

TRADEMARK ASSIGNMENT COVER SHEET

Electronic Version v1.1
Stylesheet Version v1.2

ETAS ID: TM388950

SUBMISSION TYPE:	NEW ASSIGNMENT		
NATURE OF CONVEYANCE:	SECURITY INTEREST		
CONVEYING PARTY DATA			
Name	Formerly	Execution Date	Entity Type
SPIDERCLOUD WIRELESS, INC.		06/20/2016	Corporation: DELAWARE
SPIDERCLOUD WIRELESS SERVICES, LLC		06/20/2016	Limited Liability Company: DELAWARE
RECEIVING PARTY DATA			
Name:	EASTWARD FUND MANAGEMENT, LLC		
Street Address:	432 Cherry Street		
City:	West Newton		
State/Country:	MASSACHUSETTS		
Postal Code:	02465		
Entity Type:	Limited Liability Company: DELAWARE		
PROPERTY NUMBERS Total: 1			
Property Type	Number	Word Mark	
Registration Number:	3782130	SPIDERCLOUD	
CORRESPONDENCE DATA			
Fax Number:	8585506420		
<i>Correspondence will be sent to the e-mail address first; if that is unsuccessful, it will be sent using a fax number, if provided; if that is unsuccessful, it will be sent via US Mail.</i>			
Phone:	858-550-6403		
Email:	erin.obrien@cooley.com		
Correspondent Name:	Erin O'Brien		
Address Line 1:	c/o Cooley LLP		
Address Line 2:	4401 Eastgate Mall		
Address Line 4:	San Diego, CALIFORNIA 92121		
ATTORNEY DOCKET NUMBER:	318251-102 Eastward SCW		
NAME OF SUBMITTER:	Erin O'Brien		
SIGNATURE:	/Erin O'Brien/		
DATE SIGNED:	06/22/2016		
Total Attachments: 20			
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INTELLECTUAL PROPERTY SECURITY AGREEMENT

This Intellectual Property Security Agreement (this "Agreement") is made as of June 20, 2016, by and among SPIDERCLOUD WIRELESS, INC. and SPIDERCLOUD WIRELESS SERVICES, LLC (each a "Grantor" and together "Grantors") and EASTWARD FUND MANAGEMENT, LLC, a Delaware limited liability company ("Secured Party").

RECITALS

A. Pursuant to that certain Master Lease Agreement No. 646 of even date herewith between Grantors, as co-lessees, and Secured Party, as lender (as amended, restated, supplemented or otherwise modified from time to time, the "Financing Agreement"), Secured Party has agreed to make certain advances of money and to extend certain financial accommodation to Grantors (the "Loans") in the amounts and manner set forth in the Financing Agreement. All capitalized terms used herein without definition shall have the meanings ascribed to them in the Financing Agreement.

B. Secured Party is willing to make the Loans to Grantors, but only upon the condition, among others, that each Grantor shall grant to Secured Party a security interest in substantially all of such Grantor's personal property whether presently existing or hereafter acquired. To that end, Grantors have executed in favor of Secured Party the Financing Agreement granting a security interest in all Collateral, and are executing this Agreement with respect to certain items of Intellectual Property, in particular.

NOW, THEREFORE, THE PARTIES HERETO AGREE AS FOLLOWS:

1. Grant of Security Interest. As collateral security for the prompt and complete payment and performance of all of Grantors' present or future obligations under the Financing Agreement, each Grantor hereby grants a security interest to Secured Party, as security, in and to such Grantor's entire right, title and interest in, to and under the following Intellectual Property, now owned or hereafter acquired by such Grantor or in which such Grantor now holds or hereafter acquires any interest (all of which shall collectively be called the "Collateral" for purposes of this Agreement):

(a) Any and all copyrights, whether registered or unregistered, held pursuant to the laws of the United States, any State thereof or of any other country; all registrations, applications and recordings in the United States Copyright Office or in any similar office or agency of the United States, any State thereof or any other country; all continuations, renewals, or extensions thereof; and any registrations to be issued under any pending applications, including without limitation those set forth on Exhibit A attached hereto (collectively, the "**Copyrights**");

(b) Any letters patent of, or rights corresponding thereto in, the United States or any other country, all registrations and recordings thereof, and all applications for letters patent of, or rights corresponding thereto in, the United States or any other country, including, without limitation, registrations, recordings and applications in the United States Patent and Trademark

Office or in any similar office or agency of the United States, any State thereof or any other country; all reissues, continuations, continuations-in-part or extensions thereof; all petty patents, divisionals, and patents of addition; and all patents to be issued under any such applications, including without limitation the patents and patent applications set forth on Exhibit B attached hereto (collectively, the “Patents”)

(c) All trademarks, trade names, corporate names, business names, trade styles, service marks, logos, other source or business identifiers, prints and labels on which any of the foregoing have appeared or appear, designs and general intangibles of like nature, now existing or hereafter adopted or acquired, all registrations and recordings thereof, and any applications in connection therewith, including, without limitation, registrations, recordings and applications in the United States Patent and Trademark Office or in any similar office or agency of the United States, any State thereof or any other country or any political subdivision thereof, and reissues, extensions or renewals thereof, and the entire goodwill of the business of such Grantor connected with and symbolized by such trademarks, including without limitation those set forth on Exhibit C attached hereto (collectively, the “Trademarks”);

(d) Any and all claims for damages by way of past, present and future infringements of any of the rights included above, with the right, but not the obligation, to sue for and collect such damages for said use or infringement of the intellectual property rights identified above;

(e) All licenses or other rights to use any of the Copyrights, Patents or Trademarks, and all license fees and royalties arising from such use to the extent permitted by such license or rights;

(f) All amendments, renewals and extensions of any of the Copyrights, Trademarks or Patents; and

(g) All proceeds and products of the foregoing, including without limitation all payments under insurance or any indemnity or warranty payable in respect of any of the foregoing.

Notwithstanding the foregoing, the term “Collateral” shall not include: (a) “intent-to-use” trademarks at all times prior to the first use thereof, whether by the actual use thereof in commerce, the recording of a statement of use with the United States Patent and Trademark Office or otherwise, but only to the extent the granting of a security interest in such “intent to use” trademarks would be contrary to applicable law; (b) any contract, instrument or chattel paper in which a Grantor has any right, title or interest if and to the extent such contract, instrument or chattel paper includes a provision containing a restriction on assignment such that the creation of a security interest in the right, title or interest of such Grantor therein would be prohibited and would, in and of itself, cause or result in a default thereunder enabling another person party to such contract, instrument or chattel paper to enforce any remedy with respect thereto; provided, however, that the foregoing exclusion shall not apply if (i) such prohibition has been waived or

such other person has otherwise consented to the creation hereunder of a security interest in such contract, instrument or chattel paper, or (ii) such prohibition would be rendered ineffective pursuant to Sections 9-407(a) or 9-408(a) of the Code, as applicable and as then in effect in any relevant jurisdiction, or any other applicable law (including the Bankruptcy Code or principles of equity); provided further that immediately upon the ineffectiveness, lapse or termination of any such provision, the term "Collateral" shall include, and such Grantor shall be deemed to have granted a security interest in, all its rights, title and interests in and to such contract, instrument or chattel paper as if such provision had never been in effect; and provided further that the foregoing exclusion shall in no way be construed so as to limit, impair or otherwise affect Secured Party's unconditional continuing security interest in and to all rights, title and interests of such Grantor in or to any payment obligations or other rights to receive monies due or to become due under any such contract, instrument or chattel paper and in any such monies and other proceeds of such contract, instrument or chattel paper; (c) any property that is disposed of in accordance with the Financing Agreement; or (d) any deposit accounts used for purposes of payroll, payroll taxes and other employee wage and benefit payments to or for the benefit of any Grantor's employees.

2. Covenants and Warranties. Each Grantor represents, warrants, covenants and agrees as follows:

(a) Such Grantor has rights (as defined in the UCC) in the Collateral, except for Permitted Liens;

(b) During the term of this Agreement, such Grantor will not transfer or otherwise encumber any interest in the Collateral, except for Permitted Liens and except for transfers otherwise permitted under the Financing Agreement;

(c) To its knowledge, each of the Patents is valid and enforceable, and no part of the Collateral has been judged invalid or unenforceable, in whole or in part, and no claim has been made that any part of the Collateral violates the rights of any third party;

(d) Grantors shall deliver to Secured Party within thirty (30) days of the last day of each fiscal quarter, a report signed by Grantors, in form reasonably acceptable to Secured Party, listing (i) any applications or registrations that either Grantor has made or filed in respect of any patents, copyrights or trademarks, (ii) the status of any outstanding applications or registrations and (iii) any material change in the composition of the Collateral;

(e) Each Grantor shall use reasonable commercial efforts to (i) protect, defend and maintain the validity and enforceability of the Trademarks, Patents and Copyrights, (ii) detect infringements of the Trademarks, Patents and Copyrights and promptly advise Secured Party in writing of material infringements detected, and (iii) not allow any material Trademarks, Patents or Copyrights to be abandoned, forfeited or dedicated to the public, in each case unless such Grantor deemed it to be in the best interest of such Grantor's business;

(f) Each Grantor shall apply for registration (to the extent not already registered) with the United States Patent and Trademark Office of the United States Copyright

Office, as applicable: (i) those intellectual property rights listed on Exhibits A, B and C hereto within thirty (30) days of the date of this Agreement; and (ii) those additional intellectual property rights developed or acquired by such Grantor from time to time in connection with any product or service, prior to the sale or licensing of such product or the rendering of such service to any third party (including without limitation revisions or additions to the intellectual property rights listed on such Exhibits A, B and C), except, in each case, with respect to such rights that such Grantor determines in its sole but reasonable commercial judgment need not be registered to protect its own business interests. Each Grantor shall, from time to time, execute and file such other instruments, and take such further actions as Secured Party may reasonably request from time to time to perfect or continue the perfection of Secured Party's interest in the Collateral. Each Grantor shall give Secured Party notice of all such applications or registrations; and

(g) Each Grantor shall not enter into any agreement that would materially impair or conflict with such Grantor's obligations hereunder without Secured Party's prior written consent, which consent shall not be unreasonably withheld. Each Grantor shall not permit the inclusion in any material contract to which it becomes a party of any provisions prohibiting the creation of a security interest in such Grantor's rights and interests in any property included within the definition of the Collateral acquired under such contracts, except for provisions in such material contracts as are referenced in the last paragraph of Section 1 of this Agreement.

3. Further Assurances; Attorney in Fact.

(a) On a continuing basis, Grantors will make, execute, acknowledge and deliver, and file and record in the property filing and recording places in the United States, all such instruments, including appropriate financing and continuation statements and collateral agreements and filings with the United States Patent and Trademark Office and the Register of Copyrights, and take all such action as may reasonably be deemed necessary or advisable, or as reasonably requested by Secured Party, to perfect Secured Party's security interest in all Copyrights, Patents and Trademarks and otherwise to carry out the intent and purposes of this Agreement, or for assuring and confirming to Secured Party the grant or perfection of a security interest in all Collateral.

(b) Each Grantor hereby irrevocably appoints Secured Party as such Grantor's attorney-in-fact, with full authority in the place and stead of such Grantor and in the name of such Grantor, from time to time in Secured Party's discretion, to take any action and to execute any instrument which Secured Party may deem necessary or advisable to accomplish the purposes of this Agreement, including (i) to modify, in its sole discretion, this Agreement without first obtaining such Grantor's approval of or signature to such modification by amending Exhibits A, B and C, hereof, as appropriate, to include reference to any right, title or interest in any Copyrights, Patents or Trademarks acquired by a Grantor after the execution hereof or to delete any reference to any right, title or interest in Copyrights, Patents or Trademarks in which such Grantor no longer has or claims any right, title or interest, (ii) to file, in its sole discretion, one or more financing or

continuation statements and amendments thereto, relative to any of the Collateral without the signature of such Grantor where permitted by law, and (iii) after the occurrence and during the continuance of an Event of Default, to transfer the Collateral into the name of Secured Party or a third party to the extent permitted under the Massachusetts Uniform Commercial Code.

4. Events of Default. The occurrence of any of the following shall constitute an Event of Default under this Agreement:

(a) An Event of Default under the Financing Agreement; or

(b) Grantors breach any warranty or agreement made by Grantors in this Agreement and, as to any breach that is capable of cure, Grantors fail to cure such breach within thirty (30) days of the sooner to occur of Grantors' receipt of notice of such breach from Secured Party or the date on which such breach first becomes known to Grantors.

5. Amendments. This Agreement may be amended only by a written instrument signed by both parties hereto, except for amendments permitted under Section 3 hereof to be made by Secured party alone.

6. Counterparts. This Agreement may be executed in two or more counterparts, each of which shall be deemed an original but all of which together shall constitute the same instrument.

[Signature Pages Follow]

[Signature page to Intellectual Property Security Agreement]

IN WITNESS WHEREOF, the parties hereto have executed this Agreement on the day and year first above written.

Address of Grantor: GRANTOR:
SPIDERCLOUD WIRELESS, INC.

475 Sycamore Drive
Milpitas, CA 95035
Attn: Chief Executive Office

By: 
Name: Thomas Scott
Its: Chief Financial Officer

Address of Grantor: GRANTOR:
SPIDERCLOUD WIRELESS SERVICES, LLC

475 Sycamore Drive
Milpitas, CA 95035
Attn: Chief Executive Office

By: 
Name: Thomas Scott
Its: Chief Financial Officer

Address of Secured Party: SECURED PARTY:
EASTWARD FUND MANAGEMENT, LLC

432 Cherry Street
West Newton, MA 02465
Attn: Dennis P. Cameron

By: _____
Name: Dennis P. Cameron
Its: Authorized Person

[Signature page to Intellectual Property Security Agreement]

IN WITNESS WHEREOF, the parties hereto have executed this Agreement on the day and year first above written.

Address of Grantor:

GRANTOR:
SPIDERCLOUD WIRELESS, INC.

475 Sycamore Drive
Milpitas, CA 95035
Attn: Chief Executive Office

By: _____
Name: Thomas Scott
Its: Chief Financial Officer

Address of Grantor:

GRANTOR:
SPIDERCLOUD WIRELESS SERVICES, LLC


475 Sycamore Drive
Milpitas, CA 95035
Attn: Chief Executive Office

By: _____
Name: Thomas Scott
Its: Chief Financial Officer

Address of Secured Party:

SECURED PARTY:
EASTWARD FUND MANAGEMENT, LLC

432 Cherry Street
West Newton, MA 02465
Attn: Dennis P. Cameron

By: 
Name: Dennis P. Cameron
Its: Authorized Person

TRADEMARK

REEL: 005819 FRAME: 0461

EXHIBIT A

Copyrights

Description	Registration Number	Registration Date
Not applicable		

EXHIBIT B

Patents

Description (Title)	Application No. and Publication No.(if applicable) or Patent No.	Filing Date Priority Date Issued/Status
<u>ISSUED PATENTS</u>		
UMTS RESELECTION PERFORMANCE IN SMALL CELL SYSTEMS (Our Ref. 2016.1)	8,755,802 13/726,991	Filing Date: 12/26/12 Priority Date: 12/26/12 Issued: 6/17/14
HYBRID COORDINATED SCHEDULING SCHEME FOR USE IN A RADIO ACCESS NETWORK (Our Ref. 2016.3)	8,958,809 13/752,372	Filing Date: 1/28/13 Priority Date: 1/28/13 Issued: 2/17/15
HYBRID JOINT PROCESSING FOR USE IN A RADIO ACCESS NETWORK (Our Ref. 2016.4)	9,356,764 13/950,343	Filing Date: 7/25/13 Priority Date: 7/25/13 Issued: 5/31/16
LONG-TERM EVOLUTION ARCHITECTURE AND MOBILITY	8,982,841 13/663,297	Filing Date: 10/29/12 Priority Date: 10/27/11 Issued March 17, 2015
RESOURCE CONTROL IN A COMMUNICATION SYSTEM	8,958,834 13/283,530	Filing Date: 10/27/11 Priority Date: 11/8/10 Issued February 17, 2015
METHOD, SYSTEM AND DEVICE FOR HIGH-SPEED UPLINK PACKET ACCESS SCHEDULING	8,953,529 12/953,330	Issued February 10, 2015

Description (Title)	Application No. and Publication No.(if applicable) or Patent No.	Filing Date Priority Date Issued/Status
METHOD AND APPARATUS FOR TIMING AND/OR FREQUENCY OFFSET MONITORING AND HANDLING	8,917,663 13/306,836	Issued December 23, 2014
METHOD AND APPARATUS FOR TOPOLOGY MANAGEMENT FOR HANDOVERS IN HETEROGENEOUS NETWORKS	8,868,077 13/572,006	Issued October 21, 2014
RAKE RECEIVER METHODS AND APPARATUS	8,798,117 12/549,675	Issued August 5, 2014
METHOD, SYSTEM AND DEVICE FOR CONFIGURING TOPOLOGY OR A WIRELESS NETWORK	8,644,193 12/957,181	Issued February 4, 2014
PACKET ROUTING METHODS AND APPARATUS FOR USE IN A COMMUNICATION SYSTEM	8,634,795 12/603,517	Issued January 21, 2014
DESPREADING METHODS AND APPARATUS	8,494,028 12/609,975	Issued July 23, 2013
METHODS AND APPARATUS FOR PROCESSING UPLINK SIGNALS	8,462,832 12/628,537	Issued June 11, 2013
METHODS AND APPARATUS FOR GENERATING, REPORTING AND USING INTERFERENCE CANCELLATION INFORMATION	8,412,103 12/571,216	Issued April 2, 2013

Description (Title)	Application No. and Publication No.(if applicable) or Patent No.	Filing Date Priority Date Issued/Status
COMMUNICATIONS METHODS AND APPARATUS	8,401,055 12/608,400	Issued March 19, 2013
IDENTIFYING AND CONTROLLING INTERFERENCE FROM WIRELESS TERMINALS	8,391,796 12/571,328	Issued March 5, 2013
SYSTEM AND METHOD FOR FEMTO CELL MANAGEMENT	8,351,920 12/550,299	Issued January 8, 2013
MEASURING COMMUNICATING AND USING INTERFERENCE INFORMATION	8,260,207 12/571,354	Issued September 4, 2012
RAB TRIGGERING FOR MULTIMEDIA CALLS	8,249,058 12/709,406	Issued August 21, 2012
METAL CONTAINING SACRIFICE MATERIAL AND METHOD OF DAMASCENE WIRING FORMATION	8,222,160 12/956,330	Issued July 17, 2012
SYSTEM AND METHOD FOR TELEPHONE EXCHANGE IN FEMTO CELL NETWORKS	8,195,160 12/551,380	Issued June 5, 2012
DYNAMIC TOPOLOGICAL ADAPTATION	8,169,933 12/571, 211	Issued May 1, 2012

Description (Title)	Application No. and Publication No.(if applicable) or Patent No.	Filing Date Priority Date Issued/Status
METHODS AND APPARATUS FOR COORDINATING NETWORK MONITORING AND/OR AUTOMATING DEVICE CONFIGURATIONS BASED ON MONITORING RESULTS	8,077,662 12/487,277	Issued December 13, 2011
APPARATUS AND METHOD FOR AN ERROR MINIMIZING PHASE LOCKED LOOP	6,504,887 09/375,923	Issued January 7, 2003
METHOD AND APPARATUS FOR LOCATION-BASED SERVICES	9,332,391 13/470,099	Issued May 3, 2016
METHOD AND APPARATUS FOR NETWORK ELEMENT DISCOVERY	13/429241	3/23/2012
<u>PENDING APPLICATIONS</u>		
USE OF A COMMON PHYSICAL CELL IDENTITY IN A SMALL CELL NETWORK (Our Ref. 2016.5)	2014/0211690 13/752,358	Filing Date: 1/28/13 Priority Date: 1/28/13 Issued: --- (pending in patent office)
FRACTIONAL FREQUENCY REUSE SCHEMES ASSIGNED TO CLUSTERS OF RADIO NODES IN AN LTE RADIO ACCESS NETWORK (Our Ref. 2016.6)	2015/0133129 14/075,509	Filing Date: 11/8/13 Priority Date: 11/8/13 Issued: --- (pending in patent office)

Description (Title)	Application No. and Publication No.(if applicable) or Patent No.	Filing Date Priority Date Issued/Status
<p>FRACTIONAL FREQUENCY REUSE SCHEMES ASSIGNED TO RADIO NODES IN AN LTE NETWORK (Our Ref. 2016.7)</p>	<p>2015/0131537 14/075,516</p>	<p>Filing Date: 11/8/13 Priority Date: 11/8/13 Issued: --- (pending in patent office)</p>
<p>UPLINK-AWARE SERVING CELL SELECTION</p>	<p>14/031,596</p>	
<p>ENHANCED FEATURES FOR A GATEWAY COORDINATING MULTIPLE SMALL CELL RADIO ACCESS NETWORKS (Our Ref. 2016.8)</p>	<p>15/059,235 (This case incorporates provisional applications 62/127,004, filed March 2, 2015.)</p>	<p>Filing Date: 3/2/16 Priority Date: 3/2/15 Issued: --- (pending in patent office)</p>
<p>ENHANCED FEATURES FOR A GATEWAY COORDINATING MULTIPLE SMALL CELL RADIO ACCESS NETWORKS (Our Ref. 2016.8C1)</p>	<p>15/081,311 (This is a continuation of 15/059,235 and this case incorporates provisional applications 62/127,004, filed March 2, 2015; 62/137,932 filed March 25, 2015; 62/137,942 filed March 25, 2015; 62/137,947 filed March 25, 2015 and 62/137,925 filed March 25, 2015)</p>	<p>Filing Date: 3/25/16 Priority Date: 3/2/15 Issued: --- (pending in patent office)</p>
<p>TOPOLOGY DISCOVERY AND MANAGEMENT AND SON ORCHESTRATION (Our Ref. 2016.11)</p>	<p>15/069,781 (This is a continuation-in-part of 15/059,235 and this case incorporates provisional application 62/132,102, filed March 12, 2015.)</p>	<p>Filing Date: 3/14/16 Priority Date: 3/2/15 Issued: --- (pending in patent office)</p>
<p>LOAD-BASED DYNAMIC FRACTIONAL FREQUENCY REUSE IN AN LTE NETWORK (Our Ref. 2016.2)</p>	<p>2014/0302859 13/859,480</p>	<p>Filing Date: 4/9/13 Priority Date: 4/9/13 Issued: --- (pending in patent office)</p>

Description (Title)	Application No. and Publication No.(if applicable) or Patent No.	Filing Date Priority Date Issued/Status
DYNAMIC PRIMARY SCRAMBLING CODE DISAMBIGUATION	2014/0287759 13/848,564	Filing date March 21, 2013 (pending in patent office)
HITLESS SOFTWARE UPGRADE FOR A VIRTUALIZED GATEWAY COORDINATING MULTIPLE SMALL CELL RADIO ACCESS NETWORKS (Our Ref. 2016.10)	15/069,220 (This case incorporates provisional applications 62/132,094, filed March 12, 2015.)	Filing Date: 3/14/16 Priority Date: 3/12/15 Issued: --- (pending in patent office)
CLOSED-LOOP DOWNLINK TRANSMIT POWER ASSIGNMENTS IN A SMALL CELL RADIO ACCESS NETWORK (Our Ref. 2016.20)	15/043,691	Filing Date: 2/15/16 Priority Date: 2/15/16 Issued: --- (pending in patent office)
SYSTEM AND METHOD FOR CLOSED LOOP UPLINK POWER CONTROL (Our Ref. 2016.12)	15/050,704	Filing Date: 2/23/16 Priority Date: 2/23/16 Issued: --- (pending in patent office)
CONFIGURATION SPACE FEEDBACK AND OPTIMIZATION IN A SELF CONFIGURING COMMUNICATION SYSTEM	2012/0257544 13/440,763	Filing date April 5, 2012 (pending in patent office)
ADAPTIVE PRECISION TIMING CONTROL IN A COMMUNICATION SYSTEM	2012/0136956 13/302,583	Filing date November 22, 2011 (pending in patent office)
<u>PENDING PROVISIONAL APPLICATIONS</u>		

Description (Title)	Application No. and Publication No.(if applicable) or Patent No.	Filing Date Priority Date Issued/Status
LTE-U WITH BEST-EFFORT LBT (Our Ref. 2016.19P)	62/236,311	Filing Date: 10/2/15 Priority Date: 10/2/15 Pending
METHODS FOR CENTRALIZED CHANNEL SELECTION ACROSS DIFFERENT CELLS IN A RADIO ACCESS NETWORK (Our Ref.: 2016.21P)	62/295,214	Filing Date: 2/15/16 Priority Date:2/15/16 Pending
UE-MEASUREMENT ASSISTED CLOSED LOOP LEARNING APPROACH FOR REAL-TIME OPTIMIZATION OF SYSTEM METRICS (Our Ref.: 2016.22P)	62/295,220	Filing Date: 2/15/16 Priority Date: 2/15/16 Pending
ACTIVE NETWORK DISCOVERY AND OPTIMIZATION IN UNLICENSED CHANNELS (Our Ref.: 2016.23P)	62/297,199	Filing Date: 2/19/16 Priority Date: 2/19/16 Pending
RAN SHARING VIA VIRTUAL ENBS (Our Ref.: 2016.24P)	62/342,788	Filing Date: 5/27/16 Priority Date: 5/27/16 Pending
DEMAND DRIVEN RESOURCE MANAGEMENT METHODS FOR VIRTUALIZED RADIO ACCESS NETWORKS (Our Ref. 2016.14)	62/137,913	Filing Date: 3/25/15 Priority Date: 3/25/15 Expired- Not Converted - subject matter included in other cases

Description (Title)	Application No. and Publication No.(if applicable) or Patent No.	Filing Date Priority Date Issued/Status
COORDINATED SON IN A SMALL CELL NETWORK (Our Ref. 2016.13)	62/137,905	Filing Date: 3/25/15 Priority Date: 3/25/15 Expired- Not Converted – subject matter included in other cases
<u>PCT APPLICATIONS</u>		
DYNAMIC PRIMARY SCRAMBLING CODE DISAMBIGUATION	PCT US2014031515	03/21/2014
CONFIGURATION SPACE FEEDBACK AND OPTIMIZATION IN A SELF CONFIGURING COMMUNICATION SYSTEM	PCT US2012032393	04/05/2012
METHOD AND APPARATUS FOR TOPOLOGY MANAGEMENT FOR HANDOVERS IN HETEROGENEOUS NETWORKS	PCT US2012050395	08/10/2012

Description (Title)	Application No. and Publication No.(if applicable) or Patent No.	Filing Date Priority Date Issued/Status
METHOD AND DEVICE FOR CONDITIONAL ACCESS	PCT US2011047883	08/16/2011
RAB TRIGGERING FOR MULTIMEDIA CALLS	PCT US2011025516	02/18/2011
METHOD, SYSTEM AND DEVICE FOR CONFIGURING TOPOLOGY OF A WIRELESS NETWORK	PCT US2010058427	11/30/2010
HANDOFF IN A SELF CONFIGURING COMMUNICATION SYSTEM	PCT US2010058436	11/30/2010
METHOD, SYSTEM AND DEVICE FOR HIGH SPEED UPLINK PACKET ACCESS SCHEDULING	PCT US2010057881	11/23/2010
SYSTEM AND METHOD FOR ORGANIZING A NETWORK	PCT US2010025275	02/24/2010
PACKET ROUTING METHODS AND APPARATUS IN A COMMUNICATION SYSTEM	PCT US2009061560	10/21/2009
ADDRESSING METHODS AND APPARATUS FOR USE IN A COMMUNICATION SYSTEM	PCT US2009061557	10/21/2009

Description (Title)	Application No. and Publication No.(if applicable) or Patent No.	Filing Date Priority Date Issued/Status
METHOD FOR ENCAPSULATING FEMTOCELL TRAFFIC	PCT US2009060556	10/13/2009
HANDOFF PROCEDURES AND INTRA-NETWORK DATA ROUTING FOR FEMTOCELL NETWORKS	PCT US2009059139	09/30/2009
DYNAMIC TOPOLOGICAL ADAPTATION	PCT US2009059138	09/30/2009
METHODS AND APPARATUS FOR GENERATING, REPORTING AND/OR USING INTERFERENCE CANCELLATION INFORMATION	PCT US2009059140	09/30/2009
METHODS AND APPARATUS FOR COORDINATING NETWORK MONITORING AND/OR AUTOMATING DEVICE CONFIGURATIONS BASED ON MONITORING RESULTS	PCT US2009047713	06/17/2009
FRACTIONAL FREQUENCY REUSE SCHEMES ASSIGNED TO RADIO NODES IN AN LTE NETWORK (Our Ref. 2016.7PCT)	PCT/US14/64488 (First Stage of International Filing)	Filing Date: 11/7/14 Priority Date: 11/8/13 Expired (US Protection Pursued only)
TOPOLOGY DISCOVERY AND MANAGEMENT AND SON ORCHESTRATION (Our Ref.: 2016.11PCT)	PCT/US16/22372 (First Stage of International Filing)	Filing Date: 3/14/16 Priority Date: 3/12/15 Issued: --- (pending in patent office)

Description (Title)	Application No. and Publication No.(if applicable) or Patent No.	Filing Date Priority Date Issued/Status
<u>PENDING NATIONAL STAGE CASES</u>		
METHODS AND APPARATUS FOR COORDINATING NETWORK MONITORING AND/OR AUTOMATING DEVICE CONFIGURATIONS BASED ON MONITORING RESULTS	(CANADA) 2,727,446	
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EXHIBIT C

Trademarks

Description	U.S. Registration/Application Number	Registration/Application Date
SPIDERCLOUD	3,782,130 / 77/602,340	April 27, 2010 / Oct. 28, 2008

Description	E.U. Registration/Application Number	Registration/Application Date
SPIDERCLOUD	007370927 / 007370927	June 10, 2009 / Nov. 5, 2008