



UNITED STATES PATENT AND TRADEMARK OFFICE

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

NOTICE OF ALLOWANCE AND FEE(S) DUE

20350 7590 05/08/2019
KILPATRICK TOWNSEND & STOCKTON LLP
Mailstop: IP Docketing - 22
1100 Peachtree Street
Suite 2800
Atlanta, GA 30309

EXAMINER

ZHAO, WEI

ART UNIT

PAPER NUMBER

2473

DATE MAILED: 05/08/2019

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
16/059,434	08/09/2018	Shawn Patrick Stapleton	091172-1100459-102450US	2049

TITLE OF INVENTION: DISTRIBUTED ANTENNA SYSTEM

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	08/08/2019

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.

HOW TO REPLY TO THIS NOTICE:

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

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

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

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

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

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

IMPORTANT REMINDER: Maintenance fees are due in utility patents issuing on applications filed on or after Dec. 12, 1980. It is patentee's responsibility to ensure timely payment of maintenance fees when due. More information is available at www.uspto.gov/PatentMaintenanceFees.

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)

20350 7590 05/08/2019
KILPATRICK TOWNSEND & STOCKTON LLP
Mailstop: IP Docketing - 22
1100 Peachtree Street
Suite 2800
Atlanta, GA 30309

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

Certificate of Mailing or Transmission

I hereby certify that this Fee(s) Transmittal is being deposited with the United States Postal Service with sufficient postage for first class mail in an envelope addressed to the Mail Stop ISSUE FEE address above, or being 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.
16/059,434	08/09/2018	Shawn Patrick Stapleton	091172-1100459-102450US	2049

TITLE OF INVENTION: DISTRIBUTED ANTENNA SYSTEM

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	08/08/2019

EXAMINER	ART UNIT	CLASS-SUBCLASS
ZHAO, WEI	2473	370-328000

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,

1 _____

(2) The name of a single firm (having as a member a registered attorney or agent) and the names of up to 2 registered patent attorneys or agents. If no name is listed, no name will be printed.

2 _____

3 _____

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

PLEASE NOTE: Unless an assignee is identified below, no assignee data will appear on the patent. If an assignee is identified below, the document 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
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
16/059,434	08/09/2018	Shawn Patrick Stapleton	091172-1100459-102450US	2049
20350 7590 05/08/2019 KILPATRICK TOWNSEND & STOCKTON LLP Mailstop: IP Docketing - 22 1100 Peachtree Street Suite 2800 Atlanta, GA 30309			EXAMINER ZHAO, WEI	
			ART UNIT 2473	PAPER NUMBER
DATE MAILED: 05/08/2019				

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. 16/059,434	Applicant(s) Stapleton et al.	
	Examiner WEI ZHAO	Art Unit 2473	AIA (FITF) 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 4/18/2019.
☐ 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 10-11 and 13-29. 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)	5. ☐ Examiner's Amendment/Comment
2. ☒ Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date _____.	6. ☒ Examiner's Statement of Reasons for Allowance
3. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material _____.	7. ☐ Other _____.
4. ☐ Interview Summary (PTO-413), Paper No./Mail Date _____.	

/WEI ZHAO/ Primary Examiner, Art Unit 2473	
---	--

DETAILED ACTION

1. The present application, filed on or after March 16, 2013, is being examined under the first inventor to file provisions of the AIA.

Information Disclosure Statement

2. Acknowledgment is made of Applicant's submission of information disclosure statement (IDS), dated on March 12, 2019 and April 18, 2019. The submission 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. Acknowledgment is made of Applicant's submission of terminal disclaimer, dated April 17, 2019 and is accepted.

Response to Amendment

4. Acknowledgment is made of Applicant's submission of the claim amendment/remarks, dated April 18, 2019. Claim 12 has been amended. Claims 10, 11, and 13-29 are currently pending. This communication is considered fully responsive and sets forth below:

5. Objection to Specification: in the Response, filed April 18, 2019, Applicants canceled claim 12 that renders the objection to the specification moot. The previous objection to the specification is withdrawn.

6. Claim Double Patenting Rejection: Applicants submitted the terminal disclaimer in compliance with 37 C.F.R. 1.321. Therefore, the previous claim double patenting rejection is withdrawn.

7. Claim 112(b) Rejection: Applicants canceled the rejected claim that obviates the basis of the previous rejection. Therefore, the previous rejection under 35 U.S.C. 112(b) is withdrawn.

Allowable Subject Matter

8. Claims 10, 11, and 13-29 are allowed. The following is the reason for examiner's statement of allowance:

The closest prior art on record, Sulzberger et al. (US 2005/0152695) and Boldi et al. (US 8,855,489) are generally directed to various aspects of the radio base station with multiple radio frequency heads; and the communications method between a main station and processing nodes includes interconnecting the main station and the nodes in an optical path defining adjacent nodes and non-adjacent nodes.

However, in consideration of the claim amendments/remarks and the terminal disclaimer filed April 17, 2019, and further search, no prior art reference or a

combination of prior art references disclose or suggest the combination of limitations specified in the independent claims including:

“wherein the baseband unit is configured to send a digital representation of a second set of radio resources to the first remote unit at a second point in time, the second set of radio resources for transmission at the antenna of the first remote unit;” and “wherein a number of radio resources in the first set of radio resources is different from a number of radio resources in the second set of radio resources,” in claim 10.

Claim 18 includes similar limitations.

“transmitting from the baseband unit, at a second point in time, a digital representation of a second set of radio resources to the first remote unit, the second set of radio resources for transmission at the antenna of the first remote unit;” and “wherein a number of radio resources in the first set of radio resources is different from a number of radio resources in the second set of radio resources,” in claim 24.

Dependent claims 11, 13-17, 19-23, and 25-29 are also allowable for incorporating the features recited in the independent claims.

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 WEI ZHAO whose telephone number is (571)270-5672. The examiner can normally be reached on 8-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kwang bin Yao can be reached on 5712723182. 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.

/WEI ZHAO/
Primary Examiner, Art Unit 2473

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 OBTAIN A DOUBLE PATENTING REJECTION OVER A "PRIOR" PATENT		
Application Number	16059434		
Filing Date	09-Aug-2018		
First Named Inventor	Shawn Stapleton		
Attorney Docket Number	091172-1100459-102450US		
Title of Invention	DISTRIBUTED ANTENNA SYSTEM		
☒ 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		
Dali Wireless, Inc.	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) 10080178 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 <u>57535</u>	
☐ 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	/Kelvin B. Catmull/
Name	Kelvin B. Catmull

*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.



UNITED STATES PATENT AND TRADEMARK OFFICE

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

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
16/059,434	08/09/2018	Shawn Patrick Stapleton	091172-1100459-102450US	2049
20350	7590	02/21/2019	EXAMINER	
KILPATRICK TOWNSEND & STOCKTON LLP			ZHAO, WEI	
Mailstop: IP Docketing - 22			ART UNIT	PAPER NUMBER
1100 Peachtree Street				
Suite 2800			2473	
Atlanta, GA 30309			NOTIFICATION DATE	DELIVERY MODE
			02/21/2019 ELECTRONIC	

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

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

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

KTSDocketing2@kilpatrick.foundationip.com
ipefiling@kilpatricktownsend.com

DETAILED ACTION

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

Priority

2. Acknowledgment is made of this is a continuation of U.S. Patent Application No. 15/223,819 filed July 29, 2016, now US 10,080,178, which is a continuation of U.S. Patent Application No. 14/800,515 filed July 15, 2015, now US 9,419,837, which is a continuation of U.S. Patent Application No. 14/260,145 filed April 23, 2014, now US 9,137,078, which is a continuation of U.S. Patent Application No. 13/211,247 filed August 16, 2011, now US 8,737,300, which claims the benefit of U.S. Provisional Patent Application No. 61/439,940, filed February 7, 2011.

Information Disclosure Statement

3. The information disclosure statement (IDS) submitted on August 9, 2018 is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement is being considered by the examiner.

Specification

4. The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required:

The term “Common Public Interface Standard (CPRI)” is used in paragraph [0056]. It is suggested amending the term to “Common Public Interface Standard (CPIS),” since the acronym “CPRI” is commonly used for “Common Public Radio Interface”.

Claim Rejections - 35 USC § 112

5. The following is a quotation of 35 U.S.C. 112(b):

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claim 12 rejected under 35 U.S.C. 112(b).

Regarding claim 12, it recites the Common Public Radio Interface standard without reference to a specific edition and/or publication date for the particular standard. Since the underlying standard may change over time, the scope of the claim(s) may also change over time which renders the claim(s) indefinite.

Applicant may overcome this rejection by amending the claim(s) to include a specific edition and/or publication date of the particular claimed standard.

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. A nonstatutory

obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

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

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. Claim 10 is rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim 10 of U.S. Patent No. 10,080,178.

Regarding claim 10, it recites, "A system for transporting wireless communications, comprising:

a baseband unit;

a plurality of signal sources, including at least a first signal source and a second signal source;

a plurality of remote units, including at least a first remote unit and a second remote unit;

wherein the baseband unit comprises a plurality of interfaces to communicatively couple the baseband unit to the plurality of signal sources;

wherein the baseband unit is configured to receive a plurality of radio resources from the first signal source and the second signal source;

wherein the baseband unit is configured to send a digital representation of a first set of radio resources to the first remote unit at a first point in time, the first set of radio resources for transmission at an antenna of the first remote unit;

wherein the baseband unit is configured to send a digital representation of a second set of radio resources to the first remote unit at a second point in time, the second set of radio resources for transmission at the antenna of the first remote unit;

wherein a number of radio resources in the first set of radio resources is different from a number of radio resources in the second set of radio resources; and

wherein the baseband unit is configured to receive digital signals from each of the plurality of remote units.”

Claim 10 of U.S. Patent No. 10,080,178 recites, "A system for transporting wireless communications, comprising:

a host unit;

a plurality of remote units, including at least a first remote unit and a second remote unit;

wherein the host unit comprises at least one interface to communicatively couple the host unit to at least one signal source;

wherein the host unit is configured to receive a plurality of downlink channel signals from the at least one signal source;

wherein the host unit is configured to send digital representations of the plurality of downlink channel signals to the plurality of remote units;

wherein the host unit is configurable to send digital representations of a first set of downlink channel signals to the first remote unit at a first point in time, the first set of downlink channel signals for transmission at an antenna of the first remote unit;

wherein the host unit is configurable to send digital representations of a second set of downlink channel signals to the first remote unit at a second point in time, the second set of downlink channel signals for transmission at the antenna of the first remote unit;

wherein a number of downlink channel signals in the first set of downlink channel signals is different from a number of downlink channel signals in the second set of downlink channel signals; and

wherein the host unit is configured to receive digital signals from each of the plurality of remote units.”

Based on the limitations presented above, claim 10 of the instant application claims similar elements in claim 10 of U.S. Patent No. 10,080,178, by using different wordings, such as using “a baseband unit” instead of “a host unit.” Therefore, claim 10 of the instant application would be obvious to one skilled in the art based on claim 10 of the patent.

The same rationale applies to claims 11, 18, 19, 24, and 29 as follows:

9. Claim 11 is rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim 11 of U.S. Patent No. 10,080,178.
10. Claim 18 is rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim 1 of U.S. Patent No. 10,080,178.
11. Claim 19 is rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim 9 of U.S. Patent No. 10,080,178.
12. Claim 24 is rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim 15 of U.S. Patent No. 10,080,178.

13. Claim 29 is rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim 19 of U.S. Patent No. 10,080,178.

Allowable Subject Matter

14. Claims 10-29 would be allowable if the rejections under 35 U.S.C. 112(b) and double patenting overcome. The following is the reason for examiner's statement of allowance:

The closest prior art on record, Sulzberger et al. (US 2005/0152695) and Boldi et al. (US 8,855,489) are generally directed to various aspects of the radio base station with multiple radio frequency heads; and the communications method between a main station and processing nodes includes interconnecting the main station and the nodes in an optical path defining adjacent nodes and non-adjacent nodes.

However, in consideration of the information disclosure statement submitted August 9, 2018 and further search, no prior art reference or a combination of prior art references disclose or suggest the combination of limitations specified in the independent claims including:

"wherein the baseband unit is configured to send a digital representation of a second set of radio resources to the first remote unit at a second point in time, the second set of radio resources for transmission at the antenna of the first remote unit;" and "wherein a number of radio resources in the first set of radio resources is different from a number of radio resources in the second set of radio resources," in claim 10.

Claim 18 includes similar limitations.

“transmitting from the baseband unit, at a second point in time, a digital representation of a second set of radio resources to the first remote unit, the second set of radio resources for transmission at the antenna of the first remote unit;” and “wherein a number of radio resources in the first set of radio resources is different from a number of radio resources in the second set of radio resources,” in claim 24.

Dependent claims 11-17, 19-23, and 25-29 are also allowable for incorporating the features recited in the independent claims.

Conclusion

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

Sulzberger et al. (US 2005/0152695) is generally directed to various aspects of the radio base station with multiple radio frequency heads;

Boldi et al. (US 8,855,489) is directed to the communications method between a main station and processing nodes includes interconnecting the main station and the nodes in an optical path defining adjacent nodes and non-adjacent nodes;

Callard et al. (US 2009/0060088) is cited to show a method for detecting the number of transmit antennas in a base station.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to WEI ZHAO whose telephone number is (571)270-5672. The examiner can normally be reached on 8-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kwang B. Yao can be reached on 5712723182. 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.

/WEI ZHAO/
Primary Examiner, Art Unit 2473

REMARKS/ARGUMENTS

Upon entry of the present amendment, claims 10-29 will be pending in this application. Claims 1-9 been canceled, and new claims 10-29 have been added. No new matter is added.

CONCLUSION

In view of the foregoing, Applicant believes all claims now pending in this application are in condition for examination.

Except for the issue fees payable under 37 C.F.R. § 1.18, the Director is authorized to charge any additional fees during pendency of this application, including any required extension of time fees, or credit any overpayment to Deposit Account Number 20-1430. This paragraph is intended to be a constructive petition for extension of time in accordance with 37 C.F.R. § 1.136(a)(3).

If the Examiner believes a telephone conference would expedite prosecution of this application, please contact the undersigned at (650) 326-2400 or kcatmull@kilpatricktownsend.com.

Respectfully submitted,

/Kelvin B. Catmull/

Kelvin B. Catmull
Registration No. 57,535

KILPATRICK TOWNSEND & STOCKTON LLP

KBC:vmg

AMENDMENTS TO THE CLAIMS

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

Listing of Claims:

1. – 9. (Canceled)

10. (New) A system for transporting wireless communications, comprising:
a baseband unit;
a plurality of signal sources, including at least a first signal source and a second signal source;

a plurality of remote units, including at least a first remote unit and a second remote unit;

wherein the baseband unit comprises a plurality of interfaces to communicatively couple the baseband unit to the plurality of signal sources;

wherein the baseband unit is configured to receive a plurality of radio resources from the first signal source and the second signal source;

wherein the baseband unit is configured to send a digital representation of a first set of radio resources to the first remote unit at a first point in time, the first set of radio resources for transmission at an antenna of the first remote unit;

wherein the baseband unit is configured to send a digital representation of a second set of radio resources to the first remote unit at a second point in time, the second set of radio resources for transmission at the antenna of the first remote unit;

wherein a number of radio resources in the first set of radio resources is different from a number of radio resources in the second set of radio resources; and

wherein the baseband unit is configured to receive digital signals from each of the plurality of remote units.

11. (New) The system of claim 10 wherein the baseband unit is configured to packetize each digital representation of a radio resource.

12. (New) The system of claim 10 wherein the baseband unit is configured to packetize each digital representation of a radio resource in compliance with the Common Public Radio Interface (CPRI) standard.

13. (New) The system of claim 10 wherein the digital representation of the first set of radio resources includes destination information identifying the first remote unit and the digital representation of the second set of radio resources includes destination information identifying the first remote unit.

14. (New) The system of claim 10 wherein the first set of radio resources is a subset of the plurality of radio resources and includes at least some radio resources from the first signal source and at least some radio resources from the second signal source.

15. (New) The system of claim 10 wherein the baseband unit and at least one of the plurality of signal sources are part of a baseband controller.

16. (New) The system of claim 10 wherein the baseband unit further comprises at least one interface to communicatively couple the baseband unit to one or more additional baseband units.

17. (New) The system of claim 16 wherein the one or more additional baseband units includes a plurality of additional baseband units, and the baseband unit is connected to at least a first one of the plurality of additional baseband units through a direct connection and at least a second one of the plurality of additional baseband units through an indirect connection.

18. (New) A baseband controller for use in the transport of wireless communications, comprising:

a plurality of interfaces to communicatively couple a baseband unit to a plurality of signal sources, including at least a first signal source and a second signal source;

at least one interface to communicatively couple the baseband unit to a plurality of remote units, including at least a first remote unit;

wherein the baseband unit is configured to receive a plurality of radio resources from the first signal source and the second signal source;

wherein the baseband unit is configured to send digital representations of a first set of radio resources to the first remote unit at a first point in time, the first set of radio resources for transmission at an antenna of the first remote unit;

wherein the baseband unit is configured to send digital representations of a second set of radio resources to the first remote unit at a second point in time, the second set of radio resources for transmission at the antenna of the first remote unit; and

wherein a number of radio resources in the first set of radio resources is different from a number of radio resources in the second set of radio resources.

19. (New) The baseband controller of claim 18 wherein the baseband unit is configured to packetize each digital representation of a radio resource.

20. (New) The baseband controller of claim 18 wherein the digital representation of the first set of radio resources includes destination information identifying the first remote unit and the digital representation of the second set of radio resources includes destination information identifying the first remote unit.

21. (New) The baseband controller of claim 18 wherein the first set of radio resources is a subset of the plurality of radio resources and includes at least some radio resources from the first signal source and at least some radio resources from the second signal source.

22. (New) The baseband controller of claim 18 wherein the baseband unit further comprises at least one interface to communicatively couple the baseband unit to one or more additional baseband units.

23. (New) The baseband controller of claim 18 wherein the plurality of radio resources include a first composite signal from the first signal source and a second composite signal from the second signal source, and the baseband unit is configured to form the digital representation of the first set of radio resources from a first subset of the first composite signal and a second subset of the second composite signal.

24. (New) A method for providing digital signals in a Distributed Antenna System (DAS), comprising:

receiving at a baseband unit, from a plurality of signal sources including at least a first signal source and a second signal source, a plurality of radio resources;

transmitting from the baseband unit, at a first point in time, a digital representation of a first set of radio resources to a first remote unit, the first set of radio resources for transmission at an antenna of the first remote unit;

transmitting from the baseband unit, at a second point in time, a digital representation of a second set of radio resources to the first remote unit, the second set of radio resources for transmission at the antenna of the first remote unit;

wherein a number of radio resources in the first set of radio resources is different from a number of radio resources in the second set of radio resources.

25. (New) The method of claim 24 wherein the digital representation of the first set of radio resources includes destination information identifying the first remote unit and the digital representation of the second set of radio resources includes destination information identifying the second remote unit.

26. (New) The method of claim 24 wherein the first set of radio resources is a subset of the plurality of radio resources and includes at least some radio resources from the first signal source and at least some radio resources from the second signal source.

27. (New) The method of claim 24 further comprising receiving at the baseband unit, from at least one additional baseband unit, a second plurality of radio resources.

28. (New) The method of claim 24 wherein the plurality of radio resources include a first composite signal from the first signal source and a second composite signal from the second signal source, the method further comprising forming, at the baseband unit, the digital representation of the first set of radio resources from a first subset of the first composite signal and a second subset of the second composite signal.

29. (New) The method of claim 24 further comprising packetizing, at the baseband unit, at least a subset of the plurality of radio resources.

PATENT APPLICATION FEE DETERMINATION RECORD Substitute for Form PTO-875				Application or Docket Number 16/059,434		Filing Date 08/09/2018		☐ To be Mailed		
ENTITY: ☐ LARGE ☒ SMALL ☐ MICRO										
APPLICATION AS FILED - PART I										
		(Column 1)	(Column 2)							
FOR		NUMBER FILED	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), (l), 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(j))		minus 20 =	*	x \$50 =						
INDEPENDENT CLAIMS (37 CFR 1.16(h))		minus 3 =	*	x \$230 =						
☐ 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										
		(Column 1)	(Column 2)	(Column 3)						
AMENDMENT	02/11/2019	CLAIMS REMAINING AFTER AMENDMENT	HIGHEST NUMBER PREVIOUSLY PAID FOR	PRESENT EXTRA	RATE (\$)		ADDITIONAL FEE (\$)			
	Total (37 CFR 1.16(i))	* 20	Minus	** 20	= 0	x \$50 =		0		
	Independent (37 CFR 1.16(h))	* 1	Minus	*** 3	= 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)	(Column 2)	(Column 3)						
		CLAIMS REMAINING AFTER AMENDMENT	HIGHEST NUMBER PREVIOUSLY PAID FOR	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".					/CAROL A BARNES/					
*** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 3, enter "3".										
The "Highest Number Previously Paid For" (Total or Independent) is the highest number found in the appropriate box in column 1.										

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

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

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

Application Data Sheet 37 CFR 1.76		Attorney Docket Number	091172-1100459-102450US
		Application Number	
Title of Invention	DISTRIBUTED ANTENNA SYSTEM		
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		
	Shawn	Patrick	Stapleton			
Residence Information (Select One) ☒ US Residency ☐ Non US Residency ☐ Active US Military Service						
City	Vancouver		Country of Residence ⁱ	CA		
Mailing Address of Inventor:						
Address 1	535 Middlefield Road, Suite 280					
Address 2						
City	Menlo Park		State/Province	CA		
Postal Code	94025		Country ⁱ	US		
Inventor	2				Remove	
Legal Name						
Prefix	Given Name	Middle Name	Family Name	Suffix		
	Paul		Lemson			
Residence Information (Select One) ☒ US Residency ☐ Non US Residency ☐ Active US Military Service						
City	Woodinville		State/Province	WA	Country of Residence ⁱ	US
Mailing Address of Inventor:						
Address 1	535 Middlefield Road, Suite 280					
Address 2						
City	Menlo Park		State/Province	CA		
Postal Code	94025		Country ⁱ	US		
Inventor	3				Remove	
Legal Name						
Prefix	Given Name	Middle Name	Family Name	Suffix		
	Bin		Lin			

Application Data Sheet 37 CFR 1.76		Attorney Docket Number	091172-1100459-102450US
		Application Number	
Title of Invention	DISTRIBUTED ANTENNA SYSTEM		

Residence Information (Select One) ☐ US Residency ☒ Non US Residency ☐ Active US Military Service			
City	Burnaby	Country of Residence ⁱ	CA

Mailing Address of Inventor:			
Address 1	535 Middlefield Road, Suite 280		
Address 2			
City	Menlo Park	State/Province	CA
Postal Code	94025	Country ⁱ	US
Inventor	4	Remove	

Legal Name				
Prefix	Given Name	Middle Name	Family Name	Suffix
	Albert	S.	Lee	

Residence Information (Select One) ☒ US Residency ☐ Non US Residency ☐ Active US Military Service			
City	San Mateo	State/Province	CA
Country of Residence ⁱ	US		

Mailing Address of Inventor:			
Address 1	535 Middlefield Road, Suite 280		
Address 2			
City	Menlo Park	State/Province	CA
Postal Code	94025	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).			
☐ An Address is being provided for the correspondence information of this application.			
Customer Number	20350		
Email Address	pefiling@kilpatricktownsend.com	Add Email	Remove Email

Application Information:

Title of the Invention	DISTRIBUTED ANTENNA SYSTEM		
Attorney Docket Number	091172-1100459-102450US	Small Entity Status Claimed	☒
Application Type	Nonprovisional		
Subject Matter	Utility		
Total Number of Drawing Sheets (if any)	8	Suggested Figure for Publication (if any)	

Application Data Sheet 37 CFR 1.76		Attorney Docket Number	091172-1100459-102450US
		Application Number	
Title of Invention	DISTRIBUTED ANTENNA SYSTEM		

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	20350		

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	15223819	2016-07-29

Application Data Sheet 37 CFR 1.76		Attorney Docket Number		091172-1100459-102450US	
		Application Number			
Title of Invention		DISTRIBUTED ANTENNA SYSTEM			

Prior Application Status		Patented		Remove	
Application Number	Continuity Type	Prior Application Number	Filing Date (YYYY-MM-DD)	Patent Number	Issue Date (YYYY-MM-DD)
15223819	Continuation of	14800515	2015-07-15	9419837	2016-08-16
Prior Application Status		Patented		Remove	
Application Number	Continuity Type	Prior Application Number	Filing Date (YYYY-MM-DD)	Patent Number	Issue Date (YYYY-MM-DD)
14800515	Continuation of	14260145	2014-04-23	9137078	2015-09-15
Prior Application Status		Patented		Remove	
Application Number	Continuity Type	Prior Application Number	Filing Date (YYYY-MM-DD)	Patent Number	Issue Date (YYYY-MM-DD)
14260145	Continuation of	13211247	2011-08-16	8737300	2014-05-27
Prior Application Status		Expired		Remove	
Application Number	Continuity Type	Prior Application Number	Filing or 371(c) Date (YYYY-MM-DD)		
13211247	Claims benefit of provisional	61439940	2011-02-07		
Additional Domestic Benefit/National Stage Data may be generated within this form by selecting the Add button.					
Add					

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.			
Add			

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

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

Application Data Sheet 37 CFR 1.76		Attorney Docket Number	091172-1100459-102450US
		Application Number	
Title of Invention	DISTRIBUTED ANTENNA SYSTEM		

☐	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	091172-1100459-102450US
		Application Number	
Title of Invention	DISTRIBUTED ANTENNA SYSTEM		

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.

Application Data Sheet 37 CFR 1.76		Attorney Docket Number	091172-1100459-102450US
		Application Number	
Title of Invention	DISTRIBUTED ANTENNA SYSTEM		

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		Remove	
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		Dali Wireless, Inc.	
Mailing Address Information For Applicant:			
Address 1		535 Middlefield Road, Suite 280	
Address 2			
City		Menlo Park	State/Province
Country		US	CA
Postal Code		94025	
Phone Number		Fax Number	
Email Address			
Additional Applicant Data may be generated within this form by selecting the Add button.			Add

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.

Application Data Sheet 37 CFR 1.76		Attorney Docket Number	091172-1100459-102450US
		Application Number	
Title of Invention	DISTRIBUTED ANTENNA SYSTEM		

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.			
			Remove
If the Assignee or Non-Applicant Assignee is an Organization check here.			☒
Organization Name	Dali Wireless, Inc.		
Mailing Address Information For Assignee including Non-Applicant Assignee:			
Address 1	535 Middlefield Road, Suite 280		
Address 2			
City	Menlo Park	State/Province	CA
Country i	US	Postal Code	94025
Phone Number		Fax Number	
Email Address			
Additional Assignee or Non-Applicant Assignee Data may be generated within this form by selecting the Add button.			Add

Signature:[Remove](#)

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	/Kelvin B. Catmull/		Date (YYYY-MM-DD)	2018-08-09	
First Name	Kelvin B.	Last Name	Catmull	Registration Number	57535
Additional Signature may be generated within this form by selecting the Add button.				Add	

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

Application Data Sheet 37 CFR 1.76		Attorney Docket Number	091172-1100459-102450US
		Application Number	
Title of Invention	DISTRIBUTED ANTENNA SYSTEM		

This collection of information is required by 37 CFR 1.76. 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 23 minutes to complete, including gathering, preparing, and submitting the completed application data sheet form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

Privacy Act Statement

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

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

1. The information on this form will be treated confidentially to the extent allowed under the Freedom of Information Act (5 U.S.C. 552) and the Privacy Act (5 U.S.C. 552a). Records from this system of records may be disclosed to the Department of Justice to determine whether the Freedom of Information Act requires disclosure of these 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.

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)	Application Number		
	Filing Date		Herewith
	First Named Inventor	Shawn Patrick Stapleton	
	Art Unit		
	Examiner Name		
	Attorney Docket Number		091172-1100459-102450US

U.S. PATENTS						
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.	US-4,755,795		07-05-1998	Page	
	2.	US-4,999,831		03-12-1991	Grace	
	3.	US-5,457,557	A	10-10-1995	Zarem et al.	
	4.	US-5,579,341	A	11-26-1996	Smith et al.	
	5.	US-5,619,202	A	04-08-1997	Wilson et al.	
	6.	US-5,621,730	A	04-15-1997	Kelley	
	7.	US-5,627,879	A	05-06-1997	Russell et al.	
	8.	US-5,644,622	A	07-01-1997	Russell et al.	
	9.	US-5,748,683	A	05-05-1998	Smith et al.	
	10.	US-5,818,883	A	10-06-1998	Smith et al.	
	11.	US-5,852,651	A	12-22-1998	Fischer et al.	
	12.	US-5,880,863	A	03-09-1999	Rideout et al.	
	13.	US-6,005,506	A	12-21-1999	Bazarjani et al.	
	14.	US-6,005,884	A	12-21-1999	Cook et al.	
	15.	US-6,014,366	A	01-11-2000	Ichiyoshi	
	16.	US-6,112,086	A	08-29-2000	Wala	
	17.	US-6,253,094	B1	06-26-2001	Schmutz	
	18.	US-6,353,600	B1	03-05-2002	Schwartz et al.	
	19.	US-6,356,369	B1	03-12-2002	Farhan	
	20.	US-6,373,611	B1	01-16-2002	Farhan et al.	
	21.	US-6,393,007	B2	05-21-2002	Haartsen	
	22.	US-6,493,335	B1	12-10-2002	Darcie et al.	
	23.	US-6,594,496	B2	07-15-2003	Schwartz	
	24.	US-6,625,429	B1	09-23-2003	Yamashita	
	25.	US-6,657,993	B1	12-02-2003	Casanova et al.	
	26.	US-6,697,603	B1	02-24-2004	Lovinggood et al.	
	27.	US-6,704,545	B1	03-09-2004	Wala	
	28.	US-6,724,737	B1	04-20-2004	Boyden et al.	
	29.	US-6,785,558	B1	08-31-2004	Stratford et al.	
	30.	US-6,801,767	B1	10-05-2004	Schwartz et al.	
	31.	US-6,804,540	B1	10-12-2004	Shepherd et al.	
	32.	US-6,826,164	B2	11-30-2004	Mani et al.	
	33.	US-6,831,901	B2	12-14-2004	Millar	
	34.	US-6,836,660	B1	12-28-2004	Wala	
	35.	US-7,102,442	B2	09-05-2006	Anderson	
	36.	US-7,145,704	B1	12-05-2006	Islam	
	37.	US-7,257,328	B2	08-14-2007	Levinson et al.	
	38.	US-7,283,519	B2	10-16-2007	Girard	
	39.	US-7,286,507	B1	10-23-2007	Oh et al.	
	40.	US-7,339,897	B2	03-04-2008	Larsson et al.	
	41.	US-7,362,776	B2	04-22-2008	Meier et al.	
	42.	US-7,489,632	B2	02-10-2009	Lakkakorpi	
	43.	US-7,496,367	B1	02-24-2009	Ozturk et al.	
	44.	US-7,610,460	B2	10-27-2009	Wala	
	45.	US-7,634,536	B2	12-15-2009	Halasz	
	46.	US-7,639,982	B2	12-29-2009	Wala	
	47.	US-7,650,112	B2	01-19-2010	Utsumi et al.	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)	Application Number		
	Filing Date		Herewith
	First Named Inventor	Shawn Patrick Stapleton	
	Art Unit		
	Examiner Name		
	Attorney Docket Number		091172-1100459-102450US

	48.	US-7,765,294	B2	07-27-2010	Edwards et al.	
	49.	US-7,787,854	B2	08-31-2010	Conyers et al.	
	50.	US-7,801,038	B2	09-21-2010	Liao et al.	
	51.	US-7,826,369	B2	11-02-2010	Filsfils et al.	
	52.	US-7,855,977	B2	12-21-2010	Morrison et al.	
	53.	US-8,010,099	B2	08-30-2011	Ma et al.	
	54.	US-8,010,116	B2	08-30-2011	Scheinert	
	55.	US-8,032,148	B2	10-04-2011	Hettstedt et al.	
	56.	US-8,036,226	B1	10-11-2011	Ma et al.	
	57.	US-8,098,572	B2	01-17-2012	Zhou et al.	
	58.	US-8,139,492	B1	03-20-2012	Peterson et al.	
	59.	US-8,346,091	B2	01-01-2013	Kummetz et al.	
	60.	US-8,346,160	B2	01-01-2013	Kummetz	
	61.	US-8,363,628	B2	01-29-2013	Chi et al.	
	62.	US-8,446,530	B2	05-21-2013	Bellers	
	63.	US-8,451,735	B2	05-28-2013	Li	
	64.	US-8,478,331	B1	07-02-2013	Rogers	
	65.	US-8,520,603	B2	08-27-2013	Kozisek et al.	
	66.	US-8,527,003	B2	09-03-2013	Gupta et al.	
	67.	US-8,532,242	B2	09-10-2013	Fischer et al.	
	68.	US-8,548,526	B2	10-01-2013	Schmidt et al.	
	69.	US-8,583,100	B2	11-12-2013	Koziy et al.	
	70.	US-8,682,338	B2	03-25-2014	Lemson et al.	
	71.	US-8,737,300	B2	05-27-2014	Stapleton et al.	
	72.	US-8,737,454	B2	05-27-2014	Wala et al.	
	73.	US-8,842,649	B2	09-23-2014	Liu et al.	
	74.	US-8,855,489	B2	10-07-2014	Boldi et al.	
	75.	US-8,958,789	B2	02-17-2015	Bauman et al.	
	76.	US-9,531,473	B2	12-27-2016	Lemson et al.	

U.S. PATENT APPLICATION PUBLICATIONS

Examiner Initial*	Cite No	Publication Number	Kind Code	Publication Date	Name of Patentee or Applicant of cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
	77.	US-2001/0034223	A1	10-25-2001	Rieser et al.	
	78.	US-2002/0075906	A1	06-20-2002	Cole et al.	
	79.	US-2002/0086675	A1	07-04-2002	Mansour	
	80.	US-2002/0093926	A1	07-18-2002	Kilfoyle	
	81.	US-2002/0093926	A1	07-18-2002	Kilfoyle	
	82.	US-2002/0186436	A1	12-12-2002	Mani et al.	
	83.	US-2002/0187809	A1	12-12-2002	Mani et al.	
	84.	US-2002/0191565	A1	12-19-2002	Mani et al.	
	85.	US-2003/0021263	A1	01-30-2003	Lee	
	86.	US-2003/0143947	A1	07-31-2003	Lyu	
	87.	US-2003/0181221	A1	09-25-2003	Nguyen	
	88.	US-2004/0053624	A1	03-18-2004	Frank et al.	
	89.	US-2005/0143091	A1	06-30-2005	Shapira et al.	
	90.	US-2005/0152695	A1	7/14/2005	Sulzberger et al.	
	91.	US-2005/0157675	A1	07-21-2005	Feder et al.	
	92.	US-2005/0181812	A1	08-18-2005	Scheck	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)	Application Number		
	Filing Date		Herewith
	First Named Inventor	Shawn Patrick Stapleton	
	Art Unit		
	Examiner Name		
	Attorney Docket Number		091172-1100459-102450US

	93.	US-2005/0206564	A1	09-22-2005	Mao et al.	
	94.	US-2005/0220066	A1	10-06-2005	Wal et al.	
	95.	US-2006/0094470	A1	05-04-2006	Wake et al.	
	96.	US-2006/0270366	A1	11-30-2006	Rozenblit et al.	
	97.	US-2006/0121944	A1	06-08-2006	Buscaglia et al.	
	98.	US-2007/0019598	A1	01-25-2007	Prehofer	
	99.	US-2007/0058742	A1	03-15-2007	Demarco et al.	
	100.	US-2007/0064506	A1	03-22-2007	Bauman et al.	
	101.	US-2007/0065078	A1	03-22-2007	Jiang	
	102.	US-2007/0066234	A1	03-22-2007	Lastinger et al.	
	103.	US-2007/0116046	A1	05-24-2007	Liu et al.	
	104.	US-2007/0147488	A1	06-28-2007	Han	
	105.	US-2007/0177552	A1	08-02-2007	Wu et al.	
	106.	US-2007/0281643	A1	12-06-2007	Kawai	
	107.	US-2008/0051129	A1	02-28-2008	Abe et al.	
	108.	US-2008/0058018	A1	03-06-2008	Scheinert	
	109.	US-2008/0107014	A1	05-08-2009	Huang et al.	
	110.	US-2008/0119198	A1	05-22-2008	Hettstedt et al.	
	111.	US-2008/0146146	A1	06-19-2008	Binder et al.	
	112.	US-2008/0225816	A1	09-18-2008	Osterling et al.	
	113.	US-2008/0240036	A1	10-02-2008	Liu et al.	
	114.	US-2009/0003196	A1	01-01-2009	Capece et al.	
	115.	US-2009/0060088	A1	03-05-2009	Callard et al.	
	116.	US-2009/0170543	A1	07-02-2009	Mostafa et al.	
	117.	US-2009/0180426	A1	07-16-2009	Sabat et al.	
	118.	US-2009/0191891	A1	07-30-2009	Ma et al.	
	119.	US-2009/0238566	A1	09-24-2009	Boldi et al.	
	120.	US-2009/0252136	A1	10-08-2009	Mahany et al.	
	121.	US-2009/0274048	A1	11-05-2009	Sambhwani et al.	
	122.	US-2009/0274085	A1	11-05-2009	Wang et al.	
	123.	US-2009/0286484	A1	11-19-2009	Phung et al.	
	124.	US-2010/0002661	A1	01-07-2010	Schmidt et al.	
	125.	US-2010/0087227	A1	04-08-2010	Francois et al.	
	126.	US-2010/0128676	A1	05-27-2010	Wu et al.	
	127.	US-2010/0136998	A1	06-03-2010	Lott et al.	
	128.	US-2010/0157901	A1	06-24-2010	Sanderovitz et al.	
	129.	US-2010/0177759	A1	07-15-2010	Fischer et al.	
	130.	US-2010/0178936	A1	07-15-2010	Wala et al.	
	131.	US-2010/0202565	A1	08-12-2010	Abbasfar	
	132.	US-2010/0238904	A1	09-23-2010	Zhang et al.	
	133.	US-2010/0247105	A1	09-30-2010	Yu	
	134.	US-2010/0278530	A1	11-04-2010	Kummetz et al.	
	135.	US-2010/0279704	A1	11-04-2010	Vachhani	
	136.	US-2010/0291949	A1	11-18-2010	Shapira et al.	
	137.	US-2010/0296816	A1	11-25-2010	Larsen	
	138.	US-2010/0299173	A1	11-25-2010	Zampello et al.	
	139.	US-2010/0311372	A1	12-09-2010	Bouyoud et al.	
	140.	US-2010/177760	A1	07-15-2010	Cannon et al.	
	141.	US-2011/0069657	A1	03-24-2011	Gholmieh et al.	
	142.	US-2011/0103309	A1	05-05-2011	Wang et al.	
	143.	US-2011/0135013	A1	06-09-2011	Wegener	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)	Application Number		
	Filing Date		Herewith
	First Named Inventor	Shawn Patrick Stapleton	
	Art Unit		
	Examiner Name		
	Attorney Docket Number		091172-1100459-102450US

144	US-2011/0135308	A1	06-09-2011	Tarlazzi et al.	
145	US-2011/0223958	A1	09-15-2011	Chen et al.	
146	US-2011/0241425	A1	10-06-2011	Hunter, JR. et al.	
147	US-2011/0249708	A1	10-13-2011	Maca	
148	US-2011/0281579	A1	11-17-2011	Kummetz	
149	US-2012/0039254	A1	02-16-2012	Stapleton et al.	
150	US-2012/0057572	A1	03-08-2012	Evans et al.	
151	US-2012/0127938	A1	05-24-2012	Lv et al.	
152	US-2012/0281565	A1	11-08-2012	Sauer	
153	US-2013/0272202	A1	10-17-2013	Stapleton et al.	
154	US-2014/0126914	A1	05-08-2014	Berlin et al.	
155	US-2014/0286247	A1	09-25-2014	Lemson et al.	
156	US-2014/0313884	A1	10-23-2014	Stapleton et al.	
157	US-2016/0014782	A1	01-14-2016	Stapleton et al.	
158	US-2016/0080082	A1	03-17-2016	Lemson et al.	
159	US-2017/0055198	A1	02-23-2017	Stapleton et al.	
160	US-2017/0214420	A1	07-27-2017	Phillips et al.	

FOREIGN PATENT DOCUMENTS

Examiner Initial*	Cite No	Foreign Document Number ³	Country Code ²	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
	161	103201958	CN	A	07-10-2013	Dali Systems Co. Ltd.		
	162	2606576	EP	A0	06-26-2013	Dali Systems Co. Ltd.		
	163	2008/154077	WO	A1	12-18-2008	Dali Systems Co. Ltd.		
	164	2012/024343	WO	A1	02-23-2012	Dali Systems Co. Ltd.		
	165	2012/024349	WO	A1	02-23-2012	Dali Systems Co. Ltd.		
	166	101453799	CN	A	06-10-2009			
	167	02/23956	WO	A2	03-21-2002	Teledyne Lighting And Display Products Inc.		
	168	02/47414	WO	A2	06-13-2002	Science Applications International Corporation		
	169	101453799	CN	A	06-10-2009	Comba Telecom Sys China Co Ltd		
	170	2008/146394	WO	A1	12-04-2008	Fujitsu Limited		
	171	2007-235738	JP	A	09-13-2007	Sumitomo Electric Ind LTD		
	172	2010-166531	JP	A2	07-29-2010	Hitachi Kokusai Electric Inc		
	173	2008-516503	JP	A	05-15-2008	Jinquan Dai		
	174	2008-099137	JP	A2	04-24-2008	Fujitsu Limited		
	175	2007-529926	JP	A	10-25-2007	Wensheng He		
	176	2007-523577	JP	A	08-16-2007	Telefonaktiebolaget Lm Ericsson		
	177	2004-147009	JP	A2	05-20-2004	Hitachi Kokusai Electric Inc		

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)	Application Number		
	Filing Date		Herewith
	First Named Inventor	Shawn Patrick Stapleton	
	Art Unit		
	Examiner Name		
	Attorney Docket Number		091172-1100459-102450US

178	101521893	CN	A	09-02-2009	Comba Telecom System Holdings		
179	2009-296335	JP	A2	12-17-2009	Nippon Telegraph & Telephone		
180	101453799 (dupe)	CN	A	06-10-2009	Comba Telecom Sys China Co Ltd		
181	10-2009-0088083	KR	A	08-19-2009	Samsung Electronics Co Ltd		
182	00/23956	WO	A1	04-27-2000	Univ Maryland		
183	101453699	CN	A	06-10-2009	Huawei Tech Co Ltd.		
184	2008-506322	JP	A	02-28-2008	Utstarcom Telecom Co., Ltd.		
185	2010/087031	WO	A1	08-05-2010	Hitachi Ltd		
186	0368673	EP	A1	05-16-1990	British Telecommunications		
187	01/56197	WO	A2	08-02-2001	Scientific-Atlanta, Inc.		
188	98/24256	WO	A2	06-04-1998	Ericsson Inc.		
189	0642243	EP	A1	03-08-1995	Roke Manor Research Limited		
190	2002-158615	JP	A	05-31-2002	NAT INST LAND & INFRASTRUCTURE		
191	2008-135955	JP	A	06-12-2008	Toshiba Corp		
192	1713290	EP	A1	10-18-2006	Huawei Technology Co. Ltd.		
193	1992-207532	JP	A	07-29-1992	Nippon Telegr & Teleph Corp		
194	1993-136724	JP	A	01-06-1993	A T R Koudenpa Tsushin Kenkyush		
195	1924109	EP	A1	05-21-2008	Alcatel Lucent		
196	101394647	CN	A	03-25-2009	Datang Mobile Comm Equip Co		
197	10-1996-0702978	KR	A	05-23-1996	ADC Telecommunications, Inc.		
198	2010133942	WO	A1	11-25-20110	Teko Telcom S P A		
199	1774094	CN	A	05-17-2006	Huawei Tech Co Ltd.		
200	201307942	CN	Y	09-09-2009	Comba Telecom Systems China LTD		
201	101621806	CN	A	01-06-2010	Comba Telecom Systems(China) Ltd.		

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*

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)	Application Number		
	Filing Date		Herewith
	First Named Inventor	Shawn Patrick Stapleton	
	Art Unit		
	Examiner Name		
	Attorney Docket Number		091172-1100459-102450US

	202.	Notification Of Transmittal Of The International Search Report And The Written Opinion Of The International Searching Authority, Or The Declaration and International Search Report and Written Opinion Of The International Searching Authority for International Application No. PCT/US2011/048004 mailed on January 5, 2012, 6 pages.	
	203.	Notification Of Transmittal Of The International Search Report And The Written Opinion Of The International Searching Authority, Or The Declaration and International Search Report and Written Opinion Of The International Searching Authority for International Application No. PCT/US2011/047995 mailed on December 22, 2011, 7 pages.	
	204.	International Search Report and Written Opinion of the International Searching Authority for International Application No. PCT/US2011/047999 mailed on Dec. 19, 2011, 7 pages.	
	205.	BICSI, "Network Design Basics for Cabling Professionals", 2002, 393 pages, McGraw-Hill, New York, NY, USA.	
	206.	"Common Public Radio Interface (CPRI) Specification V1.4", dated 2006-03-31, downloaded from http://www.cpri.info/spec.html on 03-28-2017, 64 pages.	
	207.	"Common Public Radio Interface (CPRI) Specification V2.1", dated 2006-03-31, downloaded from http://www.cpri.info/spec.html on 03-28-2017, 76 pages.	
	208.	"Common Public Radio Interface (CPRI) Specification V3.0", dated 2006-10-20, downloaded from http://www.cpri.info/spec.html on 03-28-2017, 89 pages.	
	209.	"Common Public Radio Interface (CPRI) Specification V4.0", dated 2008-06-30, downloaded from http://www.cpri.info/spec.html on 03-28-2017, 96 pages.	
	210.	"Common Public Radio Interface (CPRI) Specification V4.1", dated 2009-02-18, downloaded from http://www.cpri.info/spec.html on 03-28-2017, 109 pages.	
	211.	GRUNDMANN et al., "An empirical comparison of a distributed antenna microcell system versus a single antenna microcell system for indoor spread spectrum communications at 1.8 GHz", ICUPC Conference, 1993, 5 pages.	
	212.	ZHAOHUI et al., "A rake type receiver structure for CDMA mobile communication systems using antenna arrays", IEEE, 1996, pages 528-530.	
	213.	"Mastering The Mix In Signal Processing", Mixed-Signal Design Seminar, 1991, Analog Devices, Inc., 3 pages.	
	214.	GRACE, Martin K., "Synchronous quantized subcarrier multiplexing for transport of video, voice, and data", IEEE Journal on Selected Areas in Communications, September 1990, Vol. 8, No. 7., pp. 1351-1358.	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)	Application Number		
	Filing Date		Herewith
	First Named Inventor	Shawn Patrick Stapleton	
	Art Unit		
	Examiner Name		
	Attorney Docket Number		091172-1100459-102450US

	215.	Wala, Philip M., "A new microcell architecture using digital optical transport", 1993, IEEE, pp 585-588.	
	216.	CROFUT, Walter, "Remote monitoring of wirelss base stations June 1, 1998"; http://urgentcomm.com/print/mag/remote-monitoring-wireless-base-stations , downloaded on March 13, 2017, 4 pages.	
	217.	CYR et al., "The digital age is here, Digital radio frequency transport enhances cellular network performance", July 4, 1993, Telephony, pp 20-24.	
	218.	CityCell 824, "Remote Site Manual, How to use it, Preliminary Version"; February 1, 1993, 237 pages.	
	219.	CHEUN, Kyungwhoon, "Performance of direct-sequence spread-spectrum rake receives with randon spreading sequences", IEEE Transactions On Communication, September 9, 1997, Vol. 45, No. 9, pp. 1130-1143.	
	220.	BRUNNER et al., "On space-time rake receiver structure for WCDMA", 1999, IEEE, pp 1546-1551.	
	221.	GRAF, Rudolf F., "Modern Dictionary of Electronics, 7th Ed.", 1999, Newnes publishing, 9 pages.	
	222.	"Introduction to Receivers", downloaded June 15, 2017 from http://www.ece.ucsb.edu/~long/ece145a/Introduction_to_Receivers.pdf , 28 pages.	
	223.	"Standardizing Digital IF Data Transfer with VITA 49", RTC Magazine, downloaded June 15, 2017 from http://rtcmagazine.com/articles/view/100460 , 5 pages.	
	224.	LAN et al., "GSM Co-Channel and Adjacent Channel Interference Analysis and Optimization", Dec. 2011, Vol. 16, No. 6, Tsinghua Science And Technology, ISSN 1007-0214 04/12, pp 583-588.	
	225.	ACAMPORA, Anthony, "Declaration of Dr. Anthony Acampora" in support of Inter Partes Review of U.S. Patent No. 9,531,473, Feb 2, 2018, 190 pages.	
	226.	"Comprehensive Dictionary of Electrical Engineering", 1999, CRC Press & IEEE Press, 4 pages.	
	227.	"Computer Dictionary. The Comprehensive Standard for Business, School, Library and Home", 1991, Microsoft Press, ISBN 1-55615-231-0, 6 pages.	
	228.	"Wiley Electrical and Electronics Engineering Dictionary", 2004, Wiley & Sons, Inc., 7 pages.	
	229.	"McGraw-Hill Dictionary of Scientific and Technical Terms", (5th ed.), 1994, McGraw-Hill, Inc., ISBN 0-07-042333-4, 6 pages.	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)	Application Number		
	Filing Date		Herewith
	First Named Inventor	Shawn Patrick Stapleton	
	Art Unit		
	Examiner Name		
	Attorney Docket Number		091172-1100459-102450US

	230.	Excerpts from Patent Owner's Invalidity Contentions regarding U.S. Patent No. 7,639,982 served in related matter CommScope Technologies LLC v. Dali Wireless, Inc., Case No. 3:16-cv-00477-B (N.D. Tex.) ("Patent Owner's Invalidity Contentions Ex. C"), February 2, 2018, 410 pages.	
	231.	HORAK, Ray, "Telecommunications and Data Communications Handbook", 2007, Wiley & Sons, Inc., 55 pages.	
	232.	SPURGEON, Charles E., "Ethernet, The Definitive Guide", 2000, O'reilly & Assoc., Inc., 112 pages.	
	233.	"Dali Wireless, Inc.'s claim construction brief", in: CommScope Technologies LLC v. Dali Wireless, Inc., Case No. 3:16-cv-00477-B (N.D. Tex.), June 30, 2017, 36 pages.	
	234.	"Dali Wireless, Inc.'s responsive claim construction brief", in: CommScope Technologies LLC v. Dali Wireless, Inc., Case No. 3:16-cv-00477-B (N.D. Tex.), August 18, 2017, 30 pages.	
	235.	Petition for Inter Partes Review of U.S. Patent No. 9,531,473 Under 35 U.S.C. §§ 311-319 AND 37 C.F.R. § 41.100 ET SEQ., filed February 2, 2018, 95 pages.	
	236.	Non-Final Office Action for U.S. Patent Application No. 13/211,247 mailed on October 10, 2012, 6 pages.	
	237.	Notice of Allowance for U.S. Patent Application No. 13/211,247 mailed on March 13, 2013, 11 pages.	
	238.	Non-Final Office Action for U.S. Patent Application No. 13/211,247 mailed on July 22, 2013, 11 pages.	
	239.	Final Office Action for U.S. Patent Application No. 13/211,247 mailed on November 26, 2013, 13 pages.	
	240.	Notice of Allowance for U.S. Patent Application No. 13/211,247 mailed on March 11, 2014, 10 pages.	
	241.	First Office Action for Chinese Patent Application No. 20118005066.6 mailed on August 4, 2014,	
	242.	Non-Final Office Action for U.S. Patent Application No. 13/913,207 mailed on November 20, 2014, 22 pages.	
	243.	Non-Final Office Action for U.S. Patent Application No. 14/260,145 mailed on January 27, 2015, 10 pages	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)	Application Number		
	Filing Date		Herewith
	First Named Inventor	Shawn Patrick Stapleton	
	Art Unit		
	Examiner Name		
	Attorney Docket Number		091172-1100459-102450US

	244.	Second Office Action for Chinese Patent Application No. 20118005066.6 mailed on April 13, 2015, 7 pages.	
	245.	Final Office Action for U.S. Patent Application No. 13/913,207 mailed on April 15, 2015, 15 pages	
	246.	Notice of Allowance of May 8, 2015 for U.S. Patent Application No. 14/260,145 13 pages. (copy available via PAIR)	
	247.	Notice of Allowance of May 26, 2015 for U.S. Patent Application No. 13/913,207, 11 pages. (copy available via PAIR)	
	248.	Third Office Action for Chinese Patent Application No. 20118005066.6 mailed on January 4, 2015, 6 pages.	
	249.	Notice of Allowance for U.S. Application No. 14/800,515, mailed May 20, 2016, 13 pages.	
	250.	Notice of Allowance for Patent Application No. 14/800,515 mailed May 20, 2016, 13pages.	
	251.	Office Action for Japanese Patent Application No. 2016-139702 mailed, April 20, 2017, 7 pages.	
	252.	Non-Final Office Action for U.S. Patent Application No. 15/223,819 mailed on June 5, 2017, 20 pages.	
	253.	Extended European Search Report for European Application No. 11818697.2 mailed on August 17, 2017, 7 pages.	
	254.	Office Action for Japanese Application No. 2016-174930 mailed August 1, 2017, 4 pages.	
	255.	Partial Supplementary European Search Report for European Application No. 11818695.6 mailed on August 31, 2017, 15 pages.	
	256.	Final Office Action for U.S. Patent Application No. 15/223,819 mailed on September 29, 2017, 21 pages.	
	257.	Office Action for Chinese Patent Application No. 201510531485.1 mailed on November 2, 2017, 6 pages.	
	258.	Notice of Allowance for Korean Patent Application No. 10-2015-7024302, mailed November 10, 2017, 5 pages.	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)	Application Number		
	Filing Date		Herewith
	First Named Inventor	Shawn Patrick Stapleton	
	Art Unit		
	Examiner Name		
	Attorney Docket Number		091172-1100459-102450US

	259.	Notice of Allowance for U.S. Patent Application No. 15/223,819 mailed on February 1, 2018, 9 pages.	
	260.	Office Action for Chinese Patent Application No. 201610011597.9, mailed March 29, 2018, 5 pages	
	261.	Notice of Allowance for U.S. Patent Application No. 15/223,819 mailed on June 5, 2018, 7 pages.	

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.			

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

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)	Application Number		
	Filing Date		Herewith
	First Named Inventor	Shawn Patrick Stapleton	
	Art Unit		
	Examiner Name		
	Attorney Docket Number		091172-1100459-102450US

CERTIFICATION STATEMENT

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

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

OR

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

☐ See attached certification statement.

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

☒ 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	/Kelvin B. Catmull/	Date (YYYY-MM-DD)	2018-08-09
Name/Print	Kelvin B. Catmull	Registration Number	57,535

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.**