | "20120307748" | "20130336156" | "20130343288" | "20140023022" | "20140199992" | "20140254524" | "20150215952" | "20150223077" | "20150256303" | "20160007350" | "20160014610" | "20170141859" | "7363008" | "8126473" | "8565178" | "8767666").PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2018/05/16 20:51
S82	891	(terminat$3 stop$4 end$3) near9 (unlicens$3 un-licens$3)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/05/17 11:29
S83	28	(respons$3 respond$3) near9 (terminat$3 stop$4 end$3) near9 (unlicens$3 un-licens$3)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/05/17 11:33
S84	27	S83 AND ((H04W16/14 OR H04W72/0453 OR H04W72/1215 OR H04W72/042 OR H04W74/0808 OR H04W88/12 OR H04W36/14 OR H04W72/1226 OR H04W74/0816 OR H04W76/28 OR H04W84/12 OR H04W88/06 OR H04W28/20 OR H04W36/0038 OR H04W4/24 OR H04W4/80 OR H04W52/0216 OR H04W72/085 OR H04W72/1278 OR H04W74/002 OR H04W76/048 OR H04W76/20 OR H04W76/34 OR H04W84/105 OR H04W8/04 OR H04W8/18 OR H04W8/20 OR H04W8/26 OR H04W28/10 OR H04W52/0229 OR H04W72/0413 OR H04W72/082 OR H04W72/1289 OR H04W72/14 OR H04W76/025 OR H04W76/068 OR H04W76/15 OR H04W76/38 OR H04W88/02 OR H04W88/10 OR H04W92/02).CPC.)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/05/17 11:34
S85	7	("20060009202" | "20070099653" | "20130003533" | "20150023315" | "20160338096" | "20170279565" | "20170311337").PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2018/05/17 11:35
S86	24	("20080279155" | "20120063373" | "20120082100" | "20120129522" | "20120320874" | "20140003356" | "20140287769" | "20140301351" | "20140342745" | "20140378157" | "20160036617" | "20160095009" | "20160174214" | "20160205562" | "20160219623" | "20160233989" | "20160337867" | "20170079054" | "20170094681" | "20170280341" | "20170339717" | "8670780" | "8855069" | "8934909").PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2018/05/17 11:35

S87	4	("20130170427" | "20130250931" | "20140341024" | "20160066306").PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2018/05/17 11:36
S88	25	("20060223448" | "20070026868" | "20120077510" | "20130156019" | "20130203458" | "20130294356" | "20130337821" | "20140036818" | "20140036889" | "20140112289" | "20140342745" | "20150085683" | "20150131516" | "20150163681" | "20150181453" | "20150201429" | "20150223244" | "20150237548" | "20150382374" | "20160007368" | "20160135055" | "20160255648" | "20160295588" | "9326157" | "9392614").PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2018/05/17 11:36
S89	1	("20150223075").PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2018/05/17 11:36
S90	9	("20050025265" | "20100246506" | "20120077510" | "20120129522" | "20130143502" | "20140031054" | "20140112289" | "5850596" | "7512094").PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2018/05/17 11:36
S91	2	("20130203458" | "20150223244").PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2018/05/17 11:36
S92	9	("20040203815" | "20070015536" | "20090196253" | "20090196268" | "20100278141" | "20110003575" | "20110117889" | "20110299511" | "8229440").PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2018/05/17 11:36
S93	100	("20010036158" | "20020072364" | "20020085516" | "20020106029" | "20030032440" | "20030058822" | "20030112796" | "20030119489" | "20030123485" | "20030133423" | "20040008652" | "20040047364" | "20040073424" | "20040090989" | "20040131025" | "20040131051" | "20040192295" | "20040203791" | "20040254786" | "20040264482" | "20050105512" | "20050180456" | "20050195829" | "20050232232" | "20050265279" | "20050267746" | "20050286466" | "20060009202" | "20060050664" | "20060062225" | "20060083199" | "20060092927" | "20060099935" | "20060111112" | "20060142011" | "20060198347" | "20060209799" | "20060229068" | "20060245395" | "20060270411" | "20060276192" | "20060286981" | "20060291454" | "20060291483" | "20070011727" | "20070041360" | "20070043558" | "20070123196" | "20070135165" | "20070140214" | "20070171841" | "20070286082" | "20080039087" | "20080102794" | "20080123596" | "20080151845" | "20080198841" | "5375121" | "5513185" | "5867785" | "5905873" |	US-PGPUB; USPAT; USOCR	OR	OFF	2018/05/17 11:36

		"5999529" | "6011579" | "6046999" | "6147988" | "6167129" | "6215996" | "6339594" | "6424637" | "6625169" | "6647428" | "6731627" | "6731647" | "6791959" | "6850883" | "6967958" | "6983163" | "6990340" | "7006489" | "7054318" | "7054320" | "7068623" | "7072358" | "7082143" | "7089011" | "7095733" | "7103021" | "7106701" | "7162024" | "7180892" | "7203226" | "7305229" | "7349698" | "7369859" | "7398088" | "7400881" | "7433690" | "7471655" | "7830864" | "7835346").PN.				
S94	13	S83 AND ((H04L1/1812 OR H04L1/0026 OR H04L1/0027 OR H04L1/0073 OR H04L1/1822 OR H04L1/20 OR H04L29/06027 OR H04L65/1043 OR H04L1/1887 OR H04L47/14 OR H04L47/2441 OR H04L47/2491 OR H04L5/001).CPC.)	US-PGPUB; USPAT; USOCR	OR	OFF	2018/05/17 11:37
S95	7	("20060009202" | "20070099653" | "20130003533" | "20150023315" | "20160338096" | "20170279565" | "20170311337").PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2018/05/17 11:37
S96	4	("20130170427" | "20130250931" | "20140341024" | "20160066306").PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2018/05/17 11:37
S97	25	("20060223448" | "20070026868" | "20120077510" | "20130156019" | "20130203458" | "20130294356" | "20130337821" | "20140036818" | "20140036889" | "20140112289" | "20140342745" | "20150085683" | "20150131516" | "20150163681" | "20150181453" | "20150201429" | "20150223244" | "20150237548" | "20150382374" | "20160007368" | "20160135055" | "20160255648" | "20160295588" | "9326157" | "9392614").PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2018/05/17 11:37
S98	2	("20130203458" | "20150223244").PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2018/05/17 11:38
S99	100	("20010036158" | "20020072364" | "20020085516" | "20020106029" | "20030032440" | "20030058822" | "20030112796" | "20030119489" | "20030123485" | "20030133423" | "20040008652" | "20040047364" | "20040073424" | "20040090989" | "20040131025" | "20040131051" | "20040192295" | "20040203791" | "20040254786" | "20040264482" | "20050105512" | "20050180456" | "20050195829" | "20050232232" | "20050265279" | "20050267746" | "20050286466" | "20060009202" | "20060050664" | "20060062225" | "20060083199" | "20060092927" | "20060099935" | "20060111112" | "20060142011" | "20060198347" |	US-PGPUB; USPAT; USOCR	OR	OFF	2018/05/17 11:38

		"20060209799" | "20060229068" | "20060245395" | "20060270411" | "20060276192" | "20060286981" | "20060291454" | "20060291483" | "20070011727" | "20070041360" | "20070043558" | "20070123196" | "20070135165" | "20070140214" | "20070171841" | "20070286082" | "20080039087" | "20080102794" | "20080123596" | "20080151845" | "20080198841" | "5375121" | "5513185" | "5867785" | "5905873" | "5999529" | "6011579" | "6046999" | "6147988" | "6167129" | "6215996" | "6339594" | "6424637" | "6625169" | "6647428" | "6731627" | "6731647" | "6791959" | "6850883" | "6967958" | "6983163" | "6990340" | "7006489" | "7054318" | "7054320" | "7068623" | "7072358" | "7082143" | "7089011" | "7095733" | "7103021" | "7106701" | "7162024" | "7180892" | "7203226" | "7305229" | "7349698" | "7369859" | "7398088" | "7400881" | "7433690" | "7471655" | "7830864" | "7835346").PN.				
S100	1282274	455/$.ccls. 705/$.ccls. 379/$.ccls. 370/$.ccls. 709/$.ccls.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/05/17 11:42
S101	1	S83 AND ((G06F21/10 OR G06F21/105).CPC.)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/05/17 11:43
S102	1	S83 AND ((G06Q10/10 OR G06Q30/06).CPC.)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/05/17 11:43
S103	353	S82 and S100	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/05/17 11:44
S104	350	(determin$3 detect$3) same (terminat$3 stop$4 end$3) near9 (unlicens$3 un-licens$3)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/05/17 11:45
S105	130	S100 and S104	US-PGPUB;	OR	OFF	2018/05/17

			USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB			11:46
S106	103	S105 AND ((H04W16/14 OR H04W84/12 OR H04W72/0453 OR H04W48/16 OR H04W52/367 OR H04W72/042 OR H04W52/146 OR H04W74/002 OR H04W74/0808 OR H04W4/02 OR H04W56/001 OR H04W72/02 OR H04W72/04 OR H04W74/0816 OR H04W24/02 OR H04W28/08 OR H04W48/14 OR H04W52/243 OR H04W72/0406 OR H04W72/0426 OR H04W72/048 OR H04W72/082 OR H04W8/005 OR H04W16/16 OR H04W24/08 OR H04W24/10 OR H04W36/14 OR H04W48/12 OR H04W52/283 OR H04W52/30 OR H04W52/346 OR H04W52/36 OR H04W52/38 OR H04W52/52 OR H04W72/00 OR H04W84/045 OR H04W88/02 OR H04W24/00 OR H04W28/04 OR H04W36/22 OR H04W48/20 OR H04W52/04 OR H04W72/044 OR H04W72/0446 OR H04W72/0486 OR H04W72/1215 OR H04W72/1226 OR H04W72/1247 OR H04W72/1278 OR H04W74/00 OR H04W74/006 OR H04W74/04 OR H04W76/14 OR H04W84/042 OR H04W84/18 OR H04W88/06 OR H04W88/10 OR H04W8/26 OR H04W16/26 OR H04W28/0247 OR H04W28/0278 OR H04W28/06 OR H04W28/20 OR H04W28/26 OR H04W36/0072 OR H04W36/30 OR H04W40/22 OR H04W48/08 OR H04W48/10 OR H04W4/24 OR H04W52/0206 OR H04W52/0225 OR H04W52/0251 OR H04W52/281 OR H04W60/00 OR H04W64/00 OR H04W68/005 OR H04W72/005 OR H04W72/0413 OR H04W72/08 OR H04W72/085 OR H04W72/1263 OR H04W72/1284 OR H04W72/14 OR H04W74/08 OR H04W74/0833 OR H04W74/085 OR H04W76/023 OR H04W76/026 OR H04W76/12 OR H04W76/15 OR H04W76/16 OR H04W76/20 OR H04W76/27 OR H04W76/36 OR H04W80/00 OR H04W88/04 OR H04W88/08 OR H04W8/02 OR H04W8/04 OR H04W8/20).CPC.)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/05/17 11:46
S107	54	("20020138756" | "20020199203" | "20030074580" | "20030105978" | "20030135611" | "20040005886" | "20040088565" | "20040107360" | "20040123162" | "20040193907" | "20040221174" | "20050015622" | "20050033596" | "20050044418" |	US-PGPUB; USPAT; USOCR	OR	OFF	2018/05/17 11:47

		"20050060537" | "20050132225" | "20050138408" | "20050144475" | "20050154885" | "20050166065" | "20050172142" | "20050188065" | "5666411" | "5673322" | "5721779" | "5732074" | "5901284" | "5987611" | "6012100" | "6061650" | "6081508" | "6151628" | "6185609" | "6253327" | "6377982" | "6453035" | "6493349" | "6507908" | "6539482" | "6643782" | "6654891" | "6694437" | "6732270" | "6748543" | "6751729" | "6760444" | "6766453" | "6778498" | "6785823" | "6850943" | "6874139" | "7111324" | "7240015" | "7340770").PN.				
S108	29	("20040192288" | "20080049776" | "4939726" | "5129096" | "5295154" | "5400338" | "5455569" | "5479400" | "5563881" | "5610839" | "5740366" | "5974236" | "5987011" | "6044062" | "6046992" | "6249516" | "6298053" | "6349091" | "6349210" | "6385174" | "6437692" | "6704301" | "6728514" | "6804532" | "6829347" | "6850502" | "6885660" | "6965575" | "6973039").PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2018/05/17 11:47
S109	31	("20070079012" | "20070183439" | "20070211866" | "20090116509" | "4939726" | "5129096" | "5295154" | "5400338" | "5455569" | "5479400" | "5563881" | "5610839" | "5740366" | "5974236" | "5987011" | "6044062" | "6046992" | "6249516" | "6298053" | "6349091" | "6349210" | "6385174" | "6437692" | "6704301" | "6728514" | "6804532" | "6829347" | "6850502" | "6885660" | "6965575" | "6973039").PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2018/05/17 11:47
S110	60	("20030093526" | "20050003827" | "20060034236" | "20060062183" | "20060067354" | "20060218392" | "20070047492" | "20070192472" | "20070253394" | "20080151796" | "20080171552" | "20080240024" | "20080298333" | "20090061783" | "20090158282" | "20090171930" | "20090191906" | "20090196180" | "20090207800" | "20090217333" | "20090280748" | "20090298522" | "20090323835" | "20090325499" | "20100048234" | "20100061299" | "20100069013" | "20100081449" | "20100091712" | "20100111235" | "20100124254" | "20100142458" | "20100175101" | "20100195580" | "20100195590" | "20100195667" | "20100220687" | "20100229205" | "20100246434" | "20100246506" | "20100303026" | "20100309317" | "20100309806" | "20110043710" | "20110116458" | "20110222488" | "20110243078" | "20110286405" | "20120120904" | "20120165056" |	US-PGPUB; USPAT; USOCR	OR	OFF	2018/05/17 11:47

		"20120170534" | "20120218956" | "6175739" | "6757550" | "6826400" | "6882841" | "7280834" | "7742764" | "7917110" | "8032086").PN.				
S111	60	("20030093526" | "20050003827" | "20060034236" | "20060062183" | "20060067354" | "20060218392" | "20070047492" | "20070192472" | "20070253394" | "20080151796" | "20080171552" | "20080240024" | "20080298333" | "20090061783" | "20090158282" | "20090171930" | "20090191906" | "20090196180" | "20090207800" | "20090217333" | "20090280748" | "20090298522" | "20090323835" | "20090325499" | "20100048234" | "20100061299" | "20100069013" | "20100081449" | "20100091712" | "20100111235" | "20100124254" | "20100142458" | "20100175101" | "20100195580" | "20100195590" | "20100195667" | "20100220687" | "20100229205" | "20100246434" | "20100246506" | "20100303026" | "20100309317" | "20100309806" | "20110043710" | "20110116458" | "20110222488" | "20110243078" | "20110286405" | "20120120904" | "20120165056" | "20120170534" | "20120218956" | "6175739" | "6757550" | "6826400" | "6882841" | "7280834" | "7742764" | "7917110" | "8032086").PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2018/05/17 11:48
S112	11	("20020168993" | "20040127240" | "20040137905" | "20040180652" | "20050059422" | "20060018284" | "20070049239" | "20110306375" | "20120093092" | "8130708" | "8203987").PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2018/05/17 11:48
S113	6	("20060073827" | "20080205358" | "20090061783" | "20110110349" | "20110116458" | "20110280228").PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2018/05/17 11:48
S114	71	("20020154653" | "20030050012" | "20030093526" | "20050003827" | "20050070279" | "20060034236" | "20060062183" | "20060067354" | "20060218392" | "20070047492" | "20070192472" | "20070253394" | "20080130519" | "20080151796" | "20080171552" | "20080240024" | "20080298333" | "20090061783" | "20090158282" | "20090171930" | "20090191906" | "20090196180" | "20090207800" | "20090217333" | "20090280748" | "20090298522" | "20090323835" | "20090325499" | "20100048234" | "20100061299" | "20100069013" | "20100081449" | "20100091712" | "20100111235" | "20100124254" | "20100142458" | "20100175101" | "20100195580" | "20100195590" | "20100195667" | "20100220687" | "20100229205" |	US-PGPUB; USPAT; USOCR	OR	OFF	2018/05/17 11:48

		"20100246434" | "20100246506" | "20100303026" | "20100309317" | "20100309806" | "20110019649" | "20110043710" | "20110045781" | "20110090887" | "20110090890" | "20110116458" | "20110222488" | "20110243078" | "20110286405" | "20120063364" | "20120120904" | "20120165056" | "20120170534" | "20120218956" | "20130114586" | "20130142132" | "6175739" | "6757550" | "6826400" | "6882841" | "7280834" | "7742764" | "7917110" | "8032086").PN.				
S115	74	("20020154653" | "20030050012" | "20030093526" | "20050003827" | "20050070279" | "20060034236" | "20060062183" | "20060067354" | "20060218392" | "20070047492" | "20070192472" | "20070253394" | "20080130519" | "20080151796" | "20080171552" | "20080240024" | "20080298333" | "20090061783" | "20090158282" | "20090171930" | "20090191906" | "20090196180" | "20090207800" | "20090217333" | "20090253392" | "20090280748" | "20090298522" | "20090323835" | "20090325499" | "20100048234" | "20100061299" | "20100069013" | "20100081449" | "20100091712" | "20100111235" | "20100124254" | "20100142458" | "20100175101" | "20100195580" | "20100195590" | "20100195595" | "20100195667" | "20100220687" | "20100229205" | "20100240407" | "20100246434" | "20100246506" | "20100303026" | "20100309317" | "20100309806" | "20110019649" | "20110043710" | "20110045781" | "20110090887" | "20110090890" | "20110116458" | "20110222488" | "20110243078" | "20110286405" | "20120063364" | "20120120904" | "20120165056" | "20120170534" | "20120218956" | "20130114586" | "20130142132" | "6175739" | "6757550" | "6826400" | "6882841" | "7280834" | "7742764" | "7917110" | "8032086").PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2018/05/17 11:48
S116	10	("20020006788" | "20030207683" | "20090258603" | "20100128565" | "20110087639" | "20110116458" | "20110310253" | "20120008604" | "20120134328" | "20120282959").PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2018/05/17 11:48
S117	3	("20080130564" | "20080261563" | "20110216743").PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2018/05/17 11:48
S118	10	("20040203815" | "20060223524" | "20090125650" | "20100098011" | "20100191878" | "20100226430" | "20110028102" | "20110141983" | "7054790" | "7512094").PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2018/05/17 11:48

S119	10	S105 AND ((G06F21/10 OR G06F15/167 OR G06F17/30766 OR G06F17/30772 OR G06F17/30867 OR G06F21/126 OR G06F2221/0775 OR G06F2221/2101 OR G06F2221/2141).CPC.)	US-PGPUB; USPAT; USOCR	OR	OFF	2018/05/17 11:49
S120	11	S105 AND ((G06F21/10 OR G06F15/167 OR G06F17/30766 OR G06F17/30772 OR G06F17/30867 OR G06F21/126 OR G06F2221/0775 OR G06F2221/2101 OR G06F2221/2141).CPC.)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/05/17 11:49
S121	5	("20020082997" | "5790664" | "6343280" | "6697948" | "6810389").PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2018/05/17 11:49
S122	9	S105 AND ((G06Q50/184 OR G06Q30/0222 OR G06Q30/0633 OR G06Q30/02 OR G06Q2220/18).CPC.)	US-PGPUB; USPAT; USOCR	OR	OFF	2018/05/17 11:50
S123	54	S105 AND ((H04L27/0006 OR H04L5/001 OR H04L5/0048 OR H04L65/60 OR H04L67/1002 OR H04L67/1025 OR H04L67/1038 OR H04L67/104 OR H04L67/1063 OR H04L67/1091 OR H04L67/322 OR H04L67/42 OR H04L51/32 OR H04L5/0085 OR H04L47/10 OR H04L47/14 OR H04L47/2408 OR H04L47/2416 OR H04L47/2441 OR H04L47/2458 OR H04L47/28 OR H04L47/29 OR H04L47/31 OR H04L47/50 OR H04L5/0023 OR H04L5/0057 OR H04L5/006 OR H04L5/14 OR H04L67/18 OR H04L67/306 OR H04L12/2898 OR H04L1/0026 OR H04L1/0027 OR H04L1/0073 OR H04L1/1812 OR H04L1/1822 OR H04L1/1835 OR H04L1/1887 OR H04L1/1896 OR H04L1/20 OR H04L27/261 OR H04L43/08 OR H04L47/30 OR H04L5/0007 OR H04L5/003 OR H04L5/0041 OR H04L5/005 OR H04L5/0051 OR H04L5/0053 OR H04L5/0055 OR H04L5/0058 OR H04L5/0062 OR H04L5/0069 OR H04L5/0091 OR H04L5/0094 OR H04L63/0272 OR H04L63/0414 OR H04L63/0428 OR H04L63/083 OR H04L63/102 OR H04L63/164 OR H04L69/16 OR H04L69/168 OR H04L9/3226 OR H04L9/3271).CPC.)	US-PGPUB; USPAT; USOCR	OR	OFF	2018/05/17 11:51
S124	10	S105 AND ((G06F21/10 OR G06F15/167 OR G06F17/30766 OR G06F17/30772 OR G06F17/30867 OR G06F21/126 OR G06F2221/0775 OR G06F2221/2101 OR G06F2221/2141).CPC.)	US-PGPUB; USPAT; USOCR	OR	OFF	2018/05/17 11:52
S125	5	("20020082997" | "5790664" | "6343280" | "6697948" | "6810389").PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2018/05/17 11:52

S127	1	((terminat$3) near9 (unlicens$3 adj2 band)) and (positive adj2 (result report$3)).clm.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/05/17 11:55
S128	11	S105 AND ((G06F21/10 OR G06F15/167 OR G06F17/30766 OR G06F17/30772 OR G06F17/30867 OR G06F21/126 OR G06F2221/0775 OR G06F2221/2101 OR G06F2221/2141).CPC.)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/05/17 12:02
S129	5	("20020082997" | "5790664" | "6343280" | "6697948" | "6810389").PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2018/05/17 12:02
S130	1	((terminat$3 end$3 stop$4) near10 (unlicens$3 adj2 band)) and (positive adj2 (result report$3))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/05/17 12:10
S131	361	(UE mobile terminal) same (disconnect$4 terminat$3 end$3 stop$4) near10 (un-licens$3 unlicens$3)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/05/17 12:46
S132	123	(UE mobile terminal) same (determin$4 detect$3) same (disconnect$4 terminat$3 end$3 stop$4) near10 (un-licens$3 unlicens$3)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/05/17 12:47
S133	36	S100 and S132	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/05/17 12:48
S134	35	S133 AND ((H04W16/14 OR H04W72/0453 OR H04W88/06 OR H04W74/0808 OR H04W84/12 OR H04W56/001 OR H04W84/045 OR H04W84/105 OR H04W4/02 OR H04W88/02 OR H04W24/00 OR H04W24/08 OR H04W28/04 OR H04W28/08 OR H04W36/14 OR H04W48/16 OR H04W4/24 OR H04W72/0446 OR H04W72/0486 OR H04W72/082 OR H04W72/1215 OR H04W72/1226 OR H04W72/1263 OR H04W74/002 OR H04W74/006 OR H04W74/04 OR H04W74/0816 OR H04W76/12 OR H04W76/20 OR H04W84/042 OR H04W8/04 OR H04W8/26 OR H04W24/10 OR	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/05/17 12:48

		H04W28/0247 OR H04W28/06 OR H04W28/20 OR H04W28/26 OR H04W36/22 OR H04W48/10 OR H04W48/12 OR H04W4/04 OR H04W52/0206 OR H04W52/0225 OR H04W52/0251 OR H04W52/04 OR H04W60/00 OR H04W60/04 OR H04W64/00 OR H04W68/005 OR H04W72/00 OR H04W72/005 OR H04W72/02 OR H04W72/04 OR H04W72/0406 OR H04W72/0413 OR H04W72/042 OR H04W72/14 OR H04W74/08 OR H04W74/0833 OR H04W74/085 OR H04W76/023 OR H04W76/026 OR H04W76/14 OR H04W76/16 OR H04W76/27 OR H04W76/30 OR H04W84/16 OR H04W88/08 OR H04W88/10 OR H04W88/12 OR H04W88/16 OR H04W8/02 OR H04W92/02 OR H04W92/06).CPC.)				
S135	3	("20080130564" | "20080261563" | "20110216743").PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2018/05/17 12:48
S136	9	("20040203815" | "20070015536" | "20090196253" | "20090196268" | "20100278141" | "20110003575" | "20110117889" | "20110299511" | "8229440").PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2018/05/17 12:49
S137	4	("20040071090" | "20080076386" | "20080115009" | "20080293407").PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2018/05/17 12:49
S138	18	S133 AND ((H04L5/001 OR H04L27/0006 OR H04L5/0048 OR H04L5/0023 OR H04L5/0057 OR H04L5/006 OR H04L5/14 OR H04L63/164 OR H04L67/18 OR H04L67/306 OR H04L1/1812 OR H04L1/1822 OR H04L1/1835 OR H04L1/1887 OR H04L1/1896 OR H04L27/261 OR H04L47/30 OR H04L5/0007 OR H04L5/0041 OR H04L5/0051 OR H04L5/0053 OR H04L5/0055 OR H04L5/0062 OR H04L5/0069 OR H04L5/0085 OR H04L5/0091 OR H04L5/0094 OR H04L63/0272 OR H04L63/0428).CPC.)	US-PGPUB; USPAT; USOCR	OR	OFF	2018/05/17 12:49
S139	3	("20080130564" | "20080261563" | "20110216743").PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2018/05/17 12:50
S140	3	S133 AND ((H04B7/2656 OR H04B1/7087).CPC.)	US-PGPUB; USPAT; USOCR	OR	OFF	2018/05/17 12:50
S141	2	S133 AND ((G06Q30/02).CPC.)	US-PGPUB; USPAT; USOCR	OR	OFF	2018/05/17 12:50
S142	415	sensor same price with item	US-PGPUB; USPAT; USOCR; FPRS;	OR	OFF	2018/05/17 16:00

			EPO; JPO; DERWENT; IBM_TDB			
S143	30	sensor same price with item near9 store	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/05/17 16:00
S144	730	authorization same different near8 protocol	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/08/06 14:06
S145	130	authorization same different near8 protocol same (mobile phone cellular pda iphone ipad)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/08/06 14:06
S146	42	authorization same different near8 protocol same (mobile phone cellular pda iphone ipad) and (short adj range)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/08/06 14:07
S147	468	enabling near6 mode same (mobile phone cellular pda iphone ipad) and (short adj range)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/08/06 14:24
S148	33	enabling near6 mode same (mobile phone cellular pda iphone ipad) same (short adj3 range)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/08/06 14:26
S149	2	"09832708"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/08/06 14:38
S150	1	"09462411"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/08/06 14:42
S151	1	15/800885	US-PGPUB; USPAT;	OR	OFF	2018/08/06 15:29

			USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB			
S152	1	15/800885 and involv$3	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/08/06 15:29
S153	1	15/800885 and (first adj2 interfac$3) and (second adj3 interfac$3)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/08/06 15:31
S154	1	15/800885 andentity and (first adj2 interfac$3) and (second adj3 interfac$3)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/08/06 15:45
S156	1	15/800885 and entity and (first adj2 interfac$3) and (second adj3 interfac$3)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/08/06 15:46
S157	3472	(first adj2 interfac$3) same (second adj3 interfac$3) same independent$3	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/08/06 15:48
S158	10	(first adj2 interfac$3) same (second adj3 interfac$3) same independent$3 near8 entity	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/08/06 15:50
S159	15	(first adj2 interfac$3) same (second adj3 interfac$3) same (short adj2 range) same (access adj point)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/08/06 16:19
S161	153	(first adj2 interfac$3) same (second adj3 interfac$3) and (short adj2 range) same (person animal (shopping adj card))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/08/06 16:26

S162	102813	(first adj2 interfac$3) same (second adj3 interfac$3)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/08/06 16:28
S163	386	(first adj2 interfac$3) same (second adj3 interfac$3) and (first adj time adj interval) and (second adj time adj interval)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/08/06 16:29
S164	368	(first adj2 interfac$3) same (second adj3 interfac$3) and (first adj time adj interval) same (second adj time adj interval)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/08/06 16:32
S165	61	(first adj2 interfac$3) same (second adj3 interfac$3) same (first adj time adj interval) same (second adj time adj interval)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/08/06 16:35
S166	30	(first adj air adj interfac$3) same (second adj air adj interfac$3) and (first adj time adj interval) same (second adj time adj interval)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/08/06 16:42
S167	0	absent near4 involv$3 near8 ((base adj station) (access adj point))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/08/06 18:22
S168	0	absent near4 involv$3 same ((base adj station) (access adj point))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/08/06 18:23
S169	170	(absent stop$4) near4 involv$3 same ((base adj station) (access adj point))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/08/06 18:23
S170	11	2007/0129077	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO;	OR	OFF	2018/08/06 18:33

			DERWENT; IBM_TDB			
S171	1	11/584455	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/08/06 18:33
S172	19	(first adj2 interfac$3) same (second adj3 interfac$3) same (short adj2 range) same (person animal vehicle (shopping adj card))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/08/07 17:34
S173	10	S172 AND ((H04W84/12 OR H04W88/04 OR H04W48/18 OR H04W28/0231 OR H04W52/0229 OR H04W52/0274 OR H04W84/042 OR H04W88/06 OR H04W88/16 OR H04W92/02 OR H04W4/008 OR H04W4/02 OR H04W4/21 OR H04W4/80 OR H04W76/025 OR H04W76/10 OR H04W76/15 OR H04W84/10).CPC.)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/08/07 17:34

8/8/2018 12:53:25 PM
C:\Users\mvu1\Documents\EAST\Workspaces\15800885_Air_Interfaces.wsp

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)				November 1, 2017	
				Application Number	To Be Assigned
				Filing Date	Concurrently Herewith
				First Named Inventor	Peter D. Karabinis
				Art Unit	
				Examiner Name	
Sheet	A1	of	A2	Attorney Docket Number	9466-24TSCT2

U.S. PATENT DOCUMENTS					
Examiner Initials*	Cite No.	Document Number Number-Kind Code (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
	1.	US- 8,646,060 B1	02-04-2014	Ben Ayed	
	2.	US- 8,532,069 B2	09-10-2013	Balwani	
	3.	US- 8,463,238 B2	06-11-2013	Forstall et al.	
	4.	US- 8,023,580 B2	09-20-2011	Bremer	
	5.	US- 7,912,629 B2	03-22-2011	Sutter et al.	
	6.	US- 7,822,644 B2	10-26-2010	Alberth, Jr. et al.	
	7.	US- 7,539,241 B1	05-26-2009	Dick	
	8.	US- RE39,736 E	07-17-2007	Morrill, Jr.	
	9.	US- 7,155,199 B2	12-26-2006	Zalewski et al.	
	10.	US- 7,133,659 B2	11-07-2006	Zalewski et al.	
	11.	US- 7,028,897 B2	04-18-2006	Fernandes et al.	
	12.	US- 6,957,107 B2	10-18-2005	Rogers et al.	
	13.	US- 6,769,607 B1	08-03-2004	Pitroda et al.	
	14.	US- 6,595,929 B2	07-22-2003	Stivoric et al.	
	15.	US- 2013/0156218 A1	06-20-2013	Annacone et al.	
	16.	US- 2012/0214443 A1	08-23-2012	Daigle	
	17.	US- 2011/0314539 A1	12-22-2011	Horton	
	18.	US- 2010/0265845 A1	10-21-2010	Lampén	
	19.	US- 2010/0067591 A1	03-18-2010	Luo et al.	
	20.	US- 2009/0213947 A1	08-27-2009	Rao et al.	
	21.	US- 2009/0169070 A1	07-02-2009	Fadell	
	22.	US- 2009/0153367 A1	06-18-2009	Lee	
	23.	US- 2009/0113543 A1	04-30-2009	Adams et al.	
	24.	US- 2009/0023474 A1	01-22-2009	Luo et al.	
	25.	US- 2008/0306868 A1	12-11-2008	Robinson et al.	
	26.	US- 2008/0227471 A1	09-18-2008	Dankar et al.	
	27.	US- 2008/0200166 A1	08-21-2008	McCamon	
	28.	US- 2008/0167966 A1	07-10-2008	Ramsdale et al.	
	29.	US- 2008/0146148 A1	06-19-2008	Hulvey	
	30.	US- 2008/0140868 A1	06-12-2008	Kalayjian et al.	
	31.	US- 2008/0040274 A1	02-14-2008	Uzo	
	32.	US- 2007/0285280 A1	12-13-2007	Robinson et al.	
	33.	US- 2007/0243872 A1	10-18-2007	Gallagher et al.	
	34.	US- 2007/0265984 A1	11-15-2007	Santhana	
	35.	US- 2007/0250393 A1	10-25-2007	Alberth, Jr. et al.	
	36.	US- 2007/0197261 A1	08-23-2007	Humbel	
	37.	US- 2007/0184837 A1	08-09-2007	Hohl et al.	
	38.	US- 2007/0178935 A1	08-02-2007	Shim et al.	
	39.	US- 2007/0167147 A1	07-19-2007	Krasner et al.	
	40.	US- 2006/0194538A1	08-31-2006	Palin et al.	
	41.	US- 2006/0172700 A1	08-03-2006	Wu	

Examiner Signature	/MICHAEL T VU/	Date Considered	08/07/2018

*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.

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /M.T.V/

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)				November 1, 2017	
				Application Number	To Be Assigned
				Filing Date	Concurrently Herewith
				First Named Inventor	Peter D. Karabinis
				Art Unit	
				Examiner Name	
Sheet	A2	of	A2	Attorney Docket Number	9466-24TSCT2

U.S. PATENT DOCUMENTS

Examiner Initials*	Cite No.	Document Number (Number-Kind Code (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
	42.	US- 2006/0159260 A1	07-20-2006	Pereira et al.	
	43.	US- 2006/0145893 A1	07-06-2006	Hassett	
	44.	US- 2006/0133633 A1	06-22-2006	Hyvonen et al.	
	45.	US- 2006/0009234 A1	01-12-2006	Freer	
	46.	US- 2004/0170430 A1	09-02-2004	Gorokhov	
	47.	US- 2004/0030601 A1	02-12-2004	Pond et al.	
	48.	US- 2003/0220105 A1	11-27-2003	Daigremont et al.	
		US-			

FOREIGN PATENT DOCUMENTS

Examiner Initials*	Cite No.	Foreign Patent Document (Country Code, Number, Kind Code (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

NON PATENT LITERATURE DOCUMENTS

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, page(s), volume-issue number(s), publisher, city and/or country where published	T
	49.	"Digital wallet" *Wikipedia* (4 pages)(Printed on July 10, 2017)	
	50.	International Search Report and Written Opinion of the International Searching Authority, PCT Application No. PCT/US09/062792 (8 pages) (December 23, 2009)	

Examiner Signature	/MICHAEL T VU/	Date Considered	08/07/2018

*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.

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /M.T.V/

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BIB DATA SHEET

CONFIRMATION NO. 9764

SERIAL NUMBER	FILING or 371(c) DATE	CLASS	GROUP ART UNIT	ATTORNEY DOCKET NO.
15/800,885	11/01/2017 **RULE**	455	2641	9466-24TSCT2

APPLICANTS
Telcom Ventures, LLC, Miami, FL;

INVENTORS
Peter D. Karabinis, Cary, NC;
Rajendra Singh, Indian Creek Village, FL;

**** CONTINUING DATA ***************************
This application is a CON of 15/251,882 08/30/2016 PAT 9832708
which is a CON of 12/264,711 11/04/2008 PAT 9462411

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

**** IF REQUIRED, FOREIGN FILING LICENSE GRANTED **** ** SMALL ENTITY **
12/01/2017

		STATE OR COUNTRY	SHEETS DRAWINGS	TOTAL CLAIMS	INDEPENDENT CLAIMS
Foreign Priority claimed ☐ Yes ☑ No 35 USC 119(a-d) conditions met ☐ Yes ☑ No Verified and Acknowledged /MICHAEL T VU/ Examiner's Signature	☐ Met after Allowance Initials	NC	3	8	2

ADDRESS
MYERS BIGEL, P.A.
PO BOX 37428
RALEIGH, NC 27627
UNITED STATES

TITLE
MOBILE DEVICE MODE ENABLEMENT RESPONSIVE TO A PROXIMITY CRITERION

FILING FEE RECEIVED 2830	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

UNITED STATES PATENT AND TRADEMARK OFFICE

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www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
15/800,885	11/01/2017	Peter D. Karabinis	9466-24TSCT2	9764

20792 7590 10/03/2018
MYERS BIGEL, P.A.
PO BOX 37428
RALEIGH, NC 27627

EXAMINER
VU, MICHAEL T

ART UNIT	PAPER NUMBER
2641	

MAIL DATE	DELIVERY MODE
10/03/2018	PAPER

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.

PTOL-90A (Rev. 04/07)

Applicant-Initiated Interview Summary	Application No. 15/800,885	Applicant(s) Karabinis et al.	
	Examiner MICHAEL T VU	Art Unit 2641	AIA Status No

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

(1) MICHAEL T. VU. (3) _____.

(2) VERNON H. GUTHRIE. (4) _____.

Date of Interview: 02 October 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: 1,4 and 55-56.

Identification of prior art discussed: _____.

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...)

Applicant's representative (Mr. Guthrie) discussed and explained the invention of claims 1 and 4 to get clarification and addition advisement. Mr. Guthrie further discussed the proposed amendments which sent via the email (see email interview agenda sent on 9/28/2018). We had discussed the limitations of the independent claims 1 and 4, and also discussed the applicant's specification on paragraphs [37-38] [48], Figure 1, and the prior art. After discussion, the examiner invites the applicant to amend the claims with more specific details about the first air interface, the second air interface, the entity and moreover the limitations of the claims 1 and 4 of "how do they work and what they are? For example: the process of the payment for the items between the mobile device and the POS/cahier system by using the short range, long range, and Bluetooth, etc.. However, the examiner will do further search after received the response amendment of the claims. Finally, there was not any agreement between the examiner and the applicant's representative 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

/MICHAEL T VU/ Primary Examiner, Art Unit 2641	

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.

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	15800885
Filing Date	01-Nov-2017
First Named Inventor	Peter Karabinis
Attorney Docket Number	9466-24TSCT2
Title of Invention	MOBILE DEVICE MODE ENABLEMENT RESPONSIVE TO A PROXIMITY CRITERION

☒ 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
TELCOM VENTURES, LLC	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)

9832708

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 63798

○ 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	/Vernon H. Guthrie Jr./
Name	Vernon H. Guthrie Jr.

*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:	15800885
Filing Date:	01-Nov-2017
Title of Invention:	MOBILE DEVICE MODE ENABLEMENT RESPONSIVE TO A PROXIMITY CRITERION
First Named Inventor/Applicant Name:	Peter D. Karabinis
Filer:	Vernon H. Guthrie Jr./Meredith DeRosa
Attorney Docket Number:	9466-24TSCT2

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.: 15800885

Filing Date: 01-Nov-2017

Applicant/Patent under Reexamination: Karabinis

Electronic Terminal Disclaimer filed on October 31, 2018

☒ 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:	34167910
Application Number:	15800885
International Application Number:	
Confirmation Number:	9764
Title of Invention:	MOBILE DEVICE MODE ENABLEMENT RESPONSIVE TO A PROXIMITY CRITERION
First Named Inventor/Applicant Name:	Peter D. Karabinis
Customer Number:	20792
Filer:	Vernon H. Guthrie Jr./Meredith DeRosa
Filer Authorized By:	Vernon H. Guthrie Jr.
Attorney Docket Number:	9466-24TSCT2
Receipt Date:	31-OCT-2018
Filing Date:	01-NOV-2017
Time Stamp:	09:21:11
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	103118INTEFSW09210900
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	Terminal Disclaimer-Filed (Electronic)	eTerminal-Disclaimer.pdf	33559 1ef083ce72f9bfb6c3071f092f7d0a580fe0c2db	no	2
Warnings:					
Information:					
2	Fee Worksheet (SB06)	fee-info.pdf	30634 970dc3ca6ebb0e0fe5478458768c9b8d7c194b5e	no	2
Warnings:					
Information:					
		Total Files Size (in bytes):	64193		

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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.

Attorney Docket No. 9466-24TSCT2 PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re: Karabinis et al.
Application No.: 15/800,885
Filed: November 1, 2017
For: ***MOBILE DEVICE MODE ENABLEMENT RESPONSIVE TO A PROXIMITY CRITERION***

Confirmation No.: 9764
Group Art Unit: 2641
Examiner: Michael T. Vu

Date: October 31, 2018

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

AMENDMENT AND INTERVIEW SUMMARY

Applicant provides the present Amendment and Interview Summary to address the issues raised in the Office Action mailed August 9, 2018.

It is not believed that an extension of time and/or additional fee(s), including fees for additional claims, are required, beyond those that may otherwise be provided for in documents accompanying this paper. In the event, however, that an extension of time is necessary to allow consideration of this paper, such an extension is hereby petitioned under 37 C.F.R. §1.136(a). Any additional fees believed to be due in connection with this paper may be charged to our Deposit Account No. 50-0220.

PTO/SB/08a (02-18)
Approved for use through 11/30/2020. OMB 0651-0031
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INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Not for submission under 37 CFR 1.99)

Application Number	15800885
Filing Date	2017-11-01
First Named Inventor	Karabinis, Peter D.
Art Unit	2641
Examiner Name	MICHAEL T VU
Attorney Docket Number	9466-24TSCT2

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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	7780081		2010-08-24	LIANG ROBERT C	

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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	20040143505		2004-07-22	KOVACH ARAM	

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INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)	Application Number	15800885
	Filing Date	2017-11-01
	First Named Inventor	Karabinis, Peter D.
	Art Unit	2641
	Examiner Name	MICHAEL T VU
	Attorney Docket Number	9466-24TSCT2

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EXAMINER SIGNATURE

Examiner Signature		Date Considered	

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

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

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)	Application Number	15800885
	Filing Date	2017-11-01
	First Named Inventor	Karabinis, Peter D.
	Art Unit	2641
	Examiner Name	MICHAEL T VU
	Attorney Docket Number	9466-24TSCT2

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	/Vernon H. Guthrie/	Date (YYYY-MM-DD)	2018-10-31
Name/Print	Vernon H. Guthrie	Registration Number	63798

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 1 hour to complete, including gathering, preparing and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

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2. A record from this system of records may be disclosed, as a routine use, in the course of presenting evidence to a court, magistrate, or administrative tribunal, including disclosures to opposing counsel in the course of settlement negotiations.

3. A record in this system of records may be disclosed, as a routine use, to a Member of Congress submitting a request involving an individual, to whom the record pertains, when the individual has requested assistance from the Member with respect to the subject matter of the record.

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6. A record in this system of records may be disclosed, as a routine use, to another federal agency for purposes of National Security review (35 U.S.C. 181) and for review pursuant to the Atomic Energy Act (42 U.S.C. 218(c)).

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8. A record from this system of records may be disclosed, as a routine use, to the public after either publication of the application pursuant to 35 U.S.C. 122(b) or issuance of a patent pursuant to 35 U.S.C. 151. Further, a record may be disclosed, subject to the limitations of 37 CFR 1.14, as a routine use, to the public if the record was filed in an application which became abandoned or in which the proceedings were terminated and which application is referenced by either a published application, an application open to public 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 Patent Application Fee Transmittal

Application Number:	15800885
Filing Date:	01-Nov-2017
Title of Invention:	MOBILE DEVICE MODE ENABLEMENT RESPONSIVE TO A PROXIMITY CRITERION
First Named Inventor/Applicant Name:	Peter D. Karabinis
Filer:	Vernon H. Guthrie Jr./Meredith DeRosa
Attorney Docket Number:	9466-24TSCT2

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($)
Miscellaneous:				
SUBMISSION- INFORMATION DISCLOSURE STMT	2806	1	120	120
		Total in USD ($)		**120**

Electronic Acknowledgement Receipt	
EFS ID:	34168034
Application Number:	15800885
International Application Number:	
Confirmation Number:	9764
Title of Invention:	MOBILE DEVICE MODE ENABLEMENT RESPONSIVE TO A PROXIMITY CRITERION
First Named Inventor/Applicant Name:	Peter D. Karabinis
Customer Number:	20792
Filer:	Vernon H. Guthrie Jr./Meredith DeRosa
Filer Authorized By:	Vernon H. Guthrie Jr.
Attorney Docket Number:	9466-24TSCT2
Receipt Date:	31-OCT-2018
Filing Date:	01-NOV-2017
Time Stamp:	09:29:07
Application Type:	Utility under 35 USC 111(a)

Payment information:

Submitted with Payment	yes
Payment Type	CARD
Payment was successfully received in RAM	$120
RAM confirmation Number	103118INTEFSW09292600
Deposit Account	
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File Listing:

Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1		9466-24TSCT2_Amendment.pdf	1304328 57c38c82e78f0061443a91a95da37546cd626c20	yes	15
	Multipart Description/PDF files in .zip description				
	Document Description		**Start**	**End**	
	Applicant Arguments/Remarks Made in an Amendment		12	15	
	Applicant summary of interview with examiner		11	11	
	Claims		2	10	
	Amendment/Req. Reconsideration-After Non-Final Reject		1	1	
Warnings:					
Information:					
2	Information Disclosure Statement (IDS) Form (SB08)	9466-24TSCT2_IDS.pdf	1053349 26fd7b1b6225bc071898cfc92ce81d5ad9e1868a	no	4
Warnings:					
Information:					
3	Fee Worksheet (SB06)	fee-info.pdf	30586 7dedafe08a97e5563b905f2b7addeb0621edce80	no	2
Warnings:					
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		Total Files Size (in bytes):	2388263		

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New Applications Under 35 U.S.C. 111
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National Stage of an International Application under 35 U.S.C. 371
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New International Application Filed with the USPTO as a Receiving Office
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.

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

Listing of the Claims:

1. (Currently Amended) A method of operating a smartphone to wirelessly provide information to an entity using a first air interface, to wirelessly receive information from the entity using the first air interface; and to wirelessly receive a communications service from a wireless network using a second air interface that differs from the first air interface, wherein the communications service is received by the smartphone from the wireless network absent involving the entity and wherein the entity functions independently of the communications service, the method comprising:

detecting by the smartphone that a proximity condition is satisfied between the smartphone and the entity;

in response to at least the proximity condition having been satisfied between the smartphone and the entity, establishing a wireless short-range communications link between the smartphone and the entity to provide by the smartphone, using the first air interface, information to the entity and to receive by the smartphone information from the entity;

in response to at least the proximity condition having been satisfied between the smartphone and the entity and in response to a physiological parameter, wirelessly providing by the smartphone, using the first air interface, information to the entity and wirelessly receiving by the smartphone, using the first air interface, information from the entity independently of, and absent involving the entity in, receiving by the smartphone the communications service from the wireless network using the second air interface; and

wirelessly receiving by the smartphone, using the second air interface, the communications service from the wireless network absent involving the entity, absent providing by the smartphone information to the entity, and absent receiving by the smartphone information from the entity,

wherein the wireless short-range communications link used by the first air interface is based upon unlicensed frequencies,

wherein the second air interface uses a wireless communications link that is based upon licensed frequencies, and

wherein the first air interface is not involved in providing the communications service to the smartphone.

2. (Canceled)

3. (Previously Presented) The method of Claim 1,

wherein said wirelessly providing by the smartphone, using the first air interface, information to the entity and wirelessly receiving by the smartphone, using the first air interface, information from the entity independently of, and absent involving the entity in, receiving by the smartphone the communications service from the wireless network using the second air interface is performed over a first time interval;

wherein said wirelessly receiving by the smartphone, using the second air interface, the communications service from the wireless network absent involving the entity, absent providing by the smartphone information to the entity, and absent receiving by the smartphone information from the entity is performed over a second time interval; and

wherein the first and second time intervals are non-overlapping with one another.

4. (Currently Amended) A system comprising:

a smartphone that is configured to perform operations comprising:

detecting by the smartphone that a proximity condition is satisfied between the smartphone and an entity;

in response to at least the proximity condition having been satisfied between the smartphone and the entity, establishing a wireless short-range communications link between the smartphone and the entity to provide by the smartphone, using a first air interface, information to the entity and to receive by the smartphone information from the entity;

in response to at least the proximity condition having been satisfied between the smartphone and the entity and in response to a physiological parameter, wirelessly providing, using [[a]] the first air interface, information to [[an]] the entity and wirelessly receiving, using the first air interface, information from the entity independently of, and absent involving the entity in, receiving a communications service from a wireless network using a second air interface that differs from the first air interface; and

wirelessly receiving, using the second air interface, the communications service from the wireless network absent involving the entity, absent providing information to the entity, and absent receiving information from the entity,

wherein the wireless short-range communications link used by the first air interface is based upon unlicensed frequencies,

wherein the second air interface uses a wireless communications link that is based upon licensed frequencies, and

wherein the first air interface is not involved in providing the communications service to the smartphone.

5. (Original) The system according to Claim 4, further comprising the entity.

6. (Previously Presented) The system of Claim 4,

wherein said wirelessly providing, using a first air interface, information to an entity and wirelessly receiving, using the first air interface, information from the entity independently of, and absent involving the entity in, receiving a communications service from a wireless network using a second air interface that differs from the first air interface is performed over a first time interval;

wherein said wirelessly receiving, using the second air interface, the communications service from the wireless network absent involving the entity, absent providing information to the entity, and absent receiving information from the entity is performed over a second time interval; and

wherein the first and second time intervals are non-overlapping with one another.

7. (Original) The system of Claim 4, wherein the second air interface is based upon an Orthogonal Frequency Division Multiplexed (OFDM) and/or Orthogonal Frequency Division Multiple Access (OFDMA) protocol.

8. (Currently Amended) The method of Claim [[24]] 1,

wherein the wireless short-range communications link that is based upon unlicensed frequencies is further based upon a Time Division Duplex (TDD) protocol, and

wherein the second air interface that uses a wireless communications link that is based upon licensed frequencies is further based upon an Orthogonal Frequency Division Multiplexed (OFDM) and/or Orthogonal Frequency Division Multiple Access (OFDMA) protocol.

9. – 35. (Canceled)

36. (Currently Amended) The method of Claim [[35]] 1, wherein said ~~determining~~ detecting by the smartphone that a proximity condition is satisfied between the smartphone and the entity is based, at least in part, on receiving a short-range signal from the entity over the first air interface.

37. (Currently Amended) The method of Claim 36, wherein said ~~determining~~ detecting by the smartphone that a proximity condition is satisfied between the smartphone and the entity is based, at least in part, on a measurement of signal strength of the short-range signal.

38. (Canceled)

39. (Currently Amended) The method of Claim [[35]] 1,

wherein a value of the physiological parameter is provided by using a sensor of the smartphone~~, and~~

~~wherein said exchanging data with the entity over the first air interface is performed in response to both the proximity criterion and the value of the physiological parameter~~.

40. – 50. (Canceled)

51. (Currently Amended) The ~~smartphone~~ system of Claim [[50]] 4, wherein said ~~determining~~ detecting by the smartphone that a proximity condition is satisfied between the smartphone and an entity is based, at least in part, on receiving a short-range signal from the entity over the first air interface.

52. (Currently Amended) The ~~smartphone~~ system of Claim 51, wherein said ~~determining~~ detecting by the smartphone that a proximity condition is satisfied between the smartphone and an entity is based, at least in part, on a measurement of signal strength of the short-range signal.

53. (Canceled)

54. (Currently Amended) The ~~smartphone~~ system of Claim [[50]] 4,

wherein a value of the physiological parameter is provided by using a sensor of the smartphone~~, and~~

~~wherein said exchanging data with the entity over the first air interface is performed in response to both the proximity criterion having been satisfied and the value of the physiological parameter~~.

55. (New) The method of Claim 1, wherein said wirelessly providing by the smartphone, using the first air interface, information to the entity comprises:

being proximate to a specific location within a store, then detecting a short-range signal being transmitted from said specific location within the store, and then performing a transaction to pay for one or more items.

56. (New) The system of Claim 4, wherein said wirelessly providing, using the first air interface, information to the entity comprises:

being proximate to a specific location within a store, then detecting a short-range signal being transmitted from said specific location within the store, and then performing a transaction to pay for one or more items.

57. (New) The method of Claim 1,

wherein the entity comprises a check-out counter in a store, and

wherein said wirelessly providing by the smartphone, using the first air interface, information to the entity comprises:

performing a financial transaction to pay for one or more items.

58. (New) The system of Claim 4,

wherein the entity comprises a check-out counter in a store, and

wherein said wirelessly providing, using the first air interface, information to the entity comprises:

performing a financial transaction to pay for one or more items.

59. (New) The method of Claim 1, wherein establishing the wireless short-range communications link between the smartphone and the entity is performed in response to the physiological parameter.

60. (New) The system of Claim 4, wherein establishing the wireless short-range communications link between the smartphone and the entity is performed in response to the physiological parameter.

61. (New) A method of operating a smartphone, the method comprising:

detecting by the smartphone that a proximity condition is satisfied between the smartphone and an entity within a store;

establishing, using a first air interface, a wireless short-range communications link between the smartphone and the entity, in response to the proximity condition having been satisfied between the smartphone and the entity;

receiving, using the first air interface, a short-range signal from the entity within the store;

performing by the smartphone a transaction to pay for one or more items within the store, after receiving the short-range signal from the entity; and

receiving by the smartphone a communications service from a wireless network, using a second air interface that differs from the first air interface,

wherein the wireless short-range communications link used by the first air interface is based upon unlicensed frequencies, and

wherein the second air interface uses a wireless communications link that is based upon licensed frequencies.

62. (New) The method of Claim 61, wherein establishing the wireless short-range communications link between the smartphone and the entity is performed in response to a physiological parameter.

63. (New) The method of Claim 61, wherein performing by the smartphone the transaction to pay for the one or more items is performed in response to a physiological parameter.

64. (New) The method of Claim 61, wherein performing by the smartphone the transaction to pay for the one or more items is performed in response to a value of a parameter associated with the smartphone.

65. (New) A smartphone that is configured to perform operations comprising:

detecting by the smartphone that a proximity condition is satisfied between the smartphone and an entity within a store;

establishing, using a first air interface, a wireless short-range communications link between the smartphone and the entity, in response to the proximity condition having been satisfied between the smartphone and the entity;

receiving, using the first air interface, a short-range signal from the entity within the store;

performing by the smartphone a transaction to pay for one or more items within the store, after receiving the short-range signal from the entity; and

receiving by the smartphone a communications service from a wireless network, using a second air interface that differs from the first air interface,

wherein the wireless short-range communications link used by the first air interface is based upon unlicensed frequencies, and

wherein the second air interface uses a wireless communications link that is based upon licensed frequencies.

66. (New) The smartphone of Claim 65, wherein establishing the wireless short-range communications link between the smartphone and the entity is performed in response to a physiological parameter.

67. (New) The smartphone of Claim 65, wherein performing by the smartphone the transaction to pay for the one or more items is performed in response to a physiological parameter.

68. (New) The smartphone of Claim 65, wherein performing by the smartphone the transaction to pay for the one or more items is performed in response to a value of a parameter associated with the smartphone.

REMARKS AND INTERVIEW SUMMARY

Applicant appreciates the examination of the present application evidenced by the Office Action of August 9, 2018 ("Office Action"). Applicant further appreciates the courtesies extended to Applicant's undersigned representative by Examiner Vu in the Telephone Interview of October 2, 2018.

During the Telephone Interview of October 2, 2018, possible amendments to independent Claims 1 and 4 were discussed. No agreement was reached regarding the possible claim amendments. The Examiner confirmed, however, that he would provide further search/consideration if Applicant files the claim amendments.

The above constitutes a complete summary of the Telephone Interview between the Examiner and the undersigned pursuant to MPEP § 713.04.

In response to the Office Action, Applicant has amended independent Claims 1 and 4 based on the subject matter of dependent Claims 2 and 24 (now canceled), to add the term "wireless" before the term "short-range," and to further recite "detecting by the smartphone that a proximity condition is satisfied" between the smartphone and an entity, which is supported by, for example, paragraphs [0015], [0037], and [0038] of the present application publication. Applicant has also amended dependent Claims 36, 37, 39, 51, 52, and 54, and canceled Claims 25-35, 38, 40-50, and 53. Moreover, Applicant has added new dependent Claims 55-60, 62-64, and 66-68, and new independent Claims 61 and 65, which are supported by, for example, paragraphs [0016], [0026], [0027], [0036]-[0038], [0045], and [0054] of the present application publication. For at least the following reasons, Applicant submits that the present application is in condition for allowance, and a Notice of Allowance is respectfully requested in due course.

Response To Election/Restriction Requirement

In response to the election/restriction requirement of the Office Action, Applicant hereby elects **Group I, including Claims 1-8 and 24, without traverse.** (*See* Office Action, page 3.) Applicant has canceled non-elected Claims 25-35, 38, 40-50, and 53, without prejudice or disclaimer toward pursuit of the subject matter of any non-elected claims in a divisional or other

continuing application. Applicant has also amended dependent Claims 36, 37, 39, 51, 52, and 54 to depend from one of the elected claims.

The Double Patenting Rejections Have Been Overcome

Claims 1-8 and 24 stand rejected on the ground of non-statutory obviousness-type double patenting over claims of U.S. Patent No. 9,832,708. (*See* Office Action, pages 7 and 8.) As stated in the Office Action, "A timely filed terminal disclaimer...may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground...." (Office Action, page 7.)

In response, Applicant submits herewith a Terminal Disclaimer corresponding to U.S. Patent No. 9,832,708, thereby overcoming the double patenting rejections. Applicant has overcome the double patenting rejections by submitting the Terminal Disclaimer to expedite allowance of the present application without conceding the merits of the double patenting rejections.

Amended Independent Claims 1 And 4 Are Patentable Over Dowling In View Of Iguchi

Independent Claims 1 and 4 stand rejected under 35 U.S.C. 103 over U.S. Pub. No. 2007/0260710 to Dowling ("Dowling") in view of U.S. Pub. No. 2007/0129077 to Iguchi et al. ("Iguchi"). (*See* Office Action, pages 9, 10, and 12.) Applicant submits, however, that amended independent Claims 1 and 4 are patentable over Dowling in view of Iguchi for at least the following reasons.

First, Applicant has amended independent Claims 1 and 4 to recite detecting by a smartphone that a proximity condition is satisfied between the smartphone and an entity. For example, the present application describes that "the detection by mobile subscriber device 14 of a proximity criterion relative to Entity 1 can enable the mobile subscriber device 14 to authorize and complete a financial transaction such as the payment of a toll and/or of an item at a check out line." (Present Application Publication, paragraph [0038].)

In contrast with detecting **by a smartphone** that a proximity condition is satisfied between the smartphone and an entity, as recited in amended independent Claims 1 and 4, Dowling discusses **using a server** to choose an access point for a wireless client. (*See* Dowling,

paragraph [0017].) Accordingly, even assuming for the sake of argument that Dowling could be interpreted as detecting that a proximity condition is satisfied, Dowling would do so using its **(a) server rather than** its **(b) wireless client**. Dowling therefore does **not** disclose or suggest detecting **by a smartphone** that a proximity condition is satisfied between the smartphone and an entity, as recited in amended independent Claims 1 and 4.

Moreover, the Office Action relies on the secondary reference, Iguchi, for its discussion of processing a handover in a base station, which does not disclose or suggest detecting by a smartphone that a proximity condition is satisfied between the smartphone and an entity, as recited in amended independent Claims 1 and 4. (*See* Office Action, page 10.)

For at least these reasons, Applicant submits that amended independent Claims 1 and 4 are patentable over Dowling in view of Iguchi.

Second, Applicant has further amended independent Claims 1 and 4 to recite wirelessly providing by the smartphone information to the entity in response to (i) the proximity condition and in response to (ii) a **physiological parameter**. In contrast, Dowling discusses that its server sends "a set of parameters for use in accessing a second wireless access point using the second air interface." (*See* Dowling, paragraph [0016].) Dowling does **not** disclose or suggest that its set of parameters includes a **physiological** parameter, much less disclose or suggest wirelessly providing by a smartphone information to an entity in response to (i) the proximity condition and in response to (ii) a physiological parameter, as recited in amended independent Claims 1 and 4. Nor does Iguchi's discussion of processing a handover in a base station disclose or suggest the physiological parameter that is recited in amended independent Claims 1 and 4. For at least these additional reasons, Applicant submits that amended independent Claims 1 and 4 are patentable over Dowling in view of Iguchi.

<u>The Dependent Claims Are Patentable</u>

The dependent claims are patentable at least per the patentability of the independent claims from which they depend. Moreover, some of the dependent claims include separate bases for patentability.

For example, Claim 7 recites that "the second air interface is based upon an Orthogonal Frequency Division Multiplexed (OFDM) and/or Orthogonal Frequency Division Multiple

Access (OFDMA) protocol." Although the Office Action relies on Dowling's discussion of CDMA, Applicant submits that CDMA (which stands for Code Division Multiple Access) and OFDM/OFDMA are **different wireless communication technologies**. (*See* Office Action, page 14.) The mere discussion of CDMA in Dowling therefore does not disclose or suggest that "the second air interface is based upon an Orthogonal Frequency Division Multiplexed (OFDM) and/or Orthogonal Frequency Division Multiple Access (OFDMA) protocol," as recited in Claim 7. For at least this reason, Claim 7 is separately patentable.

Claim 8 recites that "the second air interface that uses a wireless communications link that is based upon licensed frequencies is further based upon an Orthogonal Frequency Division Multiplexed (OFDM) and/or Orthogonal Frequency Division Multiple Access (OFDMA) protocol," and is therefore separately patentable for at least similar reasons to the reason that is discussed above with respect to Claim 7.

Claim 8 further recites that "the wireless short-range communications link that is based upon unlicensed frequencies is further based upon a Time Division Duplex (TDD) protocol." Although the Office Action relies on paragraphs [0012]-[0017] of Dowling as teaching a TDD protocol, the cited paragraphs do not use the term "TDD" or "Time Division Duplex." (*See* Office Action, page 14.) Applicant thus requests clarification as to where in the cited paragraphs a TDD protocol is taught.

As another example, new Claim 55 recites that "wirelessly providing by the smartphone, using the first air interface, information to the entity comprises: being proximate to a specific location within a store, then detecting a short-range signal being transmitted from said specific location within the store, and then performing a transaction to pay for one or more items." In contrast, Dowling discusses a **central server** that "performs **network handshake transactions**." (*See* Dowling, paragraph [0074], *emphasis added.*) For at least this reason, new Claim 55 is separately patentable. Moreover, new Claim 56 is separately patentable for at least similar reasons.

As each of the remaining dependent claims depends from a base claim that is believed to be in condition for allowance, Applicant does not believe that it is necessary to argue the allowability of each of these claims individually. Applicant does not necessarily concur with the interpretation of these claims, or with the bases for rejection set forth in the Office Action.

Applicant therefore reserves the right to address the patentability of these claims individually as necessary in the future.

CONCLUSION

Accordingly, Applicant submits that all pending claims in the present application are in condition for allowance, and a Notice of Allowance is respectfully requested in due course. The Examiner is encouraged to contact the undersigned representative by telephone should any additional issues need to be addressed.

Respectfully submitted,

Vernon H. Guthrie
Registration No. 63,798
Attorney for Applicant

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Myers Bigel, P.A.
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PTO/SB/06 (09-11)
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PATENT APPLICATION FEE DETERMINATION RECORD Substitute for Form PTO-875	Application or Docket Number 15/800,885	Filing Date 11/01/2017	☐ 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 $40 =	
INDEPENDENT CLAIMS (37 CFR 1.16(h))	minus 3 =	*		x $210 =	
☐ APPLICATION SIZE FEE (37 CFR 1.16(s))	If the specification and drawings exceed 100 sheets of paper, the application size fee due is $310 ($155 for small entity) for each additional 50 sheets or fraction thereof. See 35 U.S.C. 41(a)(1)(G) and 37 CFR 1.16(s).				
☐ 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	10/31/2018	(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))	* 27	Minus	** 39	= 0		x $50 =	0
	Independent (37 CFR 1.16(h))	* 4	Minus	*** 8	= 0		x $230 =	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 $0 =	
	Independent (37 CFR 1.16(h))	*	Minus	***	=		x $0 =	
	☐ 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.	LIE
** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 20, enter "20".	/THERESA D DAWKINS/
*** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 3, enter "3".	
The "Highest Number Previously Paid For" (Total or Independent) is the highest number found in the appropriate box in column 1.	

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

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INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Not for submission under 37 CFR 1.99)

Application Number	15800885
Filing Date	2017-11-01
First Named Inventor	Karabinis, Peter D.
Art Unit	2641
Examiner Name	MICHAEL T VU
Attorney Docket Number	9466-24TSCT2 (C)

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INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)	Application Number	15800885
	Filing Date	2017-11-01
	First Named Inventor	Karabinis, Peter D.
	Art Unit	2641
	Examiner Name	MICHAEL T VU
	Attorney Docket Number	9466-24TSCT2 (C)

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Examiner Signature		Date Considered	

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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	15800885
	Filing Date	2017-11-01
	First Named Inventor	Karabinis, Peter D.
	Art Unit	2641
	Examiner Name	MICHAEL T VU
	Attorney Docket Number	9466-24TSCT2 (C)

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	/Vernon H. Guthrie/	Date (YYYY-MM-DD)	2018-12-19
Name/Print	Vernon H. Guthrie	Registration Number	63798

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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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 Patent Application Fee Transmittal

Application Number:	15800885
Filing Date:	01-Nov-2017
Title of Invention:	MOBILE DEVICE MODE ENABLEMENT RESPONSIVE TO A PROXIMITY CRITERION
First Named Inventor/Applicant Name:	Peter D. Karabinis
Filer:	Vernon H. Guthrie Jr./Meredith DeRosa
Attorney Docket Number:	9466-24TSCT2

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($)
Miscellaneous:				
SUBMISSION- INFORMATION DISCLOSURE STMT	2806	1	120	120
		Total in USD ($)		**120**

Electronic Acknowledgement Receipt	
EFS ID:	34631187
Application Number:	15800885
International Application Number:	
Confirmation Number:	9764
Title of Invention:	MOBILE DEVICE MODE ENABLEMENT RESPONSIVE TO A PROXIMITY CRITERION
First Named Inventor/Applicant Name:	Peter D. Karabinis
Customer Number:	20792
Filer:	Vernon H. Guthrie Jr./Meredith DeRosa
Filer Authorized By:	Vernon H. Guthrie Jr.
Attorney Docket Number:	9466-24TSCT2
Receipt Date:	19-DEC-2018
Filing Date:	01-NOV-2017
Time Stamp:	08:37:24
Application Type:	Utility under 35 USC 111(a)

Payment information:

Submitted with Payment	yes
Payment Type	CARD
Payment was successfully received in RAM	$120
RAM confirmation Number	121918INTEFSW08383800
Deposit Account	
Authorized User	
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File Listing:

Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1	Information Disclosure Statement (IDS) Form (SB08)	9466-24TSCT2_IDS.pdf	1053413 d86979a273c0405c62bcfffe39b017c3691d169e	no	4
Warnings:					
Information:					
2	Fee Worksheet (SB06)	fee-info.pdf	30586 cb40848d294c66f251778258ed587de5bff0d96f	no	2
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If a new application is being filed and the application includes the necessary components for a filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application.
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NOTICE OF ALLOWANCE AND FEE(S) DUE

20792 7590 01/09/2019
MYERS BIGEL, P.A.
PO BOX 37428
RALEIGH, NC 27627

EXAMINER
VU, MICHAEL T

ART UNIT	PAPER NUMBER
2641	

DATE MAILED: 01/09/2019

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
15/800,885	11/01/2017	Peter D. Karabinis	9466-24TSCT2	9764

TITLE OF INVENTION: MOBILE DEVICE MODE ENABLEMENT RESPONSIVE TO A PROXIMITY CRITERION

APPLN. TYPE	ENTITY STATUS	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	SMALL	$500	$0.00	$0.00	$500	04/09/2019

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.

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

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(Typed or printed name)
(Signature)
(Date)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
15/800,885	11/01/2017	Peter D. Karabinis	9466-24TSCT2	9764

TITLE OF INVENTION: MOBILE DEVICE MODE ENABLEMENT RESPONSIVE TO A PROXIMITY CRITERION

APPLN. TYPE	ENTITY STATUS	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	SMALL	$500	$0.00	$0.00	$500	04/09/2019

EXAMINER	ART UNIT	CLASS-SUBCLASS
VU, MICHAEL T	2641	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 03-09 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 must have been previously recorded, or filed for recordation, as set forth in 37 CFR 3.11 and 37 CFR 3.81(a). 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. Fees submitted: ❑Issue Fee ❑Publication Fee (if required) ❑Advance Order - # of Copies _____

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

❑ Electronic Payment via EFS-Web ❑ Enclosed check ❑ Non-electronic payment by credit card (Attach form PTO-2038)

❑ The Director is hereby authorized to charge the required fee(s), any deficiency, or credit any overpayment to Deposit Account No. _____

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. _____

UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
15/800,885	11/01/2017	Peter D. Karabinis	9466-24TSCT2	9764

20792 7590 01/09/2019
MYERS BIGEL, P.A.
PO BOX 37428
RALEIGH, NC 27627

EXAMINER
VU, MICHAEL T

ART UNIT	PAPER NUMBER
2641	

DATE MAILED: 01/09/2019

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

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

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

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

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

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

The information collected by PTOL-85 Part B is required by 37 CFR 1.311. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 30 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, 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. 15/800,885	Applicant(s) Karabinis et al.	
	Examiner MICHAEL T VU	Art Unit 2641	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 December 21, 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 1,3-8,36-37,39,51-52 and 54-60 . As a result of the allowed claim(s), you may be eligible to benefit from the **Patent Prosecution Highway** program at a participating intellectual property office for the corresponding application. For more information, please see **http://www.uspto.gov/patents/init_events/pph/index.jsp** or send an inquiry to **PPHfeedback@uspto.gov.**

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

   Certified copies:

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

   1. ☐ Certified copies of the priority documents have been received.
   2. ☐ Certified copies of the priority documents have been received in Application No. _____ .
   3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

   * Certified copies not received: _____ .

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file 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. 12/21/2018,.
5. ☑ Examiner's Amendment/Comment
6. ☑ Examiner's Statement of Reasons for Allowance
7. ☐ Other _____.

/MICHAEL T VU/
Primary Examiner, Art Unit 2641

DETAILED ACTION

Notice of Pre-AIA or AIA Status

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 on 12/19/2018, 10/31/2018 is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement is being considered by the examiner.

Terminal Disclaimer

3. The terminal disclaimer filed on 10/31/2018 disclaiming the terminal portion of any patent granted on this application which would extend beyond the expiration date of 11/04/2008 (see Date of Continuation on BIB) has been reviewed and is accepted. The terminal disclaimer has been approved on 10/31/2018.

EXAMINER'S AMENDMENT

4. 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.

5. Authorization for this examiner's amendment was given in a telephone interview with Vernon H. Guthrie on December 21, 2018.

Please amend the applicant as follow:

6. **Claims 61-68 have been canceled.**

Allowable Subject Matter

7. **Claims 1, 3-8, 36-37, 39, 51-52, 54-60** are allowed.

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

With respect to claims 1, and 4, the closest prior art of record, Dowling (US 2007/0260710) teaches a method of operating a smartphone to wirelessly provide information to an entity using a first air interface, to wirelessly receive information from the entity using the first air interface; and to wirelessly receive a communications service from a wireless network using a second air interface that differs from the first air interface, wherein the communications service is received by the smartphone from the wireless network absent involving the entity and wherein the entity functions independently of the communications service, the method comprising:

detecting by the smartphone that a proximity condition is satisfied between the smartphone and the entity;

However, Dowling alone or in combination fails teaches or fairly suggest;

in response to at least the proximity condition having been satisfied between the smartphone and the entity, establishing a wireless short-range communications link between the smartphone and the entity to provide by the smartphone, using the first air interface, information to the entity and to receive by the smartphone information from the entity;

in response to at least the proximity condition having been satisfied between the smartphone and the entity and in response to a physiological parameter, wirelessly providing by the smartphone, using the first air interface, information to the entity and wirelessly receiving by the smartphone, using the first air interface, information from the entity independently of, and absent involving the entity in, receiving by the smartphone the communications service from the wireless network using the second air interface; and

wirelessly receiving by the smartphone, using the second air interface, the communications service from the wireless network absent involving the entity, absent providing by the smartphone information to the entity, and absent receiving by the smartphone information from the entity,

wherein the wireless short-range communications link used by the first air interface is based upon unlicensed frequencies,

wherein the second air interface uses a wireless communications link that is based upon licensed frequencies, and

wherein the first air interface is not involved in providing the communications service to the smartphone.

Dependent claims 3, 5-8, 36-37, 39, and 54-60 are allowable for the same reason as set forth above.

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

Conclusion

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to MICHAEL T VU whose telephone number is (571)272-8131. The examiner can normally be reached on 8:00AM to 6:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Charles N. Appiah can be reached on 571-272-7904. The fax phone number for the organization where this application or proceeding is assigned is 571-272-8300.

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).

/MICHAEL T VU/
Primary Examiner, Art Unit 2641

Applicant-Initiated Interview Summary	**Application No.** 15/800,885	**Applicant(s)** Karabinis et al.	
	Examiner MICHAEL T VU	**Art Unit** 2641	**AIA Status** No

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

(1) MICHAEL T. VU. (3) _____.

(2) Vernon H. Guthrie. (4) _____.

Date of Interview: 21 December 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: 1,4 and 61-68.

Identification of prior art discussed: _____.

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...)

Applicant's representative authorized entry of an Examiner's Amendment to cancel claims 61-68. In order to expedite prosecution of the application in condition for allowance.

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

/MICHAEL T VU/ Primary Examiner, Art Unit 2641	

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.

Issue Classification	Application/Control No.	Applicant(s)/Patent Under Reexamination
	15/800,885	Karabinis et al.
	Examiner	**Art Unit**
	MICHAEL T VU	2641

CPC						
Symbol					**Type**	**Version**
H04W	/	48	/	04	F	2013-01-01
G06Q	/	30	/	0601	I	2013-01-01
H04W	/	4	/	02	I	2013-01-01
H04W	/	4	/	023	I	2013-01-01
H04L	/	67	/	18	I	2013-01-01
H04W	/	4	/	80	I	2018-02-01
H04W	/	76	/	10	I	2018-02-01
H04W	/	88	/	06	A	2013-01-01

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

NONE (Assistant Examiner) (Date)		**Total Claims Allowed:** 19	
/MICHAEL T VU/ Primary Examiner, Art Unit 2641 (Primary Examiner) (Date)	28 December 2018	O.G. Print Claim(s) 1	O.G. Print Figure 1

U.S. Patent and Trademark Office Part of Paper No.: 20181227

Issue Classification	Application/Control No.	Applicant(s)/Patent Under Reexamination
	15/800,885	Karabinis et al.
	Examiner	**Art Unit**
	MICHAEL T VU	2641

INTERNATIONAL CLASSIFICATION				
CLAIMED				
H04W	/	4	/	02

NON-CLAIMED				
	/		/	

US ORIGINAL CLASSIFICATION	
CLASS	**SUBCLASS**
455	456.3

CROSS REFERENCES(S)						
CLASS	**SUBCLASS (ONE SUBCLASS PER BLOCK)**					
370	230	330	331	329		

NONE (Assistant Examiner) (Date)		Total Claims Allowed: 19	
/MICHAEL T VU/ Primary Examiner, Art Unit 2641 (Primary Examiner) (Date)	28 December 2018	O.G. Print Claim(s) 1	O.G. Print Figure 1

U.S. Patent and Trademark Office Part of Paper No.: 20181227

Issue Classification	Application/Control No.	Applicant(s)/Patent Under Reexamination
	15/800,885	Karabinis et al.
	Examiner	**Art Unit**
	MICHAEL T VU	2641

☐ 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	1		10		19		28	5	37		46	7	55		64
	2		11		20		29		38		47	17	56		65
2	3		12		21		30	6	39		48	8	57		66
10	4		13		22		31		40		49	18	58		67
11	5		14		23		32		41		50	9	59		68
12	6		15		24		33		42	14	51	19	60		
13	7		16		25		34		43	15	52		61		
3	8		17		26		35		44		53		62		
	9		18		27	4	36		45	16	54		63		

NONE (Assistant Examiner) (Date)		**Total Claims Allowed:** 19
/MICHAEL T VU/ Primary Examiner, Art Unit 2641 (Primary Examiner) (Date)	28 December 2018	O.G. Print Claim(s): 1 O.G. Print Figure: 1

U.S. Patent and Trademark Office Part of Paper No.: 20181227

Search Notes	Application/Control No.	Applicant(s)/Patent Under Reexamination
	15/800,885	Karabinis et al.
	Examiner	**Art Unit**
	MICHAEL T VU	2641

CPC - Searched*		
Symbol	**Date**	**Examiner**
H04W 48/04	12/21/2018	MTV

CPC Combination Sets - Searched*		
Symbol	**Date**	**Examiner**
H04W84/12 OR H04W88/04 OR H04W48/18 OR H04W28/0231 OR H04W52/0229 OR H04W52/0274 OR H04W84/042 OR H04W88/06 OR H04W88/16 OR H04W92/02	12/21/2018	MTV

US Classification - Searched*			
Class	**Subclass**	**Date**	**Examiner**

* 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 Name: Peter Karabinis	12/21/2018	MTV
Assignee: Telcom Ventures	12/21/2018	MTV
Double Patent Rejected, TD filed 10/31/2018	12/21/2018	MTV
EAST Searched System	12/21/2018	MTV

Interference Search			
US Class/CPC Symbol	**US Subclass/CPC Group**	**Date**	**Examiner**
Interference	Text Searched	12/21/2018	MTV

	/MICHAEL T VU/ Primary Examiner, Art Unit 2641

EAST Search History

EAST Search History (Prior Art)

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L1	2	15/800885	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/12/28 10:42
L2	6	(first adj2 interfac$3) same (second adj3 interfac$3) same (proximit$3 (short adj2 range)) same (entity person animal vehicle (shopping adj card)) and transaction	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/12/28 10:55
L3	12	("20060152369" | "20080084312" | "20090117872" | "20110260839" | "20120242294" | "20130265140" | "20130293190" | "20140025444" | "20140340267" | "20140364772" | "20150119728" | "20150154490").PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2018/12/28 10:56
L4	48	("20030220105" | "20040030601" | "20040170430" | "20060009234" | "20060133633" | "20060145893" | "20060159260" | "20060172700" | "20060194538" | "20070167147" | "20070178935" | "20070184837" | "20070197261" | "20070243872" | "20070250393" | "20070265984" | "20070285280" | "20080040274" | "20080140868" | "20080146148" | "20080167966" | "20080200166" | "20080227471" | "20080306868" | "20090023474" | "20090113543" | "20090153367" | "20090169070" | "20090213947" | "20100067591" | "20100265845" | "20110314539" | "20120214443" | "20130156218" | "6595929" | "6769607" | "6957107" | "7028897" | "7133659" | "7155199" | "7539241" | "7822644" | "7912629" | "8023580" | "8463238" | "8532069" | "8646060" | "RE39736").PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2018/12/28 10:56
L5	43	("20040030601" | "20040170430" | "20060009234" | "20060133633" | "20060145893" | "20060159260" | "20060172700" | "20070167147" | "20070178935" | "20070184837" | "20070197261" | "20070250393" | "20070265984" | "20070285280" | "20080040274" | "20080140868" | "20080146148" | "20080167966" | "20080200166" | "20080227471" |	US-PGPUB; USPAT; USOCR	OR	OFF	2018/12/28 10:56

		"20080306868" | "20090023474" | "20090113543" | "20090153367" | "20090169070" | "20090213947" | "20100067591" | "20100265845" | "20110314539" | "20120214443" | "20130156218" | "6595929" | "6769607" | "6957107" | "7028897" | "7133659" | "7155199" | "7539241" | "7822644" | "7912629" | "8532069" | "8646060" | "RE39736").PN.				
L6	4	2 AND ((H04W48/04 OR H04W4/02 OR H04W4/023 OR H04W4/80 OR H04W76/10 OR H04W88/06).CPC.)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/12/28 10:57
L7	5	2 AND ((G06Q30/0601 OR G06Q10/00).CPC.)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/12/28 10:57
L8	4	2 AND ((H04L67/18).CPC.)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/12/28 10:57
L9	1	2 AND ((G06F8/60 OR G06F9/24 OR G06F9/48).CPC.)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/12/28 10:57
L10	48	("20030220105" | "20040030601" | "20040170430" | "20060009234" | "20060133633" | "20060145893" | "20060159260" | "20060172700" | "20060194538" | "20070167147" | "20070178935" | "20070184837" | "20070197261" | "20070243872" | "20070250393" | "20070265984" | "20070285280" | "20080040274" | "20080140868" | "20080146148" | "20080167966" | "20080200166" | "20080227471" | "20080306868" | "20090023474" | "20090113543" | "20090153367" | "20090169070" | "20090213947" | "20100067591" | "20100265845" | "20110314539" | "20120214443" | "20130156218" | "6595929" | "6769607" | "6957107" | "7028897" | "7133659" | "7155199" | "7539241" | "7822644" | "7912629" | "8023580" | "8463238" | "8532069" | "8646060" | "RE39736").PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2018/12/28 10:59
L11	43	("20040030601" | "20040170430" | "20060009234" | "20060133633" |	US-PGPUB; USPAT;	OR	OFF	2018/12/28 10:59

		"20060145893" | "20060159260" | "20060172700" | "20070167147" | "20070178935" | "20070184837" | "20070197261" | "20070250393" | "20070265984" | "20070285280" | "20080040274" | "20080140868" | "20080146148" | "20080167966" | "20080200166" | "20080227471" | "20080306868" | "20090023474" | "20090113543" | "20090153367" | "20090169070" | "20090213947" | "20100067591" | "20100265845" | "20110314539" | "20120214443" | "20130156218" | "6595929" | "6769607" | "6957107" | "7028897" | "7133659" | "7155199" | "7539241" | "7822644" | "7912629" | "8532069" | "8646060" | "RE39736").PN.	USOCR			
S1	29754	local near8 activat$3	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2017/05/30 15:57
S2	5	local near8 activat$3 same (terminat$3 stop$4 end$3) with wide near4 network	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2017/05/30 15:58
S4	2694	(local WLAN) same (terminat$3 stop$4 end$3) with wide near4 network	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2017/05/31 06:10
S5	460	connect$4 near6 (local WLAN) same (terminat$3 stop$4 end$3) with wide near4 network	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2017/05/31 06:11
S6	11	connect$4 near6 (local WLAN) same determin$4 with (terminat$3 stop$4 end$3) with wide near4 network	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2017/05/31 06:11
S7	87	S5 AND ((H04W84/12 OR H04W12/08 OR H04W24/02 OR H04W24/08 OR H04W4/26 OR H04W28/0215 OR H04W28/0268 OR H04W28/0289 OR H04W28/12 OR H04W36/14 OR H04W4/001 OR H04W80/04 OR H04W84/042 OR H04W24/00 OR H04W28/021 OR H04W28/0221 OR H04W28/0247 OR H04W28/0257 OR	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2017/05/31 06:12

		H04W28/0284 OR H04W28/20 OR H04W48/04 OR H04W48/06 OR H04W48/16 OR H04W52/0212 OR H04W52/0264 OR H04W12/00 OR H04W28/02 OR H04W4/24 OR H04W88/06 OR H04W88/08 OR H04W40/02 OR H04W4/008 OR H04W76/02 OR H04W88/12 OR H04W8/02 OR H04W12/02 OR H04W12/06 OR H04W24/04 OR H04W28/08 OR H04W28/10 OR H04W36/26 OR H04W40/12 OR H04W48/14 OR H04W48/20 OR H04W4/005 OR H04W4/006 OR H04W4/02 OR H04W4/023 OR H04W4/06 OR H04W4/12 OR H04W4/18 OR H04W4/20 OR H04W52/0203 OR H04W72/0453 OR H04W76/022 OR H04W80/06 OR H04W84/04 OR H04W84/20 OR H04W88/02 OR H04W88/04 OR H04W88/085 OR H04W88/10 OR H04W8/18 OR H04W8/20).CPC.)				
S8	67	(local WLAN) same indicat$4 same activat$3 and (terminat$3 stop$4 end$3) with wide near4 network	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2017/06/01 15:43
S9	21	S8 AND ((H04W76/02 OR H04W88/04 OR H04W4/008 OR H04W88/10 OR H04W12/00 OR H04W88/06 OR H04W16/14 OR H04W28/08 OR H04W28/10 OR H04W40/12 OR H04W48/18 OR H04W4/001 OR H04W4/021 OR H04W4/24 OR H04W88/02 OR H04W88/16 OR H04W12/04 OR H04W12/06 OR H04W12/08 OR H04W28/06 OR H04W4/043 OR H04W52/0209 OR H04W74/00 OR H04W8/26).CPC.)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2017/06/01 15:44
S10	9	S8 AND ((G06Q10/06 OR G06Q30/02 OR G06Q30/0233 OR G06Q30/0601 OR G06Q10/02 OR G06Q30/00 OR G06Q30/04 OR G06Q50/30).CPC.)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2017/06/01 15:45
S11	8	S8 AND ((G06F1/3203 OR G06F11/1448 OR G06F11/1458 OR G06F11/2294 OR G06F2009/4557 OR G06F2009/45575 OR G06F9/4443 OR G06F9/45558 OR G06F9/4856).CPC.)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2017/06/01 15:45
S12	2272	((SOUMYA NEAR2 DAS) OR (BONGYONG NEAR2 SONG) OR (SAMIR NEAR3 SOLIMAN)).IN.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT;	OR	OFF	2017/06/01 15:46

			IBM_TDB			
S13	0	S8 AND S12	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2017/06/01 15:46
S14	85	((sari near2 nielsen) or (antti near2 toskala)).in.	USPAT	OR	OFF	2017/06/01 15:48
S15	0	S8 and S14	USPAT	OR	OFF	2017/06/01 15:48
S16	1360	(UE mobile terminal) same (disconnect$4 terminat$3) with ((wide cellular) adj4 network)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2017/11/13 12:49
S17	26	(UE mobile terminal) same (disconnect$4 terminat$3) with ((wide cellular) adj4 network) same (detect$3 whether) with ((local adj area adj network) WLAN)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2017/11/13 12:50
S18	9	(UE mobile terminal) same (disconnect$4 terminat$3) with ((wide cellular) adj4 network) same (detect$3 whether) same (indicat$3) same ((local adj area adj network) WLAN)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2017/11/13 12:50
S19	6	(UE mobile terminal) same (disconnect$4 terminat$3) with ((wide cellular) adj4 network) and (unlicensed adj band)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2017/11/13 13:08
S21	30	(UE mobile terminal) same (wide adj area adj network) same activat$3 same ((long adj term adj evolution adj network) LTE)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2017/11/13 14:02
S22	100	(UE mobile terminal) same (local adj area adj network) same (indicat$3 with activat$3)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2017/11/13 14:33
S23	115	((terminat$3 end$3) near9 (unlicens$3 adj2 band))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT;	OR	OFF	2018/05/16 19:53

			IBM_TDB			
S24	43	((terminat$3 end$3) near9 (unlicens$3 adj2 band)) same LTE	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/05/16 19:54
S26	150	((terminat$3 end$3) near9 ((unlicens$3 adj2 band) LTE-U))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/05/16 20:16
S27	31	UE same ((terminat$3 end$3) near9 ((unlicens$3 adj2 band) LTE-U))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/05/16 20:17
S28	18	("20050095986" | "20120113918" | "20120307748" | "20130336156" | "20130343288" | "20140023022" | "20140199992" | "20140254524" | "20150215952" | "20150223077" | "20150256303" | "20160007350" | "20160014610" | "20170141859" | "7363008" | "8126473" | "8565178" | "8767666").PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2018/05/16 20:20
S29	24	((terminat$3) near9 (unlicens$3 adj2 band))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/05/16 20:31
S30	18	S29 AND ((H04W16/14 OR H04W72/0453 OR H04W28/08 OR H04W84/045 OR H04W84/12 OR H04W88/02 OR H04W88/06 OR H04W72/02 OR H04W72/042 OR H04W72/0446 OR H04W76/06 OR H04W76/30 OR H04W28/26 OR H04W72/0406 OR H04W72/14 OR H04W24/08 OR H04W24/10 OR H04W28/18 OR H04W48/16 OR H04W48/18 OR H04W52/04 OR H04W56/0005 OR H04W60/00 OR H04W64/00 OR H04W72/00 OR H04W72/04 OR H04W72/044 OR H04W72/0486 OR H04W72/1289 OR H04W74/006 OR H04W74/0833 OR H04W74/085 OR H04W76/27 OR H04W88/12 OR H04W8/02 OR H04W92/20).CPC.)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/05/16 20:35
S31	18	("20050095986" | "20120113918" | "20120307748" | "20130336156" | "20130343288" | "20140023022" | "20140199992" | "20140254524" | "20150215952" | "20150223077" |	US-PGPUB; USPAT; USOCR	OR	OFF	2018/05/16 20:36

		"20150256303" | "20160007350" | "20160014610" | "20170141859" | "7363008" | "8126473" | "8565178" | "8767666").PN.				
S32	8	("20060246903" | "20070281704" | "20080002658" | "20080113624" | "20090054058" | "20110289175" | "6850489" | "8509788").PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2018/05/16 20:36
S33	9	S29 AND ((H04L1/00 OR H04L27/0006 OR H04L27/26 OR H04L5/0048 OR H04L5/001 OR H04L5/0023 OR H04L5/0057 OR H04L5/006 OR H04L5/0085 OR H04L5/0091 OR H04L5/14 OR H04L1/0003 OR H04L1/0009 OR H04L1/0061 OR H04L1/18 OR H04L1/1861 OR H04L5/0007 OR H04L5/0044 OR H04L5/0053 OR H04L5/0092).CPC.)	US-PGPUB; USPAT; USOCR	OR	OFF	2018/05/16 20:37
S34	18	("20050095986" | "20120113918" | "20120307748" | "20130336156" | "20130343288" | "20140023022" | "20140199992" | "20140254524" | "20150215952" | "20150223077" | "20150256303" | "20160007350" | "20160014610" | "20170141859" | "7363008" | "8126473" | "8565178" | "8767666").PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2018/05/16 20:37
S35	131	S26 AND ((H04W16/14 OR H04W74/0808 OR H04W72/0453 OR H04W72/1215 OR H04W84/12 OR H04W72/0446 OR H04W74/0816 OR H04W72/042 OR H04W88/06 OR H04W88/10 OR H04W24/08 OR H04W88/02 OR H04W88/08 OR H04W72/082 OR H04W84/045 OR H04W48/16 OR H04W74/006 OR H04W28/26 OR H04W72/00 OR H04W72/02 OR H04W72/044 OR H04W84/042 OR H04W8/005 OR H04W16/16 OR H04W24/02 OR H04W24/10 OR H04W48/12 OR H04W52/0206 OR H04W52/243 OR H04W56/001 OR H04W72/0406 OR H04W72/0413 OR H04W72/085 OR H04W72/14 OR H04W74/08 OR H04W76/28 OR H04W12/06 OR H04W16/32 OR H04W28/08 OR H04W28/18 OR H04W40/16 OR H04W4/24 OR H04W52/04 OR H04W52/241 OR H04W52/244 OR H04W56/00 OR H04W72/04 OR H04W72/0426 OR H04W72/048 OR H04W72/0486 OR H04W72/1252 OR H04W72/1268 OR H04W74/002 OR H04W74/04 OR H04W74/0833 OR H04W76/15 OR H04W76/27 OR H04W88/12 OR H04W92/20 OR H04W12/08 OR H04W24/00 OR H04W28/14 OR H04W28/16 OR H04W36/22 OR H04W36/385 OR H04W40/244 OR H04W48/00 OR H04W48/20 OR H04W4/02 OR	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/05/16 20:38

		H04W4/20 OR H04W52/143 OR H04W52/281 OR H04W52/367 OR H04W56/0005 OR H04W56/0015 OR H04W60/00 OR H04W64/00 OR H04W72/005 OR H04W72/10 OR H04W72/121 OR H04W72/1247 OR H04W72/1263 OR H04W72/1273 OR H04W72/1289 OR H04W74/004 OR H04W74/008 OR H04W74/06 OR H04W74/0841 OR H04W74/085 OR H04W76/046 OR H04W76/048 OR H04W76/06 OR H04W76/30 OR H04W8/02 OR H04W8/22 OR H04W8/24 OR H04W92/10).CPC.)				
S36	5	("20120039284" | "20130201884" | "20130208587" | "20130315152" | "20150016239").PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2018/05/16 20:40
S37	18	("20050095986" | "20120113918" | "20120307748" | "20130336156" | "20130343288" | "20140023022" | "20140199992" | "20140254524" | "20150215952" | "20150223077" | "20150256303" | "20160007350" | "20160014610" | "20170141859" | "7363008" | "8126473" | "8565178" | "8767666").PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2018/05/16 20:40
S38	13	("20040264475" | "20060194540" | "20070171909" | "20110044218" | "20120051342" | "20120069766" | "20130337821" | "20140044105" | "20150124740" | "20150223075" | "20150271226" | "20150334744" | "6526264").PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2018/05/16 20:40
S39	4	("20130170427" | "20130250931" | "20140341024" | "20160066306").PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2018/05/16 20:40
S40	8	("20060223448" | "20080122581" | "20110021153" | "20110128895" | "20130163449" | "20160338019" | "20170127449" | "8155102").PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2018/05/16 20:40
S41	1	("20140044105").PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2018/05/16 20:40
S42	26	("20040162617" | "20080233967" | "20090262785" | "20100046440" | "20100091670" | "20100322287" | "20110110251" | "20110170424" | "20110205984" | "20110244904" | "20120120892" | "20120140656" | "20120207040" | "20120264388" | "20130065533" | "20130142059" | "20130143502" | "20130195072" | "20130315152" | "20130322279" | "20130336156" | "20130337821" | "20140133371" | "20150063148" | "8494580" | "9253778").PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2018/05/16 20:41
S43	8	("20080108366" | "20110228742" | "20130143502" | "20140044105" | "20150189676" | "20150264699" | "20160294516" | "8792900").PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2018/05/16 20:41
S44	10	("20120120892" | "20130196653" |	US-PGPUB;	OR	OFF	2018/05/16

		"20140029535" | "20140187287" | "20140213219" | "20140369329" | "20150009850" | "20150063323" | "8290503" | "8767576").PN.	USPAT; USOCR			20:41
S45	44	("20090129332" | "20090285169" | "20100172254" | "20110128895" | "20120069766" | "20120082140" | "20120093009" | "20120170557" | "20120243498" | "20120250631" | "20120264468" | "20130003591" | "20130010766" | "20130034018" | "20130058245" | "20130083661" | "20130094467" | "20130142059" | "20130178225" | "20130194981" | "20130208587" | "20130235814" | "20130242924" | "20130272260" | "20140036818" | "20140044000" | "20140044105" | "20140045494" | "20140050146" | "20140050170" | "20140087748" | "20140126403" | "20140301351" | "20150055621" | "20150063245" | "20150085683" | "20150085684" | "20150085792" | "20150085841" | "20150163794" | "20150163801" | "20150163823" | "20150208413" | "20150236782").PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2018/05/16 20:41
S46	18	("20090197627" | "20100048234" | "20100208685" | "20100273515" | "20110228666" | "20110299479" | "20110300891" | "20120044898" | "20120052891" | "20120100883" | "20120176998" | "20120231834" | "20130034091" | "20130044662" | "20130343219" | "20140080501" | "20140086195" | "20150087352").PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2018/05/16 20:41
S47	4	("20050207381" | "20120076081" | "20130208587" | "20150215100").PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2018/05/16 20:41
S48	61	S26 AND ((H04L5/0048 OR H04L27/0006 OR H04L5/0053 OR H04L5/001 OR H04L5/0055 OR H04L5/0073 OR H04L5/14 OR H04L1/20 OR H04L5/0098 OR H04L1/00 OR H04L1/0003 OR H04L1/0009 OR H04L1/0015 OR H04L27/2601 OR H04L27/2613 OR H04L41/0803 OR H04L5/0007 OR H04L5/0023 OR H04L5/0057 OR H04L5/006 OR H04L5/0085 OR H04L5/0091 OR H04L12/1407 OR H04L1/0026 OR H04L1/0027 OR H04L1/0038 OR H04L1/0061 OR H04L1/0073 OR H04L1/18 OR H04L1/1861 OR H04L1/1887 OR H04L25/0238 OR H04L25/0242 OR H04L27/2605 OR H04L27/2611 OR H04L27/2626 OR H04L27/2656 OR H04L27/2666 OR H04L27/2675 OR H04L41/0893 OR H04L41/5019 OR H04L43/0894 OR H04L43/10 OR H04L43/16 OR H04L47/29 OR H04L47/52 OR H04L5/00 OR H04L5/0005 OR H04L5/0032 OR	US-PGPUB; USPAT; USOCR	OR	OFF	2018/05/16 20:41

		H04L5/0035 OR H04L5/005 OR H04L5/0051 OR H04L5/0058 OR H04L5/0092 OR H04L5/08 OR H04L65/102 OR H04L65/1073 OR H04L69/22 OR H04L7/00).CPC.)				
S49	74	("20020156897" | "20020167933" | "20020197991" | "20030114158" | "20030119490" | "20030165124" | "20030176186" | "20040001461" | "20040067753" | "20040072581" | "20040090958" | "20040105416" | "20040142693" | "20040203788" | "20040229621" | "20050018637" | "20050090259" | "20050221828" | "20050271008" | "20060020694" | "20060058032" | "20060073826" | "20060095954" | "20060098598" | "20060111112" | "20060116127" | "20060148479" | "20060223498" | "20060268799" | "20070008885" | "20070026862" | "20070083470" | "20070091839" | "20070173251" | "20070268908" | "20080076420" | "20080091612" | "20080189550" | "20080254833" | "20080259886" | "20080311917" | "20090061863" | "20090092081" | "20090110168" | "20090129338" | "20090219826" | "20090220216" | "20090265542" | "20090287922" | "20100093307" | "20100161638" | "20100190492" | "20100214977" | "20100226347" | "20110055574" | "20110076998" | "20110093945" | "20130324115" | "5406615" | "5475677" | "5854982" | "6493437" | "6647426" | "6680923" | "6922559" | "6925074" | "7127250" | "7283822" | "7308263" | "7324818" | "7565145" | "7623486" | "8340711" | "8738084").PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2018/05/16 20:42
S50	37	("20090129332" | "20110128895" | "20120069766" | "20120082140" | "20120093009" | "20120170557" | "20120243498" | "20120250631" | "20120264468" | "20130010766" | "20130034018" | "20130058245" | "20130083661" | "20130094467" | "20130178225" | "20130194981" | "20130208587" | "20130235814" | "20130242924" | "20130272260" | "20140036818" | "20140044000" | "20140044105" | "20140045494" | "20140050170" | "20140087748" | "20150055621" | "20150063245" | "20150085683" | "20150085684" | "20150085792" | "20150085841" | "20150163794" | "20150163801" | "20150163823" | "20150208413" | "20150236782").PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2018/05/16 20:42
S51	22	("20030104849" | "20050089057" | "20060148482" | "20060187952" | "20090122736" | "20100124254" | "20100167742" | "20100177757" |	US-PGPUB; USPAT; USOCR	OR	OFF	2018/05/16 20:42

		"20100197317" | "20110228666" | "20120015607" | "20120077510" | "20120129522" | "20120207036" | "20130058218" | "20130136097" | "20130344883" | "20140342745" | "20150009871" | "20150156636" | "6295285" | "8478282").PN.				
S52	4	("20130203429" | "20140335876" | "20140341135" | "20150223075").PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2018/05/16 20:42
S53	4	("20050207381" | "20120076081" | "20130208587" | "20150215100").PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2018/05/16 20:42
S54	44	("20090129332" | "20090285169" | "20100172254" | "20110128895" | "20120069766" | "20120082140" | "20120093009" | "20120170557" | "20120243498" | "20120250631" | "20120264468" | "20130003591" | "20130010766" | "20130034018" | "20130058245" | "20130083661" | "20130094467" | "20130142059" | "20130178225" | "20130194981" | "20130208587" | "20130235814" | "20130242924" | "20130272260" | "20140036818" | "20140044000" | "20140044105" | "20140045494" | "20140050146" | "20140050170" | "20140087748" | "20140126403" | "20140301351" | "20150055621" | "20150063245" | "20150085683" | "20150085684" | "20150085792" | "20150085841" | "20150163794" | "20150163801" | "20150163823" | "20150208413" | "20150236782").PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2018/05/16 20:42
S55	26	("20040162617" | "20080233967" | "20090262785" | "20100046440" | "20100091670" | "20100322287" | "20110110251" | "20110170424" | "20110205984" | "20110244904" | "20120120892" | "20120140656" | "20120207040" | "20120264388" | "20130065533" | "20130142059" | "20130143502" | "20130195072" | "20130315152" | "20130322279" | "20130336156" | "20130337821" | "20140133371" | "20150063148" | "8494580" | "9253778").PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2018/05/16 20:42
S56	4	("20130170427" | "20130250931" | "20140341024" | "20160066306").PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2018/05/16 20:42
S57	13	("20040264475" | "20060194540" | "20070171909" | "20110044218" | "20120051342" | "20120069766" | "20130337821" | "20140044105" | "20150124740" | "20150223075" | "20150271226" | "20150334744" | "6526264").PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2018/05/16 20:43
S58	18	("20050095986" | "20120113918" | "20120307748" | "20130336156" | "20130343288" | "20140023022" | "20140199992" | "20140254524" |	US-PGPUB; USPAT; USOCR	OR	OFF	2018/05/16 20:43

		"20150215952" | "20150223077" | "20150256303" | "20160007350" | "20160014610" | "20170141859" | "7363008" | "8126473" | "8565178" | "8767666").PN.				
S59	13	S26 AND ((H04B17/318 OR H04B17/336 OR H04B17/345 OR H04B10/272 OR H04B17/18 OR H04B1/40 OR H04B7/0413 OR H04B7/155 OR H04B7/15535 OR H04B7/2656).CPC.)	US-PGPUB; USPAT; USOCR	OR	OFF	2018/05/16 20:43
S60	1	("20140044105").PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2018/05/16 20:43
S61	2	("20120051748" | "20120166819").PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2018/05/16 20:43
S62	2	S26 AND ((H04Q11/0067 OR H04Q2011/0081 OR H04Q2011/0084 OR H04Q2011/0088).CPC.)	US-PGPUB; USPAT; USOCR	OR	OFF	2018/05/16 20:44
S63	2	("20120051748" | "20120166819").PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2018/05/16 20:44
S64	3	S26 AND ((H04M15/00 OR H04M15/41 OR H04M15/55 OR H04M15/66).CPC.)	US-PGPUB; USPAT; USOCR	OR	OFF	2018/05/16 20:44
S65	74	("20020156897" | "20020167933" | "20020197991" | "20030114158" | "20030119490" | "20030165124" | "20030176186" | "20040001461" | "20040067753" | "20040072581" | "20040090958" | "20040105416" | "20040142693" | "20040203788" | "20040229621" | "20050018637" | "20050090259" | "20050221828" | "20050271008" | "20060020694" | "20060058032" | "20060073826" | "20060095954" | "20060098598" | "20060111112" | "20060116127" | "20060148479" | "20060223498" | "20060268799" | "20070008885" | "20070026862" | "20070083470" | "20070091839" | "20070173251" | "20070268908" | "20080076420" | "20080091612" | "20080189550" | "20080254833" | "20080259886" | "20080311917" | "20090061863" | "20090092081" | "20090110168" | "20090129338" | "20090219826" | "20090220216" | "20090265542" | "20090287922" | "20100093307" | "20100161638" | "20100190492" | "20100214977" | "20100226347" | "20110055574" | "20110076998" | "20110093945" | "20130324115" | "5406615" | "5475677" | "5854982" | "6493437" | "6647426" | "6680923" | "6922559" | "6925074" | "7127250" | "7283822" | "7308263" | "7324818" | "7565145" | "7623486" | "8340711" | "8738084").PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2018/05/16 20:44

S66	131	S26 AND ((H04W16/14 OR H04W74/0808 OR H04W72/0453 OR H04W72/1215 OR H04W84/12 OR H04W72/0446 OR H04W74/0816 OR H04W72/042 OR H04W88/06 OR H04W88/10 OR H04W24/08 OR H04W88/02 OR H04W88/08 OR H04W72/082 OR H04W84/045 OR H04W48/16 OR H04W74/006 OR H04W28/26 OR H04W72/00 OR H04W72/02 OR H04W72/044 OR H04W84/042 OR H04W8/005 OR H04W16/16 OR H04W24/02 OR H04W24/10 OR H04W48/12 OR H04W52/0206 OR H04W52/243 OR H04W56/001 OR H04W72/0406 OR H04W72/0413 OR H04W72/085 OR H04W72/14 OR H04W74/08 OR H04W76/28 OR H04W12/06 OR H04W16/32 OR H04W28/08 OR H04W28/18 OR H04W40/16 OR H04W4/24 OR H04W52/04 OR H04W52/241 OR H04W52/244 OR H04W56/00 OR H04W72/04 OR H04W72/0426 OR H04W72/048 OR H04W72/0486 OR H04W72/1252 OR H04W72/1268 OR H04W74/002 OR H04W74/04 OR H04W74/0833 OR H04W76/15 OR H04W76/27 OR H04W88/12 OR H04W92/20 OR H04W12/08 OR H04W24/00 OR H04W28/14 OR H04W28/16 OR H04W36/22 OR H04W36/385 OR H04W40/244 OR H04W48/00 OR H04W48/20 OR H04W4/02 OR H04W4/20 OR H04W52/143 OR H04W52/281 OR H04W52/367 OR H04W56/0005 OR H04W56/0015 OR H04W60/00 OR H04W64/00 OR H04W72/005 OR H04W72/10 OR H04W72/121 OR H04W72/1247 OR H04W72/1263 OR H04W72/1273 OR H04W72/1289 OR H04W74/004 OR H04W74/008 OR H04W74/06 OR H04W74/0841 OR H04W74/085 OR H04W76/046 OR H04W76/048 OR H04W76/06 OR H04W76/30 OR H04W8/02 OR H04W8/22 OR H04W8/24 OR H04W92/10).CPC.)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/05/16 20:46
S67	10	("20120120892" | "20130196653" | "20140029535" | "20140187287" | "20140213219" | "20140369329" | "20150009850" | "20150063323" | "8290503" | "8767576").PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2018/05/16 20:47
S68	26	("20040162617" | "20080233967" | "20090262785" | "20100046440" | "20100091670" | "20100322287" | "20110110251" | "20110170424" | "20110205984" | "20110244904" | "20120120892" | "20120140656" | "20120207040" | "20120264388" | "20130065533" | "20130142059" | "20130143502" | "20130195072" | "20130315152" | "20130322279" |	US-PGPUB; USPAT; USOCR	OR	OFF	2018/05/16 20:47

		"20130336156" | "20130337821" | "20140133371" | "20150063148" | "8494580" | "9253778").PN.				
S69	8	("20060223448" | "20080122581" | "20110021153" | "20110128895" | "20130163449" | "20160338019" | "20170127449" | "8155102").PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2018/05/16 20:47
S70	4	("20130170427" | "20130250931" | "20140341024" | "20160066306").PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2018/05/16 20:47
S71	18	("20050095986" | "20120113918" | "20120307748" | "20130336156" | "20130343288" | "20140023022" | "20140199992" | "20140254524" | "20150215952" | "20150223077" | "20150256303" | "20160007350" | "20160014610" | "20170141859" | "7363008" | "8126473" | "8565178" | "8767666").PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2018/05/16 20:47
S72	61	S26 AND ((H04L5/0048 OR H04L27/0006 OR H04L5/0053 OR H04L5/001 OR H04L5/0055 OR H04L5/0073 OR H04L5/14 OR H04L1/20 OR H04L5/0098 OR H04L1/00 OR H04L1/0003 OR H04L1/0009 OR H04L1/0015 OR H04L27/2601 OR H04L27/2613 OR H04L41/0803 OR H04L5/0007 OR H04L5/0023 OR H04L5/0057 OR H04L5/006 OR H04L5/0085 OR H04L5/0091 OR H04L12/1407 OR H04L1/0026 OR H04L1/0027 OR H04L1/0038 OR H04L1/0061 OR H04L1/0073 OR H04L1/18 OR H04L1/1861 OR H04L1/1887 OR H04L25/0238 OR H04L25/0242 OR H04L27/2605 OR H04L27/2611 OR H04L27/2626 OR H04L27/2656 OR H04L27/2666 OR H04L27/2675 OR H04L41/0893 OR H04L41/5019 OR H04L43/0894 OR H04L43/10 OR H04L43/16 OR H04L47/29 OR H04L47/52 OR H04L5/00 OR H04L5/0005 OR H04L5/0032 OR H04L5/0035 OR H04L5/005 OR H04L5/0051 OR H04L5/0058 OR H04L5/0092 OR H04L5/08 OR H04L65/102 OR H04L65/1073 OR H04L69/22 OR H04L7/00).CPC.)	US-PGPUB; USPAT; USOCR	OR	OFF	2018/05/16 20:49
S73	74	("20020156897" | "20020167933" | "20020197991" | "20030114158" | "20030119490" | "20030165124" | "20030176186" | "20040001461" | "20040067753" | "20040072581" | "20040090958" | "20040105416" | "20040142693" | "20040203788" | "20040229621" | "20050018637" | "20050090259" | "20050221828" | "20050271008" | "20060020694" | "20060058032" | "20060073826" | "20060095954" | "20060098598" | "20060111112" | "20060116127" |	US-PGPUB; USPAT; USOCR	OR	OFF	2018/05/16 20:50

		"20060148479" | "20060223498" | "20060268799" | "20070008885" | "20070026862" | "20070083470" | "20070091839" | "20070173251" | "20070268908" | "20080076420" | "20080091612" | "20080189550" | "20080254833" | "20080259886" | "20080311917" | "20090061863" | "20090092081" | "20090110168" | "20090129338" | "20090219826" | "20090220216" | "20090265542" | "20090287922" | "20100093307" | "20100161638" | "20100190492" | "20100214977" | "20100226347" | "20110055574" | "20110076998" | "20110093945" | "20130324115" | "5406615" | "5475677" | "5854982" | "6493437" | "6647426" | "6680923" | "6922559" | "6925074" | "7127250" | "7283822" | "7308263" | "7324818" | "7565145" | "7623486" | "8340711" | "8738084").PN.				
S74	37	("20090129332" | "20110128895" | "20120069766" | "20120082140" | "20120093009" | "20120170557" | "20120243498" | "20120250631" | "20120264468" | "20130010766" | "20130034018" | "20130058245" | "20130083661" | "20130094467" | "20130178225" | "20130194981" | "20130208587" | "20130235814" | "20130242924" | "20130272260" | "20140036818" | "20140044000" | "20140044105" | "20140045494" | "20140050170" | "20140087748" | "20150055621" | "20150063245" | "20150085683" | "20150085684" | "20150085792" | "20150085841" | "20150163794" | "20150163801" | "20150163823" | "20150208413" | "20150236782").PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2018/05/16 20:50
S75	44	("20090129332" | "20090285169" | "20100172254" | "20110128895" | "20120069766" | "20120082140" | "20120093009" | "20120170557" | "20120243498" | "20120250631" | "20120264468" | "20130003591" | "20130010766" | "20130034018" | "20130058245" | "20130083661" | "20130094467" | "20130142059" | "20130178225" | "20130194981" | "20130208587" | "20130235814" | "20130242924" | "20130272260" | "20140036818" | "20140044000" | "20140044105" | "20140045494" | "20140050146" | "20140050170" | "20140087748" | "20140126403" | "20140301351" | "20150055621" | "20150063245" | "20150085683" | "20150085684" | "20150085792" | "20150085841" | "20150163794" | "20150163801" | "20150163823" | "20150208413" | "20150236782").PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2018/05/16 20:50

S76	26	("20040162617" | "20080233967" | "20090262785" | "20100046440" | "20100091670" | "20100322287" | "20110110251" | "20110170424" | "20110205984" | "20110244904" | "20120120892" | "20120140656" | "20120207040" | "20120264388" | "20130065533" | "20130142059" | "20130143502" | "20130195072" | "20130315152" | "20130322279" | "20130336156" | "20130337821" | "20140133371" | "20150063148" | "8494580" | "9253778").PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2018/05/16 20:50
S77	4	("20130170427" | "20130250931" | "20140341024" | "20160066306").PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2018/05/16 20:50
S78	18	("20050095986" | "20120113918" | "20120307748" | "20130336156" | "20130343288" | "20140023022" | "20140199992" | "20140254524" | "20150215952" | "20150223077" | "20150256303" | "20160007350" | "20160014610" | "20170141859" | "7363008" | "8126473" | "8565178" | "8767666").PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2018/05/16 20:50
S79	18	S29 AND ((H04W16/14 OR H04W72/0453 OR H04W28/08 OR H04W84/045 OR H04W84/12 OR H04W88/02 OR H04W88/06 OR H04W72/02 OR H04W72/042 OR H04W72/0446 OR H04W76/06 OR H04W76/30 OR H04W28/26 OR H04W72/0406 OR H04W72/14 OR H04W24/08 OR H04W24/10 OR H04W28/18 OR H04W48/16 OR H04W48/18 OR H04W52/04 OR H04W56/0005 OR H04W60/00 OR H04W64/00 OR H04W72/00 OR H04W72/04 OR H04W72/044 OR H04W72/0486 OR H04W72/1289 OR H04W74/006 OR H04W74/0833 OR H04W74/085 OR H04W76/27 OR H04W88/12 OR H04W8/02 OR H04W92/20).CPC.)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/05/16 20:51
S80	8	("20060246903" | "20070281704" | "20080002658" | "20080113624" | "20090054058" | "20110289175" | "6850489" | "8509788").PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2018/05/16 20:51
S81	18	("20050095986" | "20120113918" | "20120307748" | "20130336156" | "20130343288" | "20140023022" | "20140199992" | "20140254524" | "20150215952" | "20150223077" | "20150256303" | "20160007350" | "20160014610" | "20170141859" | "7363008" | "8126473" | "8565178" | "8767666").PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2018/05/16 20:51
S82	891	(terminat$3 stop$4 end$3) near9 (unlicens$3 un-licens$3)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO;	OR	OFF	2018/05/17 11:29

			DERWENT; IBM_TDB			
S83	28	(respons$3 respond$3) near9 (terminat$3 stop$4 end$3) near9 (unlicens$3 un-licens$3)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/05/17 11:33
S84	27	S83 AND ((H04W16/14 OR H04W72/0453 OR H04W72/1215 OR H04W72/042 OR H04W74/0808 OR H04W88/12 OR H04W36/14 OR H04W72/1226 OR H04W74/0816 OR H04W76/28 OR H04W84/12 OR H04W88/06 OR H04W28/20 OR H04W36/0038 OR H04W4/24 OR H04W4/80 OR H04W52/0216 OR H04W72/085 OR H04W72/1278 OR H04W74/002 OR H04W76/048 OR H04W76/20 OR H04W76/34 OR H04W84/105 OR H04W8/04 OR H04W8/18 OR H04W8/20 OR H04W8/26 OR H04W28/10 OR H04W52/0229 OR H04W72/0413 OR H04W72/082 OR H04W72/1289 OR H04W72/14 OR H04W76/025 OR H04W76/068 OR H04W76/15 OR H04W76/38 OR H04W88/02 OR H04W88/10 OR H04W92/02).CPC.)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/05/17 11:34
S85	7	("20060009202" | "20070099653" | "20130003533" | "20150023315" | "20160338096" | "20170279565" | "20170311337").PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2018/05/17 11:35
S86	24	("20080279155" | "20120063373" | "20120082100" | "20120129522" | "20120320874" | "20140003356" | "20140287769" | "20140301351" | "20140342745" | "20140378157" | "20160036617" | "20160095009" | "20160174214" | "20160205562" | "20160219623" | "20160233989" | "20160337867" | "20170079054" | "20170094681" | "20170280341" | "20170339717" | "8670780" | "8855069" | "8934909").PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2018/05/17 11:35
S87	4	("20130170427" | "20130250931" | "20140341024" | "20160066306").PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2018/05/17 11:36
S88	25	("20060223448" | "20070026868" | "20120077510" | "20130156019" | "20130203458" | "20130294356" | "20130337821" | "20140036818" | "20140036889" | "20140112289" | "20140342745" | "20150085683" | "20150131516" | "20150163681" | "20150181453" | "20150201429" | "20150223244" | "20150237548" | "20150382374" | "20160007368" | "20160135055" | "20160255648" | "20160295588" | "9326157" | "9392614").PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2018/05/17 11:36

S89	1	("20150223075").PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2018/05/17 11:36
S90	9	("20050025265" | "20100246506" | "20120077510" | "20120129522" | "20130143502" | "20140031054" | "20140112289" | "5850596" | "7512094").PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2018/05/17 11:36
S91	2	("20130203458" | "20150223244").PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2018/05/17 11:36
S92	9	("20040203815" | "20070015536" | "20090196253" | "20090196268" | "20100278141" | "20110003575" | "20110117889" | "20110299511" | "8229440").PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2018/05/17 11:36
S93	100	("20010036158" | "20020072364" | "20020085516" | "20020106029" | "20030032440" | "20030058822" | "20030112796" | "20030119489" | "20030123485" | "20030133423" | "20040008652" | "20040047364" | "20040073424" | "20040090989" | "20040131025" | "20040131051" | "20040192295" | "20040203791" | "20040254786" | "20040264482" | "20050105512" | "20050180456" | "20050195829" | "20050232232" | "20050265279" | "20050267746" | "20050286466" | "20060009202" | "20060050664" | "20060062225" | "20060083199" | "20060092927" | "20060099935" | "20060111112" | "20060142011" | "20060198347" | "20060209799" | "20060229068" | "20060245395" | "20060270411" | "20060276192" | "20060286981" | "20060291454" | "20060291483" | "20070011727" | "20070041360" | "20070043558" | "20070123196" | "20070135165" | "20070140214" | "20070171841" | "20070286082" | "20080039087" | "20080102794" | "20080123596" | "20080151845" | "20080198841" | "5375121" | "5513185" | "5867785" | "5905873" | "5999529" | "6011579" | "6046999" | "6147988" | "6167129" | "6215996" | "6339594" | "6424637" | "6625169" | "6647428" | "6731627" | "6731647" | "6791959" | "6850883" | "6967958" | "6983163" | "6990340" | "7006489" | "7054318" | "7054320" | "7068623" | "7072358" | "7082143" | "7089011" | "7095733" | "7103021" | "7106701" | "7162024" | "7180892" | "7203226" | "7305229" | "7349698" | "7369859" | "7398088" | "7400881" | "7433690" | "7471655" | "7830864" | "7835346").PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2018/05/17 11:36
S94	13	S83 AND ((H04L1/1812 OR H04L1/0026 OR H04L1/0027 OR	US-PGPUB; USPAT;	OR	OFF	2018/05/17 11:37

		H04L1/0073 OR H04L1/1822 OR H04L1/20 OR H04L29/06027 OR H04L65/1043 OR H04L1/1887 OR H04L47/14 OR H04L47/2441 OR H04L47/2491 OR H04L5/001).CPC.)	USOCR			
S95	7	("20060009202" | "20070099653" | "20130003533" | "20150023315" | "20160338096" | "20170279565" | "20170311337").PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2018/05/17 11:37
S96	4	("20130170427" | "20130250931" | "20140341024" | "20160066306").PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2018/05/17 11:37
S97	25	("20060223448" | "20070026868" | "20120077510" | "20130156019" | "20130203458" | "20130294356" | "20130337821" | "20140036818" | "20140036889" | "20140112289" | "20140342745" | "20150085683" | "20150131516" | "20150163681" | "20150181453" | "20150201429" | "20150223244" | "20150237548" | "20150382374" | "20160007368" | "20160135055" | "20160255648" | "20160295588" | "9326157" | "9392614").PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2018/05/17 11:37
S98	2	("20130203458" | "20150223244").PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2018/05/17 11:38
S99	100	("20010036158" | "20020072364" | "20020085516" | "20020106029" | "20030032440" | "20030058822" | "20030112796" | "20030119489" | "20030123485" | "20030133423" | "20040008652" | "20040047364" | "20040073424" | "20040090989" | "20040131025" | "20040131051" | "20040192295" | "20040203791" | "20040254786" | "20040264482" | "20050105512" | "20050180456" | "20050195829" | "20050232232" | "20050265279" | "20050267746" | "20050286466" | "20060009202" | "20060050664" | "20060062225" | "20060083199" | "20060092927" | "20060099935" | "20060111112" | "20060142011" | "20060198347" | "20060209799" | "20060229068" | "20060245395" | "20060270411" | "20060276192" | "20060286981" | "20060291454" | "20060291483" | "20070011727" | "20070041360" | "20070043558" | "20070123196" | "20070135165" | "20070140214" | "20070171841" | "20070286082" | "20080039087" | "20080102794" | "20080123596" | "20080151845" | "20080198841" | "5375121" | "5513185" | "5867785" | "5905873" | "5999529" | "6011579" | "6046999" | "6147988" | "6167129" | "6215996" | "6339594" | "6424637" | "6625169" | "6647428" | "6731627" | "6731647" |	US-PGPUB; USPAT; USOCR	OR	OFF	2018/05/17 11:38

		"6791959" | "6850883" | "6967958" | "6983163" | "6990340" | "7006489" | "7054318" | "7054320" | "7068623" | "7072358" | "7082143" | "7089011" | "7095733" | "7103021" | "7106701" | "7162024" | "7180892" | "7203226" | "7305229" | "7349698" | "7369859" | "7398088" | "7400881" | "7433690" | "7471655" | "7830864" | "7835346").PN.				
S100	1282274	455/$.ccls. 705/$.ccls. 379/$.ccls. 370/$.ccls. 709/$.ccls.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/05/17 11:42
S101	1	S83 AND ((G06F21/10 OR G06F21/105).CPC.)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/05/17 11:43
S102	1	S83 AND ((G06Q10/10 OR G06Q30/06).CPC.)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/05/17 11:43
S103	353	S82 and S100	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/05/17 11:44
S104	350	(determin$3 detect$3) same (terminat$3 stop$4 end$3) near9 (unlicens$3 un-licens$3)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/05/17 11:45
S105	130	S100 and S104	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/05/17 11:46
S106	103	S105 AND ((H04W16/14 OR H04W84/12 OR H04W72/0453 OR H04W48/16 OR H04W52/367 OR H04W72/042 OR H04W52/146 OR H04W74/002 OR H04W74/0808 OR H04W4/02 OR H04W56/001 OR H04W72/02 OR H04W72/04 OR H04W74/0816 OR H04W24/02 OR H04W28/08 OR H04W48/14 OR H04W52/243 OR H04W72/0406 OR	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/05/17 11:46

		H04W72/0426 OR H04W72/048 OR H04W72/082 OR H04W8/005 OR H04W16/16 OR H04W24/08 OR H04W24/10 OR H04W36/14 OR H04W48/12 OR H04W52/283 OR H04W52/30 OR H04W52/346 OR H04W52/36 OR H04W52/38 OR H04W52/52 OR H04W72/00 OR H04W84/045 OR H04W88/02 OR H04W24/00 OR H04W28/04 OR H04W36/22 OR H04W48/20 OR H04W52/04 OR H04W72/044 OR H04W72/0446 OR H04W72/0486 OR H04W72/1215 OR H04W72/1226 OR H04W72/1247 OR H04W72/1278 OR H04W74/00 OR H04W74/006 OR H04W74/04 OR H04W76/14 OR H04W84/042 OR H04W84/18 OR H04W88/06 OR H04W88/10 OR H04W8/26 OR H04W16/26 OR H04W28/0247 OR H04W28/0278 OR H04W28/06 OR H04W28/20 OR H04W28/26 OR H04W36/0072 OR H04W36/30 OR H04W40/22 OR H04W48/08 OR H04W48/10 OR H04W4/24 OR H04W52/0206 OR H04W52/0225 OR H04W52/0251 OR H04W52/281 OR H04W60/00 OR H04W64/00 OR H04W68/005 OR H04W72/005 OR H04W72/0413 OR H04W72/08 OR H04W72/085 OR H04W72/1263 OR H04W72/1284 OR H04W72/14 OR H04W74/08 OR H04W74/0833 OR H04W74/085 OR H04W76/023 OR H04W76/026 OR H04W76/12 OR H04W76/15 OR H04W76/16 OR H04W76/20 OR H04W76/27 OR H04W76/36 OR H04W80/00 OR H04W88/04 OR H04W88/08 OR H04W8/02 OR H04W8/04 OR H04W8/20).CPC.)				
S107	54	("20020138756" | "20020199203" | "20030074580" | "20030105978" | "20030135611" | "20040005886" | "20040088565" | "20040107360" | "20040123162" | "20040193907" | "20040221174" | "20050015622" | "20050033596" | "20050044418" | "20050060537" | "20050132225" | "20050138408" | "20050144475" | "20050154885" | "20050166065" | "20050172142" | "20050188065" | "5666411" | "5673322" | "5721779" | "5732074" | "5901284" | "5987611" | "6012100" | "6061650" | "6081508" | "6151628" | "6185609" | "6253327" | "6377982" | "6453035" | "6493349" | "6507908" | "6539482" | "6643782" | "6654891" | "6694437" | "6732270" | "6748543" | "6751729" | "6760444" | "6766453" | "6778498" | "6785823" | "6850943" | "6874139" | "7111324" | "7240015" | "7340770").PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2018/05/17 11:47
S108	29	("20040192288" | "20080049776" |	US-PGPUB;	OR	OFF	2018/05/17

		"4939726" | "5129096" | "5295154" | "5400338" | "5455569" | "5479400" | "5563881" | "5610839" | "5740366" | "5974236" | "5987011" | "6044062" | "6046992" | "6249516" | "6298053" | "6349091" | "6349210" | "6385174" | "6437692" | "6704301" | "6728514" | "6804532" | "6829347" | "6850502" | "6885660" | "6965575" | "6973039").PN.	USPAT; USOCR			11:47
S109	31	("20070079012" | "20070183439" | "20070211866" | "20090116509" | "4939726" | "5129096" | "5295154" | "5400338" | "5455569" | "5479400" | "5563881" | "5610839" | "5740366" | "5974236" | "5987011" | "6044062" | "6046992" | "6249516" | "6298053" | "6349091" | "6349210" | "6385174" | "6437692" | "6704301" | "6728514" | "6804532" | "6829347" | "6850502" | "6885660" | "6965575" | "6973039").PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2018/05/17 11:47
S110	60	("20030093526" | "20050003827" | "20060034236" | "20060062183" | "20060067354" | "20060218392" | "20070047492" | "20070192472" | "20070253394" | "20080151796" | "20080171552" | "20080240024" | "20080298333" | "20090061783" | "20090158282" | "20090171930" | "20090191906" | "20090196180" | "20090207800" | "20090217333" | "20090280748" | "20090298522" | "20090323835" | "20090325499" | "20100048234" | "20100061299" | "20100069013" | "20100081449" | "20100091712" | "20100111235" | "20100124254" | "20100142458" | "20100175101" | "20100195580" | "20100195590" | "20100195667" | "20100220687" | "20100229205" | "20100246434" | "20100246506" | "20100303026" | "20100309317" | "20100309806" | "20110043710" | "20110116458" | "20110222488" | "20110243078" | "20110286405" | "20120120904" | "20120165056" | "20120170534" | "20120218956" | "6175739" | "6757550" | "6826400" | "6882841" | "7280834" | "7742764" | "7917110" | "8032086").PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2018/05/17 11:47
S111	60	("20030093526" | "20050003827" | "20060034236" | "20060062183" | "20060067354" | "20060218392" | "20070047492" | "20070192472" | "20070253394" | "20080151796" | "20080171552" | "20080240024" | "20080298333" | "20090061783" | "20090158282" | "20090171930" | "20090191906" | "20090196180" | "20090207800" | "20090217333" | "20090280748" | "20090298522" | "20090323835" | "20090325499" |	US-PGPUB; USPAT; USOCR	OR	OFF	2018/05/17 11:48

		"20100048234" | "20100061299" | "20100069013" | "20100081449" | "20100091712" | "20100111235" | "20100124254" | "20100142458" | "20100175101" | "20100195580" | "20100195590" | "20100195667" | "20100220687" | "20100229205" | "20100246434" | "20100246506" | "20100303026" | "20100309317" | "20100309806" | "20110043710" | "20110116458" | "20110222488" | "20110243078" | "20110286405" | "20120120904" | "20120165056" | "20120170534" | "20120218956" | "6175739" | "6757550" | "6826400" | "6882841" | "7280834" | "7742764" | "7917110" | "8032086").PN.				
S112	11	("20020168993" | "20040127240" | "20040137905" | "20040180652" | "20050059422" | "20060018284" | "20070049239" | "20110306375" | "20120093092" | "8130708" | "8203987").PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2018/05/17 11:48
S113	6	("20060073827" | "20080205358" | "20090061783" | "20110110349" | "20110116458" | "20110280228").PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2018/05/17 11:48
S114	71	("20020154653" | "20030050012" | "20030093526" | "20050003827" | "20050070279" | "20060034236" | "20060062183" | "20060067354" | "20060218392" | "20070047492" | "20070192472" | "20070253394" | "20080130519" | "20080151796" | "20080171552" | "20080240024" | "20080298333" | "20090061783" | "20090158282" | "20090171930" | "20090191906" | "20090196180" | "20090207800" | "20090217333" | "20090280748" | "20090298522" | "20090323835" | "20090325499" | "20100048234" | "20100061299" | "20100069013" | "20100081449" | "20100091712" | "20100111235" | "20100124254" | "20100142458" | "20100175101" | "20100195580" | "20100195590" | "20100195667" | "20100220687" | "20100229205" | "20100246434" | "20100246506" | "20100303026" | "20100309317" | "20100309806" | "20110019649" | "20110043710" | "20110045781" | "20110090887" | "20110090890" | "20110116458" | "20110222488" | "20110243078" | "20110286405" | "20120063364" | "20120120904" | "20120165056" | "20120170534" | "20120218956" | "20130114586" | "20130142132" | "6175739" | "6757550" | "6826400" | "6882841" | "7280834" | "7742764" | "7917110" | "8032086").PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2018/05/17 11:48
S115	74	("20020154653" | "20030050012" | "20030093526" | "20050003827" |	US-PGPUB; USPAT;	OR	OFF	2018/05/17 11:48

		"20050070279" | "20060034236" | "20060062183" | "20060067354" | "20060218392" | "20070047492" | "20070192472" | "20070253394" | "20080130519" | "20080151796" | "20080171552" | "20080240024" | "20080298333" | "20090061783" | "20090158282" | "20090171930" | "20090191906" | "20090196180" | "20090207800" | "20090217333" | "20090253392" | "20090280748" | "20090298522" | "20090323835" | "20090325499" | "20100048234" | "20100061299" | "20100069013" | "20100081449" | "20100091712" | "20100111235" | "20100124254" | "20100142458" | "20100175101" | "20100195580" | "20100195590" | "20100195595" | "20100195667" | "20100220687" | "20100229205" | "20100240407" | "20100246434" | "20100246506" | "20100303026" | "20100309317" | "20100309806" | "20110019649" | "20110043710" | "20110045781" | "20110090887" | "20110090890" | "20110116458" | "20110222488" | "20110243078" | "20110286405" | "20120063364" | "20120120904" | "20120165056" | "20120170534" | "20120218956" | "20130114586" | "20130142132" | "6175739" | "6757550" | "6826400" | "6882841" | "7280834" | "7742764" | "7917110" | "8032086").PN.	USOCR			
S116	10	("20020006788" | "20030207683" | "20090258603" | "20100128565" | "20110087639" | "20110116458" | "20110310253" | "20120008604" | "20120134328" | "20120282959").PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2018/05/17 11:48
S117	3	("20080130564" | "20080261563" | "20110216743").PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2018/05/17 11:48
S118	10	("20040203815" | "20060223524" | "20090125650" | "20100098011" | "20100191878" | "20100226430" | "20110028102" | "20110141983" | "7054790" | "7512094").PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2018/05/17 11:48
S119	10	S105 AND ((G06F21/10 OR G06F15/167 OR G06F17/30766 OR G06F17/30772 OR G06F17/30867 OR G06F21/126 OR G06F2221/0775 OR G06F2221/2101 OR G06F2221/2141).CPC.)	US-PGPUB; USPAT; USOCR	OR	OFF	2018/05/17 11:49
S120	11	S105 AND ((G06F21/10 OR G06F15/167 OR G06F17/30766 OR G06F17/30772 OR G06F17/30867 OR G06F21/126 OR G06F2221/0775 OR G06F2221/2101 OR G06F2221/2141).CPC.)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/05/17 11:49
S121	5	("20020082997" | "5790664" | "6343280" | "6697948" |	US-PGPUB; USPAT;	OR	OFF	2018/05/17 11:49

		"6810389").PN.	USOCR			
S122	9	S105 AND ((G06Q50/184 OR G06Q30/0222 OR G06Q30/0633 OR G06Q30/02 OR G06Q2220/18).CPC.)	US-PGPUB; USPAT; USOCR	OR	OFF	2018/05/17 11:50
S123	54	S105 AND ((H04L27/0006 OR H04L5/001 OR H04L5/0048 OR H04L65/60 OR H04L67/1002 OR H04L67/1025 OR H04L67/1038 OR H04L67/104 OR H04L67/1063 OR H04L67/1091 OR H04L67/322 OR H04L67/42 OR H04L51/32 OR H04L5/0085 OR H04L47/10 OR H04L47/14 OR H04L47/2408 OR H04L47/2416 OR H04L47/2441 OR H04L47/2458 OR H04L47/28 OR H04L47/29 OR H04L47/31 OR H04L47/50 OR H04L5/0023 OR H04L5/0057 OR H04L5/006 OR H04L5/14 OR H04L67/18 OR H04L67/306 OR H04L12/2898 OR H04L1/0026 OR H04L1/0027 OR H04L1/0073 OR H04L1/1812 OR H04L1/1822 OR H04L1/1835 OR H04L1/1887 OR H04L1/1896 OR H04L1/20 OR H04L27/261 OR H04L43/08 OR H04L47/30 OR H04L5/0007 OR H04L5/003 OR H04L5/0041 OR H04L5/005 OR H04L5/0051 OR H04L5/0053 OR H04L5/0055 OR H04L5/0058 OR H04L5/0062 OR H04L5/0069 OR H04L5/0091 OR H04L5/0094 OR H04L63/0272 OR H04L63/0414 OR H04L63/0428 OR H04L63/083 OR H04L63/102 OR H04L63/164 OR H04L69/16 OR H04L69/168 OR H04L9/3226 OR H04L9/3271).CPC.)	US-PGPUB; USPAT; USOCR	OR	OFF	2018/05/17 11:51
S124	10	S105 AND ((G06F21/10 OR G06F15/167 OR G06F17/30766 OR G06F17/30772 OR G06F17/30867 OR G06F21/126 OR G06F2221/0775 OR G06F2221/2101 OR G06F2221/2141).CPC.)	US-PGPUB; USPAT; USOCR	OR	OFF	2018/05/17 11:52
S125	5	("20020082997" | "5790664" | "6343280" | "6697948" | "6810389").PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2018/05/17 11:52
S127	1	((terminat$3) near9 (unlicens$3 adj2 band)) and (positive adj2 (result report$3)).clm.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/05/17 11:55
S128	11	S105 AND ((G06F21/10 OR G06F15/167 OR G06F17/30766 OR G06F17/30772 OR G06F17/30867 OR G06F21/126 OR G06F2221/0775 OR G06F2221/2101 OR G06F2221/2141).CPC.)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/05/17 12:02
S129	5	("20020082997" | "5790664" | "6343280" | "6697948" |	US-PGPUB; USPAT;	OR	OFF	2018/05/17 12:02

		"6810389").PN.	USOCR			
S130	1	((terminat$3 end$3 stop$4) near10 (unlicens$3 adj2 band)) and (positive adj2 (result report$3))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/05/17 12:10
S131	361	(UE mobile terminal) same (disconnect$4 terminat$3 end$3 stop$4) near10 (un-licens$3 unlicens$3)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/05/17 12:46
S132	123	(UE mobile terminal) same (determin$4 detect$3) same (disconnect$4 terminat$3 end$3 stop$4) near10 (un-licens$3 unlicens$3)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/05/17 12:47
S133	36	S100 and S132	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/05/17 12:48
S134	35	S133 AND ((H04W16/14 OR H04W72/0453 OR H04W88/06 OR H04W74/0808 OR H04W84/12 OR H04W56/001 OR H04W84/045 OR H04W84/105 OR H04W4/02 OR H04W88/02 OR H04W24/00 OR H04W24/08 OR H04W28/04 OR H04W28/08 OR H04W36/14 OR H04W48/16 OR H04W4/24 OR H04W72/0446 OR H04W72/0486 OR H04W72/082 OR H04W72/1215 OR H04W72/1226 OR H04W72/1263 OR H04W74/002 OR H04W74/006 OR H04W74/04 OR H04W74/0816 OR H04W76/12 OR H04W76/20 OR H04W84/042 OR H04W8/04 OR H04W8/26 OR H04W24/10 OR H04W28/0247 OR H04W28/06 OR H04W28/20 OR H04W28/26 OR H04W36/22 OR H04W48/10 OR H04W48/12 OR H04W4/04 OR H04W52/0206 OR H04W52/0225 OR H04W52/0251 OR H04W52/04 OR H04W60/00 OR H04W60/04 OR H04W64/00 OR H04W68/005 OR H04W72/00 OR H04W72/005 OR H04W72/02 OR H04W72/04 OR H04W72/0406 OR H04W72/0413 OR H04W72/042 OR H04W72/14 OR H04W74/08 OR H04W74/0833 OR H04W74/085 OR H04W76/023 OR H04W76/026 OR H04W76/14 OR H04W76/16 OR H04W76/27 OR	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/05/17 12:48

		H04W76/30 OR H04W84/16 OR H04W88/08 OR H04W88/10 OR H04W88/12 OR H04W88/16 OR H04W8/02 OR H04W92/02 OR H04W92/06).CPC.)				
S135	3	("20080130564" | "20080261563" | "20110216743").PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2018/05/17 12:48
S136	9	("20040203815" | "20070015536" | "20090196253" | "20090196268" | "20100278141" | "20110003575" | "20110117889" | "20110299511" | "8229440").PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2018/05/17 12:49
S137	4	("20040071090" | "20080076386" | "20080115009" | "20080293407").PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2018/05/17 12:49
S138	18	S133 AND ((H04L5/001 OR H04L27/0006 OR H04L5/0048 OR H04L5/0023 OR H04L5/0057 OR H04L5/006 OR H04L5/14 OR H04L63/164 OR H04L67/18 OR H04L67/306 OR H04L1/1812 OR H04L1/1822 OR H04L1/1835 OR H04L1/1887 OR H04L1/1896 OR H04L27/261 OR H04L47/30 OR H04L5/0007 OR H04L5/0041 OR H04L5/0051 OR H04L5/0053 OR H04L5/0055 OR H04L5/0062 OR H04L5/0069 OR H04L5/0085 OR H04L5/0091 OR H04L5/0094 OR H04L63/0272 OR H04L63/0428).CPC.)	US-PGPUB; USPAT; USOCR	OR	OFF	2018/05/17 12:49
S139	3	("20080130564" | "20080261563" | "20110216743").PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2018/05/17 12:50
S140	3	S133 AND ((H04B7/2656 OR H04B1/7087).CPC.)	US-PGPUB; USPAT; USOCR	OR	OFF	2018/05/17 12:50
S141	2	S133 AND ((G06Q30/02).CPC.)	US-PGPUB; USPAT; USOCR	OR	OFF	2018/05/17 12:50
S142	415	sensor same price with item	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/05/17 16:00
S143	30	sensor same price with item near9 store	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/05/17 16:00
S144	730	authorization same different near8 protocol	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO;	OR	OFF	2018/08/06 14:06

			DERWENT; IBM_TDB			
S145	130	authorization same different near8 protocol same (mobile phone cellular pda iphone ipad)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/08/06 14:06
S146	42	authorization same different near8 protocol same (mobile phone cellular pda iphone ipad) and (short adj range)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/08/06 14:07
S147	468	enabling near6 mode same (mobile phone cellular pda iphone ipad) and (short adj range)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/08/06 14:24
S148	33	enabling near6 mode same (mobile phone cellular pda iphone ipad) same (short adj3 range)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/08/06 14:26
S149	2	"09832708"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/08/06 14:38
S150	1	"09462411"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/08/06 14:42
S151	1	15/800885	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/08/06 15:29
S152	1	15/800885 and involv$3	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/08/06 15:29
S153	1	15/800885 and (first adj2 interfac$3) and (second adj3 interfac$3)	US-PGPUB; USPAT; USOCR;	OR	OFF	2018/08/06 15:31

			FPRS; EPO; JPO; DERWENT; IBM_TDB			
S154	1	15/800885 andentity and (first adj2 interfac$3) and (second adj3 interfac$3)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/08/06 15:45
S156	1	15/800885 and entity and (first adj2 interfac$3) and (second adj3 interfac$3)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/08/06 15:46
S157	3472	(first adj2 interfac$3) same (second adj3 interfac$3) same independent$3	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/08/06 15:48
S158	10	(first adj2 interfac$3) same (second adj3 interfac$3) same independent$3 near8 entity	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/08/06 15:50
S159	15	(first adj2 interfac$3) same (second adj3 interfac$3) same (short adj2 range) same (access adj point)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/08/06 16:19
S161	153	(first adj2 interfac$3) same (second adj3 interfac$3) and (short adj2 range) same (person animal (shopping adj card))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/08/06 16:26
S162	102813	(first adj2 interfac$3) same (second adj3 interfac$3)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/08/06 16:28
S163	386	(first adj2 interfac$3) same (second adj3 interfac$3) and (first adj time adj interval) and (second adj time adj interval)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/08/06 16:29
S164	368	(first adj2 interfac$3) same (second	US-PGPUB;	OR	OFF	2018/08/06

		adj3 interfac$3) and (first adj time adj interval) same (second adj time adj interval)	USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB			16:32
S165	61	(first adj2 interfac$3) same (second adj3 interfac$3) same (first adj time adj interval) same (second adj time adj interval)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/08/06 16:35
S166	30	(first adj air adj interfac$3) same (second adj air adj interfac$3) and (first adj time adj interval) same (second adj time adj interval)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/08/06 16:42
S167	0	absent near4 involv$3 near8 ((base adj station) (access adj point))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/08/06 18:22
S168	0	absent near4 involv$3 same ((base adj station) (access adj point))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/08/06 18:23
S169	170	(absent stop$4) near4 involv$3 same ((base adj station) (access adj point))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/08/06 18:23
S170	11	2007/0129077	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/08/06 18:33
S171	1	11/584455	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/08/06 18:33
S172	19	(first adj2 interfac$3) same (second adj3 interfac$3) same (short adj2 range) same (person animal vehicle (shopping adj card))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT;	OR	OFF	2018/08/07 17:34

			IBM_TDB			
S173	10	S172 AND ((H04W84/12 OR H04W88/04 OR H04W48/18 OR H04W28/0231 OR H04W52/0229 OR H04W52/0274 OR H04W84/042 OR H04W88/06 OR H04W88/16 OR H04W92/02 OR H04W4/008 OR H04W4/02 OR H04W4/21 OR H04W4/80 OR H04W76/025 OR H04W76/10 OR H04W76/15 OR H04W84/10).CPC.)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/08/07 17:34
S174	48	("20030220105" | "20040030601" | "20040170430" | "20060009234" | "20060133633" | "20060145893" | "20060159260" | "20060172700" | "20060194538" | "20070167147" | "20070178935" | "20070184837" | "20070197261" | "20070243872" | "20070250393" | "20070265984" | "20070285280" | "20080040274" | "20080140868" | "20080146148" | "20080167966" | "20080200166" | "20080227471" | "20080306868" | "20090023474" | "20090113543" | "20090153367" | "20090169070" | "20090213947" | "20100067591" | "20100265845" | "20110314539" | "20120214443" | "20130156218" | "6595929" | "6769607" | "6957107" | "7028897" | "7133659" | "7155199" | "7539241" | "7822644" | "7912629" | "8023580" | "8463238" | "8532069" | "8646060" | "RE39736").PN.	US-PGPUB; USPAT	OR	OFF	2018/08/08 12:53
S175	1320305	455/$.ccls. 370/$.ccls. 379/$.ccls. 709/$.ccls. 705/$.ccls.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/12/27 15:20
S176	296	(physiological adj2 parameter) same (proximit$3)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/12/27 15:22
S177	11	S176 AND ((H04W4/90 OR H04W4/80 OR H04W4/02 OR H04W76/14).CPC.)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/12/27 15:22
S178	236	("20020001367" | "20020027975" | "20020057678" | "20020120698" | "20030069035" | "20040203572" | "20040266390" | "20050085215" | "20050104745" | "20050151642" | "20060293024" | "20070030146" | "20070033095" | "20070049287" | "20070053308" | "20070058528" |	US-PGPUB; USPAT; USOCR	OR	OFF	2018/12/27 15:23

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S179	145	("20020001367" | "20020057678" | "20020120698" | "20030069035" | "20040203572" | "20040266390" | "20050085215" | "20050151642" | "20060293024" | "20070033095" | "20070053308" | "20070058528" | "20070161383" | "20080019268" | "20080081646" | "20080294058" | "20090257345" | "20090322513" | "20100002846" | "20100159976" | "20100238018" | "20110086607" | "20110134897" | "20110153368" | "20110263219" | "20120002792" | "20120029970" | "20120202428" | "20120210325" | "20120218102" | "20120295575" | "20130005295" | "20130030825" | "20130084824" | "20130122932" | "20130138791" | "20130183924" | "20130203373" | "20130203376" | "20130226369" | "20140051379" | "20140113606" | "20140126356" | "20140148120" | "20140155018" | "20140199959" | "20140248848" | "20150055453" | "20150109125" | "20150111524" | "20150137972" | "20150172897" | "20150289121" | "20150350262" | "20150358794" | "20150365319" | "20160026768" | "20160050550" | "20160088455" | "20160219084" | "20160269535" | "20160307436" | "20160363931" | "20170004427" | "20170150335" | "5379337" | "5563931" | "5596625" | "5710803" | "5742666" | "6014555" | "6249674" |	US-PGPUB; USPAT; USOCR	OR	OFF	2018/12/27 15:23

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S181	15	("20010049544" | "20020013518" | "20030146847" | "20040088027" | "20050102167" | "20050115561" | "5912656" | "6198394" | "6269339" | "6551243" | "6589172" | "6697103" | "6733495" | "6735630" | "6954148").PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2018/12/27 15:23
S182	15	S175 and S176	US-PGPUB; USPAT; USOCR	OR	OFF	2018/12/27 15:23
S183	11	S182 AND ((G06F19/00 OR G06F19/3418 OR G06F19/3475 OR G06F19/30).CPC.)	US-PGPUB; USPAT; USOCR	OR	OFF	2018/12/27 15:24
S184	31	("20020013518" | "20030009154" | "20030181815" | "20030216625" | "20040059205" | "20040073093" | "20050094705" | "3943918" | "4321933" | "4747413" | "4958645" | "5153584" | "5365217" | "5458123" | "5748103" | "6072396" | "6102856" | "6238337" | "6416471" | "6529164" | "6579231" | "6589170" | "6856832" | "6870484" | "6894975" | "6897788" | "6970097" | "6982639" | "7109859" | "7218938" | "7993266").PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2018/12/27 15:24
S185	15	("20010049544" | "20020013518" | "20030146847" | "20040088027" | "20050102167" | "20050115561" | "5912656" | "6198394" | "6269339" | "6551243" | "6589172" | "6697103" | "6733495" | "6735630" | "6954148").PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2018/12/27 15:28
S186	8	S182 AND ((G06Q50/22 OR G06Q50/24 OR G06Q10/06311 OR G06Q10/1097 OR G06Q30/02 OR G06Q30/0269).CPC.)	US-PGPUB; USPAT; USOCR	OR	OFF	2018/12/27 15:28
S187	15	("20010049544" | "20020013518" | "20030146847" | "20040088027" | "20050102167" | "20050115561" | "5912656" | "6198394" | "6269339" | "6551243" | "6589172" | "6697103" | "6733495" | "6735630" | "6954148").PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2018/12/27 15:29
S188	4	S182 AND ((H04L67/12 OR H04L29/12783 OR H04L51/046 OR H04L61/35 OR H04L67/14 OR H04L67/30).CPC.)	US-PGPUB; USPAT; USOCR	OR	OFF	2018/12/27 15:29
S189	3	S182 AND ((H04W4/02 OR H04W36/14 OR H04W48/16 OR H04W76/10 OR H04W84/10 OR H04W84/12 OR H04W88/02 OR H04W88/06).CPC.)	US-PGPUB; USPAT; USOCR	OR	OFF	2018/12/27 15:29
S190	22	("20010034475" | "20020013518" | "20020084698" | "20020115914" | "20030206116" | "20030220673" |	US-PGPUB; USPAT; USOCR	OR	OFF	2018/12/27 15:30

		"20040004460" | "20040147818" | "20050138428" | "6213942" | "6221012" | "6497656" | "6525854" | "6544174" | "6589170" | "6616606" | "6654631" | "6749566" | "6819013" | "6870475" | "7061924" | "7316648").PN.				
S191	2	S182 AND ((H04M1/663 OR H04M1/725 OR H04M1/72527 OR H04M1/7253 OR H04M1/72569 OR H04M2250/10 OR H04M2250/12).CPC.)	US-PGPUB; USPAT; USOCR	OR	OFF	2018/12/27 15:30
S192	22	("20010034475" | "20020013518" | "20020084698" | "20020115914" | "20030206116" | "20030220673" | "20040004460" | "20040147818" | "20050138428" | "6213942" | "6221012" | "6497656" | "6525854" | "6544174" | "6589170" | "6616606" | "6654631" | "6749566" | "6819013" | "6870475" | "7061924" | "7316648").PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2018/12/27 15:30
S193	0	(proximit$3) and "6"$phone and entity and (physiological adj2 parameter) and (first adj air adj interface) and (second adj air adj interface) and absent and ((unlicens$3 licens$3) near4 (frequenc$3 bandwidth band))"clm."	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/12/27 15:34
S194	0	(absent stop$4) same (entity (base adj station) (access adj point)) same "6"$phone same (first adj2 interfac$3) same (second adj2 interfac$3)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/12/27 15:36
S195	0	(absent stop$4) same (entity (base adj station) (access adj point)) same "6"$phone and (first adj2 interfac$3) same (second adj2 interfac$3)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/12/27 15:37
S196	3	S176 AND ((H04Q2213/13092 OR H04Q2213/13098 OR H04Q2213/13103 OR H04Q2213/13104 OR H04Q2213/13389 OR H04Q3/00).CPC.)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/12/27 15:46
S197	7	S176 AND ((H04M1/72536 OR H04M2242/04 OR H04M2242/15 OR H04M3/5116 OR H04M11/04).CPC.)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/12/27 15:47
S198	236	("20020001367" | "20020027975" | "20020057678" | "20020120698" | "20030069035" | "20040203572" | "20040266390" | "20050085215" |	US-PGPUB; USPAT; USOCR	OR	OFF	2018/12/27 15:49

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"20080194238" | "20080294058" |
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"20090322513" | "20100002846" |
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S201	3	S176 AND ((H04Q2213/13092 OR H04Q2213/13098 OR H04Q2213/13103 OR H04Q2213/13104 OR H04Q2213/13389 OR H04Q3/00).CPC.)	US-PGPUB; USPAT; USOCR	OR	OFF	2018/12/27 15:50
S202	65	(first adj2 interfac$3) same (second adj3 interfac$3) same (proximit$3 (short adj2 range)) same (entity person animal vehicle (shopping adj card))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/12/27 15:53
S203	9	S175 and S202	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/12/27 15:53
S204	34	("20010050990" | "20010055396" | "20020049681" | "20020069361" | "20020162003" | "20030028495" | "20030076961" | "20030172122" | "20040109568" | "20050054334" | "20050246533" | "20060015736" | "20060227808" | "20060293035" | "20070022162" | "20070022295" | "20070143596" | "20070220614" | "20080148397" | "20080222425" | "20080288278" | "20090100263" | "20090106557" | "20090113328" | "20100121928" | "20100121931" | "20120143967" | "5872849" | "6009177" | "6202150" | "6389136" | "6463534" | "7082538" | "7243238").PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2018/12/27 15:53
S205	19	("5136646" | "5553145" | "5615269" | "5629982" | "5666420" | "5790665" | "5812670" | "5935246" | "5946396" | "6047242" | "6115699" | "6119108" | "6134326" | "6137884" | "6141750" | "6182142" | "6185683" | "6301660" | "6334118").PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2018/12/27 15:55
S206	13	("4232370" | "4652990" | "5023907" | "5388211" | "5649187" | "5678046" | "5724425" | "5828751" | "5923763" | "5943423" | "5960085" | "5970143" | "5978475").PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2018/12/27 15:55
S207	8	("5659616" | "5671279" | "5712914" | "5796841" | "5878144" | "5884158" | "5903878" | "5987440").PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2018/12/27 15:55

S208	22	("4200770" | "4218582" | "4405829" | "4558176" | "4771461" | "4868877" | "4995082" | "5001752" | "5005200" | "5136643" | "5150411" | "5164988" | "5199070" | "5214700" | "5214702" | "5222140" | "5261002" | "5276737" | "5313521" | "5315658" | "5499295" | "5787172").PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2018/12/27 15:55
S209	5	("20030143987" | "20040090937" | "20050288021" | "20060153133" | "6876642").PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2018/12/27 15:55

12/28/2018 10:59:56 AM
C:\Users\mvu1\Documents\EAST\Workspaces\15800885_Air_Interfaces.wsp

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

PTO/SB/08a (02-18)
Approved for use through 11/30/2020. OMB 0651-0031
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
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INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	15800885
	Filing Date	2017-11-01
	First Named Inventor	Karabinis, Peter D.
	Art Unit	2641
	Examiner Name	MICHAEL T VU
	Attorney Docket Number	9466-24TSCT2 (C)

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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					

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U.S.PATENT APPLICATION PUBLICATIONS Remove

Examiner Initial*	Cite No	Publication Number	Kind Code[1]	Publication Date	Name of Patentee or Applicant of cited Document	Pages,Columns,Lines where Relevant Passages or Relevant Figures Appear
	1	20060085297		2006-04-20	MINERLEY KEVIN G	

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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							

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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]

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	Art Unit	2641
	Examiner Name	MICHAEL T VU
	Attorney Docket Number	9466-24TSCT2 (C)

	1	

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EXAMINER SIGNATURE

Examiner Signature	/MICHAEL T VU/	Date Considered	12/27/2018

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

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

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /M.T.V/

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	First Named Inventor	Karabinis, Peter D.
	Art Unit	2641
	Examiner Name	MICHAEL T VU
	Attorney Docket Number	9466-24TSCT2 (C)

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.

X The fee set forth in 37 CFR 1.17 (p) has been submitted herewith.

X 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	/Vernon H. Guthrie/	Date (YYYY-MM-DD)	2018-12-19
Name/Print	Vernon H. Guthrie	Registration Number	63798

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.**

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /M.T.V/

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.

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5. A record related to an International Application filed under the Patent Cooperation Treaty in this system of records may be disclosed, as a routine use, to the International Bureau of the World Intellectual Property Organization, pursuant to the Patent Cooperation Treaty.

6. A record in this system of records may be disclosed, as a routine use, to another federal agency for purposes of National Security review (35 U.S.C. 181) and for review pursuant to the Atomic Energy Act (42 U.S.C. 218(c)).

7. A record from this system of records may be disclosed, as a routine use, to the Administrator, General Services, or his/her designee, during an inspection of records conducted by GSA as part of that agency's responsibility to recommend improvements in records management practices and programs, under authority of 44 U.S.C. 2904 and 2906. Such disclosure shall be made in accordance with the GSA regulations governing inspection of records for this purpose, and any other relevant (i.e., GSA or Commerce) directive. Such disclosure shall not be used to make determinations about individuals.

8. A record from this system of records may be disclosed, as a routine use, to the public after either publication of the application pursuant to 35 U.S.C. 122(b) or issuance of a patent pursuant to 35 U.S.C. 151. Further, a record may be disclosed, subject to the limitations of 37 CFR 1.14, as a routine use, to the public if the record was filed in an application which became abandoned or in which the proceedings were terminated and which application is referenced by either a published application, an application open to public inspections or an issued patent.

9. A record from this system of records may be disclosed, as a routine use, to a Federal, State, or local law enforcement agency, if the USPTO becomes aware of a violation or potential violation of law or regulation.

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /M.T.V/

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

PTO/SB/08a (02-18)
Approved for use through 11/30/2020. OMB 0651-0031
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
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	First Named Inventor	Karabinis, Peter D.
	Art Unit	2641
	Examiner Name	MICHAEL T VU
	Attorney Docket Number	9466-24TSCT2

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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	7780081		2010-08-24	LIANG ROBERT C	

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U.S.PATENT APPLICATION PUBLICATIONS Remove

Examiner Initial*	Cite No	Publication Number	Kind Code[1]	Publication Date	Name of Patentee or Applicant of cited Document	Pages,Columns,Lines where Relevant Passages or Relevant Figures Appear
	1	20040143505		2004-07-22	KOVACH ARAM	

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

FOREIGN PATENT DOCUMENTS Remove

Examiner Initial*	Cite No	Foreign Document Number[3]	Country Code[2] i	Kind Code[4]	Publication Date	Name of Patentee or Applicant of cited Document	Pages,Columns,Lines where Relevant Passages or Relevant Figures Appear	T[5]
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If you wish to add additional Foreign Patent Document citation information please click the Add button Add

NON-PATENT LITERATURE DOCUMENTS Remove

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

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	Examiner Name	MICHAEL T VU
	Attorney Docket Number	9466-24TSCT2

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

EXAMINER SIGNATURE

Examiner Signature	/MICHAEL T VU/	Date Considered	12/27/2018

*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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	Attorney Docket Number	9466-24TSCT2

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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

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Signature	/Vernon H. Guthrie/	Date (YYYY-MM-DD)	2018-10-31
Name/Print	Vernon H. Guthrie	Registration Number	63798

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ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /M.T.V/

Attorney Docket No. 9466-24TSCT2 PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re: Karabinis et al.
Application No.: 15/800,885
Filed: November 1, 2017
For: ***MOBILE DEVICE MODE ENABLEMENT RESPONSIVE TO A PROXIMITY CRITERION***

Confirmation No.: 9764
Group Art Unit: 2641
Examiner: Michael T. Vu

Date: January 11, 2019

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

INTERVIEW SUMMARY

Applicant appreciates the courtesies extended to Applicant's undersigned representative by Examiner Vu in the Telephone Interview of December 20, 2018.

During the Telephone Interview of December 20, 2018, the possibility of canceling Claims 61-68 to expedite allowance of the present application was discussed. Agreement was reached to cancel Claims 61-68 by an Examiner's Amendment.

The above constitutes a complete summary of the Telephone Interview between the Examiner and the undersigned pursuant to MPEP § 713.04.

Respectfully submitted,

Vernon H. Guthrie
Registration No. 63,798
Attorney for Applicant

Customer Number 20792
Myers Bigel, P.A.
P.O. Box 37428, Raleigh, NC 27627
919-854-1400
919-854-1401 (Fax)

PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), by mail or fax, or via EFS-Web.

By mail, send to: Mail Stop ISSUE FEE
Commissioner for Patents
P.O. Box 1450
Alexandria, Virginia 22313-1450

By fax, send to: (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)

20792 7590 01/09/2019
MYERS BIGEL, P.A.
PO BOX 37428
RALEIGH, NC 27627

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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 transmitted to the USPTO via EFS-Web or by facsimile to (571) 273-2885, on the date below.

(Typed or printed name)

(Signature)

(Date)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
15/800,885	11/01/2017	Peter D. Karabinis	9466-24TSCT2	9764

TITLE OF INVENTION: MOBILE DEVICE MODE ENABLEMENT RESPONSIVE TO A PROXIMITY CRITERION

APPLN. TYPE	ENTITY STATUS	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	SMALL	$500	$0.00	$0.00	$500	04/09/2019

EXAMINER	ART UNIT	CLASS-SUBCLASS
VU, MICHAEL T	2641	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 03-09 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 Myers Bigel, P.A.
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 must have been previously recorded, or filed for recordation, as set forth in 37 CFR 3.11 and 37 CFR 3.81(a). Completion of this form is NOT a substitute for filing an assignment.

(A) NAME OF ASSIGNEE: Telcom Ventures, LLC

(B) RESIDENCE: (CITY and STATE OR COUNTRY): Miami, Florida

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

4a. Fees submitted: ☒ Issue Fee ☐ Publication Fee (if required) ☐ Advance Order - # of Copies _____

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

☒ Electronic Payment via EFS-Web ☐ Enclosed check ☐ Non-electronic payment by credit card (Attach form PTO-2038)

☒ The Director is hereby authorized to charge the required fee(s), any deficiency, or credit any overpayment to Deposit Account No. 50-0220

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 [signature] Date January 11, 2019

Typed or printed name Vernon H. Guthrie Registration No. 63,798

PTOL-85 Part B (08-18) Approved for use through 01/31/2020 OMB 0651-0033 U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Electronic Patent Application Fee Transmittal

Application Number:	15800885
Filing Date:	01-Nov-2017
Title of Invention:	MOBILE DEVICE MODE ENABLEMENT RESPONSIVE TO A PROXIMITY CRITERION
First Named Inventor/Applicant Name:	Peter D. Karabinis
Filer:	Vernon H. Guthrie Jr./Meredith DeRosa
Attorney Docket Number:	9466-24TSCT2

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:	34833194
Application Number:	15800885
International Application Number:	
Confirmation Number:	9764
Title of Invention:	MOBILE DEVICE MODE ENABLEMENT RESPONSIVE TO A PROXIMITY CRITERION
First Named Inventor/Applicant Name:	Peter D. Karabinis
Customer Number:	20792
Filer:	Vernon H. Guthrie Jr./Meredith DeRosa
Filer Authorized By:	Vernon H. Guthrie Jr.
Attorney Docket Number:	9466-24TSCT2
Receipt Date:	11-JAN-2019
Filing Date:	01-NOV-2017
Time Stamp:	15:09:44
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	011419INTEFSW15101000
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	Applicant summary of interview with examiner	9466-24TSCT2_Interview_Summary.pdf	69101 18d030f066eff1d1fb767bc8dabb9a28695ec689	no	1
Warnings:					
Information:					
2	Issue Fee Payment (PTO-85B)	9466-24TSCT2_Issue_Fee.pdf	130261 b3cda715355b91cde45568426b841867513df1d5	no	1
Warnings:					
Information:					
3	Fee Worksheet (SB06)	fee-info.pdf	30510 245e998c27f1b9a0465b5af5cb47f6e8f87d64d3	no	2
Warnings:					
Information:					
		Total Files Size (in bytes):	229872		

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<u>New Applications Under 35 U.S.C. 111</u>
If a new application is being filed and the application includes the necessary components for a filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application.
<u>National Stage of an International Application under 35 U.S.C. 371</u>
If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course.
<u>New International Application Filed with the USPTO as a Receiving Office</u>
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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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.
15/800,885	02/26/2019	10219199	9466-24TSCT2	9764

20792 7590 02/06/2019
MYERS BIGEL, P.A.
PO BOX 37428
RALEIGH, NC 27627

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):

Peter D. Karabinis, Cary, NC;
Telcom Ventures, LLC, Miami, FL;
Rajendra Singh, Indian Creek Village, FL;

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.

IR103 (Rev. 10/09)

Doc Code: PA..
Document Description: Power of Attorney

PTO/AIA/82B (07-13)
Approved for use through 03/31/2021. OMB 0651-0035
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
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POWER OF ATTORNEY BY APPLICANT

I hereby revoke all previous powers of attorney given in the application identified in either the attached transmittal letter or the boxes below.

Application Number	Filing Date

(Note: The boxes above may be left blank if information is provided on form PTO/AIA/82A.)

☑ I hereby appoint the Patent 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 (form PTO/AIA/82A) or identified above: 138517

OR

☐ I hereby appoint Practitioner(s) named in the attached list (form PTO/AIA/82C) 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 patent application referenced in the attached transmittal letter (form PTO/AIA/82A) or identified above. (Note: Complete form PTO/AIA/82C.)

Please recognize or change the correspondence address for the application identified in the attached transmittal letter or the boxes above 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 (if the Applicant is a juristic entity, list the Applicant name in the box):

Telcom Ventures LLC

☐ Inventor or Joint Inventor (title not required below)

☐ Legal Representative of a Deceased or Legally Incapacitated Inventor (title not required below)

☑ Assignee or Person to Whom the Inventor is Under an Obligation to Assign (provide signer's title if applicant is a juristic entity)

☐ 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) (provide signer's title if applicant is a juristic entity)

SIGNATURE of Applicant for Patent

The undersigned (whose title is supplied below) is authorized to act on behalf of the applicant (e.g., where the applicant is a juristic entity).

Signature		Date (Optional)	6-25-2019
Name	Serge G. Martin		
Title	Executive Vice President - Telcom Ventures LLC		

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. If more than one applicant, use multiple forms.

☐ Total of forms are submitted.

This collection of information is required by 37 CFR 1.131, 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.

Doc Code: PA..
Document Description: Power of Attorney

PTO/AIA/82A (07-13)
Approved for use through 01/31/2018. OMB 0651-0035
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
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TRANSMITTAL FOR POWER OF ATTORNEY TO ONE OR MORE REGISTERED PRACTITIONERS

NOTE: This form is to be submitted with the Power of Attorney by Applicant form (PTO/AIA/82B) to identify the application to which the Power of Attorney is directed, in accordance with 37 CFR 1.5, unless the application number and filing date are identified in the Power of Attorney by Applicant form. If neither form PTO/AIA/82A nor form PTO/AIA82B identifies the application to which the Power of Attorney is directed, the Power of Attorney will not be recognized in the application.

Application Number	15/800,885
Filing Date	2017-11-01
First Named Inventor	Peter D. Karabinis
Title	MOBILE DEVICE MODE ENABLEMENT RESPONSIVE TO A PROXIMITY CRITERION
Art Unit	2641
Examiner Name	Michael T VU
Attorney Docket Number	1348.001US3

SIGNATURE of Applicant or Patent Practitioner

Signature	/Aaron W. Pederson/	Date (Optional)	2019-06-25
Name	Aaron Pederson	Registration Number	58607
Title (if Applicant is a juristic entity)			
Applicant Name (if Applicant is a juristic entity)			

NOTE: This form must be signed in accordance with 37 CFR 1.33. See 37 CFR 1.4(d) for signature requirements and certifications. If more than one applicant, use multiple forms.

☐ *Total of _____ forms are submitted.

This collection of information is required by 37 CFR 1.131, 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.**

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POWER OF ATTORNEY BY APPLICANT

I hereby revoke all previous powers of attorney given in the application identified in either the attached transmittal letter or the boxes below.

Application Number	Filing Date
15/800,885	2017-11-01

(Note: The boxes above may be left blank if information is provided on form PTO/AIA/82A.)

[X] I hereby appoint the Patent 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 (form PTO/AIA/82A) or identified above: 138517

OR

[ ] I hereby appoint Practitioner(s) named in the attached list (form PTO/AIA/82C) 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 patent application referenced in the attached transmittal letter (form PTO/AIA/82A) or identified above. (Note: Complete form PTO/AIA/82C.)

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

[X] The address associated with the above-mentioned Customer Number

OR

[ ] The address associated with Customer Number: 138517

OR

[ ] Firm or Individual Name					
Address					
City		State		Zip	
Country					
Telephone		Email			

I am the Applicant (if the Applicant is a juristic entity, list the Applicant name in the box):

TLV

[ ] Inventor or Joint Inventor (title not required below)

[ ] Legal Representative of a Deceased or Legally Incapacitated Inventor (title not required below)

[X] Assignee or Person to Whom the Inventor is Under an Obligation to Assign (provide signer's title if applicant is a juristic entity)

[ ] 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) (provide signer's title if applicant is a juristic entity)

SIGNATURE of Applicant for Patent

The undersigned (whose title is supplied below) is authorized to act on behalf of the applicant (e.g., where the applicant is a juristic entity).

Signature		Date (Optional)	2019-06-25
Name	Peter D. Karabinis		
Title			

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. If more than one applicant, use multiple forms.

[ ] Total of forms are submitted.

This collection of information is required by 37 CFR 1.131, 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.**

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Approved for use through 01/31/2018. OMB 0651-0035
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
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POWER OF ATTORNEY BY APPLICANT

No more than ten (10) patent practitioners total may be appointed as set forth below by name and registration number. This page need not be submitted if appointing the Patent Practitioner(s) associated with a Customer Number (see form PTO/AIA/82B):

Name	Registration Number

Privacy Act Statement

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

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

1. The information on this form will be treated confidentially to the extent allowed under the Freedom of Information Act (5 U.S.C. 552) and the Privacy Act (5 U.S.C. 552a). Records from this system of records may be disclosed to the Department of Justice to determine whether 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.

Electronic Acknowledgement Receipt

EFS ID:	36403492
Application Number:	15800885
International Application Number:	
Confirmation Number:	9764
Title of Invention:	MOBILE DEVICE MODE ENABLEMENT RESPONSIVE TO A PROXIMITY CRITERION
First Named Inventor/Applicant Name:	Peter D. Karabinis
Customer Number:	20792
Filer:	Aaron Wesley Pederson
Filer Authorized By:	
Attorney Docket Number:	9466-24TSCT2
Receipt Date:	25-JUN-2019
Filing Date:	01-NOV-2017
Time Stamp:	14:24:53
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	TLV-Post_AIA_POA_SIGNED.pdf	58874 63651f6a448b0083f58113bc773628cf4f20ee3b	no	1

Warnings:

Information:					
2	Transmittal Letter	1348-001US3_POA_Trans.pdf	212087 1a312e96cdb4e84d72325674afb88ccffef33410	no	4
Warnings:					
Information:					
			Total Files Size (in bytes):	270961	

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New Applications Under 35 U.S.C. 111
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National Stage of an International Application under 35 U.S.C. 371
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New International Application Filed with the USPTO as a Receiving Office
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Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NUMBER	FILING OR 371(C) DATE	FIRST NAMED APPLICANT	ATTY. DOCKET NO./TITLE
15/800,885	11/01/2017	Peter D. Karabinis	9466-24TSCT2

CONFIRMATION NO. 9764

POA ACCEPTANCE LETTER

138517
Carlson, Caspers, Vandenburgh & Lindquist, P.A.
225 S. Sixth St.
Ste. 4200
Minneapolis, MN 55402

OC000000109289039

Date Mailed: 07/02/2019

NOTICE OF ACCEPTANCE OF POWER OF ATTORNEY

This is in response to the Power of Attorney filed 06/25/2019.

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**.

/mbeyene/

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United States Patent and Trademark Office
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Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NUMBER	FILING OR 371(C) DATE	FIRST NAMED APPLICANT	ATTY. DOCKET NO./TITLE
15/800,885	11/01/2017	Peter D. Karabinis	9466-24TSCT2

CONFIRMATION NO. 9764

POWER OF ATTORNEY NOTICE

20792
MYERS BIGEL, P.A.
PO BOX 37428
RALEIGH, NC 27627

OC000000109289025

Date Mailed: 07/02/2019

NOTICE REGARDING CHANGE OF POWER OF ATTORNEY

This is in response to the Power of Attorney filed 06/25/2019.

- 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**.

/mbeyene/