502574287 11/19/2013

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2

EPAS ID: PAT2620189

| SUBMISSION TYPE: | NEW ASSIGNMENT |
|-----------------------|----------------|
| NATURE OF CONVEYANCE: | ASSIGNMENT |

CONVEYING PARTY DATA

| Name | Execution Date |
|--------------------|----------------|
| SREEKAR MARUPADUGA | 11/18/2013 |
| PATRICK SCHMIDT | 11/18/2013 |
| ANDY WURTENBERGER | 11/18/2013 |

RECEIVING PARTY DATA

| Name: | SPRINT SPECTRUM L.P. |
|-----------------|----------------------|
| Street Address: | 6450 SPRINT PARKWAY |
| City: | OVERLAND PARK |
| State/Country: | KANSAS |
| Postal Code: | 66251 |

PROPERTY NUMBERS Total: 1

| Property Type | Number |
|---------------------|----------|
| Application Number: | 14083760 |

CORRESPONDENCE DATA

Fax Number: (913)315-0762 Phone: 913-315-9261

Email: sally.j.werts@sprint.com

Correspondence will be sent via US Mail when the email attempt is unsuccessful.

Correspondent Name: **SPRINT**

Address Line 1: 6391 SPRINT PARKWAY Address Line 2: KSOPHT0101-Z2100

Address Line 4: OVERLAND PARK, KANSAS 66251-2100

| ATTORNEY DOCKET NUMBER: | 9658 |
|-------------------------|-----------------------|
| NAME OF SUBMITTER: | MICHAEL D. ANDERSON |
| Signature: | /Michael D. Anderson/ |
| | PATENT |

REEL: 031630 FRAME: 0826 502574287

| Date: | 11/19/2013 |
|---|------------------|
| Total Attachments: 3 source=9658 Application (Assignement) Exsource=9658 Application (Assignement) Exsource=9658 Application (Assignement) Ex | ecuted#page2.tif |

PATENT REEL: 031630 FRAME: 0827

ASSIGNMENT AND AGREEMENT IN AN APPLICATION FOR LETTERS PATENT OF THE UNITED STATES OF AMERICA

I hereby declare that I am the sole inventor (if only one inventor is named below) or an original, first and joint inventor (if plural inventors are named below) of the invention relating to "Adaptive Per-Antenna Rate Control Based on Network Conditions" described in an application for Letters Patent of the United States of America filed on Nov. 19, 2013 Serial No.14083760, or, if not identified here by filing date and serial number, executed by me on even date with my execution of this Assignment.

For valuable consideration received, I hereby sell, assign and transfer to Sprint Spectrum L.P., a limited partnership duly organized and existing under the laws of the State of Delaware, United States of America, its successors and assigns, my entire right, title and interest, for all countries in and to said inventions and all the rights and privileges under any and all Letters Patent that may be granted therefore, and any divisions, continuations, reissues and extensions thereof.

I agree that, when requested, I will, without charge to said limited partnership but at its expense, sign all papers, take all rightful oaths, make all rightful declarations and do all acts which may be necessary, desirable or convenient for securing and maintaining patents or other forms of protection for said inventions in any and all countries and for vesting title thereto in said limited partnership, its successors, assigns or nominees.

I agree that I will communicate to said limited partnership or its representatives any facts known to me respecting said inventions and when requested by said limited partnership and at its expense will testify in any legal proceedings, and generally do everything possible to aid said limited partnership, its successors, assigns and legal representatives or nominees, to obtain or enforce proper protection for said inventions in any and all countries.

I authorize and empower said limited partnership, its successors, assigns or nominees, to make application for patent or other form of protection for said inventions in its or their own name, or in my/our name, in any and all countries to invoke and claim for any application for patent or other form of protection for said inventions filed by it or them, the benefit of the right of priority provided by the International Convention for the Protection of Industrial Property, as amended, or by any convention which may henceforth be substituted for it, and to invoke and claim such right of priority without further written or oral authorization from me.

I hereby consent that a copy of this Assignment shall be deemed a full legal and formal equivalent of any assignment, consent to file or like document which may be required in any country for any purpose and more particularly in proof of the right of the said limited partnership or its successors, assigns or nominees to apply for patent or other proper protection for said inventions, and to claim the aforesaid benefits of the right of priority provided by the International Convention for the Protection of Industrial Property, as amended, or by any convention which may henceforth be substituted for it.

I covenant with Sprint Spectrum L.P., its successors, assigns, legal representatives, and nominees, that to the best of my knowledge the right, title and interest herein conveyed by me are free and clear of any encumbrance, and that I have the full right to convey the same as herein expressed.

This Agreement and Assignment supersedes all other assignments, agreements and addendums related to the above identified application.

The undersigned hereby authorizes and requests the attorneys of record in said application to insert in this assignment the filing date and serial number of said application when officially known, and the date of execution of the application.

PATENT REEL: 031630 FRAME: 0828

| SOLE OR JOINT INVENTOR |
|--|
| Inventor (1) Date: 11/18/2013, (Sreekar Marupaduga) |
| Citizenship: India |
| Post Office Address: 5315 W 121st Terrace, Apt # 244 Overland Park, Kansas 66209 |
| Residence: 5315 W 121st Terrace, Apt # 244 Overland Park, Kansas 66209 |
| L |
| |
| SOLE OR JOINT INVENTOR |
| Inventor (2) (Patrick Schmidt) Date: 11/18/2013 |
| Citizenship: United States of America |
| Post Office Address: 603 154th Circle Bonner Springs, KS 66012 |
| Residence: 603 154th Circle Bonner Springs, KS 66012 |
| |
| |
| GOLE ON TODAY DATAYON |
| Inventor (3) Date: 1/8/13 (Andy Wurtenberger) |
| Citizenship: United States of America |
| Post Office Address: 13854 South Kaw Street Olathe, Kansas 66062 |
| Residence: 13854 South Kaw Street Olathe, Kansas 66062 |

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:

- 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.
- 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.
- 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).
- 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.
- 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.

PATENT REEL: 031630 FRAME: 0830

RECORDED: 11/19/2013