

## PATENT ASSIGNMENT COVER SHEET

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<b>Name</b>	<b>Execution Date</b>
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<b>PROPERTY NUMBERS Total: 1</b>	
<b>Property Type</b>	<b>Number</b>
<b>Application Number:</b>	15618669
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<b>ATTORNEY DOCKET NUMBER:</b>	IPW2-USCN212644
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<b>DATE SIGNED:</b>	07/03/2018
<b>Total Attachments: 7</b>	
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## ASSIGNMENT OF PATENT RIGHTS

For good and valuable consideration, the receipt of which is hereby acknowledged, Intellectual Ventures Holding 81 LLC, a Nevada limited liability company having offices at 7251 W Lake Mead Blvd, Ste 300, Las Vegas, NV 89128 (“*Assignor*”), does hereby sell, assign, transfer, and convey unto Intellectual Ventures II LLC, a Delaware limited liability company, having an address at 2711 Centerville Road, Suite 400, Wilmington, DE 19808 (“*Assignee*”), or its designees, all right, title, and interest that exist today and may exist in the future in and to any and all of the following (collectively, the “*Patent Rights*”):

(a) the provisional patent applications, patent applications and patents listed in the table below (the “*Patents*”);

<u>Patent No.</u> <u>(Application No.)</u>	<u>Country</u>	<u>Issue Date</u> <u>(Filing Date)</u>	<u>Title of Patent and First</u> <u>Named Inventor</u>
DE602005031400.8 (DE602005031400.8)	DE	11/23/2011 (8/10/2005)	Combined open loop/closed loop power control in a wireless communication system Nicholas William Anderson
CN201210073572.3	CN	8/10/2005	Combined open loop/closed loop power control in a wireless communication system Nicholas William Anderson
CN201210074049.2	CN	8/10/2005	Combined open loop/closed loop power control in a wireless communication system Nicholas William Anderson
CN201410049642.0	CN	8/10/2005	Combined open loop/closed loop power control in a wireless communication system Nicholas William Anderson
CN201410049641.6	CN	8/10/2005	Combined open loop/closed loop power control in a wireless communication system Nicholas William Anderson
KR10-1183074 (KR10-2012-7004526)	KR	9/10/2012 (8/10/2005)	Power control in a wireless communication system Nicholas William Anderson
KR10-1244958 (KR10-2012-7004519)	KR	3/12/2013 (8/10/2005)	Power control in a wireless communication system Nicholas William Anderson

<u>Patent No.</u> <u>(Application No.)</u>	<u>Country</u>	<u>Issue Date</u> <u>(Filing Date)</u>	<u>Title of Patent and First</u> <u>Named Inventor</u>
KR10-1269726 (KR10-2012-7004514)	KR	5/24/2013 (8/10/2005)	Power control in a wireless communication system Nicholas William Anderson
KR10-1261329 (KR10-2012-7020771)	KR	4/30/2013 (8/10/2005)	Power control in a wireless communication system Nicholas William Anderson
8983522 (13/726976)	US	3/17/2015 (12/26/2012)	POWER CONTROL IN A WIRELESS NETWORK Nicholas William Anderson
9055586 (13/727153)	US	6/9/2015 (12/26/2012)	POWER CONTROL IN A WIRELESS NETWORK Nicholas William Anderson
14/713719	US	5/15/2015	POWER CONTROL IN A WIRELESS NETWORK Nicholas William Anderson
CNZL200580027091.7 (CN200580027091.7)	CN	3/12/2014 (8/10/2005)	Combined open loop/closed loop power control in a wireless communication system Nicholas William Anderson
DE602005032651.0 (DE602005032651.0)	DE	2/8/2012 (8/10/2005)	Methods for combined open loop/closed loop power control in a wireless communication system, corresponding base station and remote transceiver Nicholas William Anderson
ES2379272 (ES05801370.7)	ES	11/23/2011 (8/10/2005)	Combined open loop/closed loop power control in a wireless communication system Nicholas William Anderson
FR1779545 (FR05801370.7)	FR	11/23/2011 (8/10/2005)	Combined open loop/closed loop power control in a wireless communication system Nicholas William Anderson
FR2271155 (FR10185576.5)	FR	2/8/2012 (8/10/2005)	Methods for combined open loop/closed loop power control in a wireless communication system, corresponding base station and remote transceiver Nicholas William Anderson

<u>Patent No.</u> <u>(Application No.)</u>	<u>Country</u>	<u>Issue Date</u> <u>(Filing Date)</u>	<u>Title of Patent and First</u> <u>Named Inventor</u>
GB1779545 (GB05801370.7)	GB	11/23/2011 (8/10/2005)	Combined open loop/closed loop power control in a wireless communication system Nicholas William Anderson
GB2271155 (GB10185576.5)	GB	2/8/2012 (8/10/2005)	Methods for combined open loop/closed loop power control in a wireless communication system, corresponding base station and remote transceiver Nicholas William Anderson
IT1779545 (IT05801370.7)	IT	11/23/2011 (8/10/2005)	Combined open loop/closed loop power control in a wireless communication system Nicholas William Anderson
IT2271155 (IT10185576.5)	IT	2/8/2012 (8/10/2005)	Methods for combined open loop/closed loop power control in a wireless communication system, corresponding base station and remote transceiver Nicholas William Anderson
JP5319115 (JP2007-525302)	JP	7/19/2013 (8/10/2005)	Combined open loop/closed loop power control in a wireless communication system Nicholas William Anderson
JP5357949 (JP2011-234218)	JP	9/6/2013 (8/10/2005)	COMBINED OPEN LOOP/CLOSED LOOP POWER CONTROL IN A WIRELESS COMMUNICATION SYSTEM Nicholas William Anderson
KR10-1182174 (KR10-2007-7005478)	KR	9/6/2012 (8/10/2005)	Power control in a wireless communication system Nicholas William Anderson
NL1779545 (NL05801370.7)	NL	11/23/2011 (8/10/2005)	Combined open loop/closed loop power control in a wireless communication system Nicholas William Anderson

<u>Patent No.</u> <u>(Application No.)</u>	<u>Country</u>	<u>Issue Date</u> <u>(Filing Date)</u>	<u>Title of Patent and First</u> <u>Named Inventor</u>
NL2271155 (NL10185576.5)	NL	2/8/2012 (8/10/2005)	Methods for combined open loop/closed loop power control in a wireless communication system, corresponding base station and remote transceiver Nicholas William Anderson
SE1779545 (SE05801370.7)	SE	11/23/2011 (8/10/2005)	Combined open loop/closed loop power control in a wireless communication system Nicholas William Anderson
SE2271155 (SE10185576.5)	SE	2/8/2012 (8/10/2005)	Methods for combined open loop/closed loop power control in a wireless communication system, corresponding base station and remote transceiver Nicholas William Anderson
8897828 (10/917968)	US	11/25/2014 (8/12/2004)	Power control in a wireless communication system Nicholas William Anderson
DE602007025707.7 (DE602007025707.7)	DE	9/26/2012 (4/27/2007)	Mapping services to radio bearers and allocating bandwidth to the radio bearers according to weight values Timothy Speight
CNZL200780021662.5 (CN200780021662.5)	CN	1/2/2013 (4/27/2007)	Mapping services to radio bearers and allocating bandwidth to the radio bearers according to weight values Timothy Speight
FR2027681 (FR07728609.4)	FR	9/26/2012 (4/27/2007)	Mapping services to radio bearers and allocating bandwidth to the radio bearers according to weight values Timothy Speight
GB2027681 (GB07728609.4)	GB	9/26/2012 (4/27/2007)	Mapping services to radio bearers and allocating bandwidth to the radio bearers according to weight values Timothy Speight
JP4966371 (JP2009-508323)	JP	4/6/2012 (4/27/2007)	Mapping services to radio bearers and allocating bandwidth to the radio bearers according to weight values Timothy Speight

<u>Patent No.</u> <u>(Application No.)</u>	<u>Country</u>	<u>Issue Date</u> <u>(Filing Date)</u>	<u>Title of Patent and First</u> <u>Named Inventor</u>
KR10-1118339 (KR10-2008-7029455)	KR	2/13/2012 (4/27/2007)	Mapping services to radio bearers and allocating bandwidth to the radio bearers according to weight values Timothy Speight
KR10-1182175 (KR10-2011-7025396)	KR	9/6/2012 (4/27/2007)	Mapping services to radio bearers and allocating bandwidth to the radio bearers according to weight values Timothy Speight
NL2027681 (NL07728609.4)	NL	9/26/2012 (4/27/2007)	Mapping services to radio bearers and allocating bandwidth to the radio bearers according to weight values Timothy Speight
SE2027681 (SE07728609.4)	SE	9/26/2012 (4/27/2007)	Mapping services to radio bearers and allocating bandwidth to the radio bearers according to weight values Timothy Speight
8005041 (11/430421)	US	8/23/2011 (5/8/2006)	Wireless communication system, apparatus for supporting data flow and method therefor Timothy J. Speight
8428026 (13/212843)	US	4/23/2013 (8/18/2011)	SCHEDULING DATA TRANSMISSIONS IN A WIRELESS NETWORK Timothy J. Speight
13/858666	US	4/8/2013	SCHEDULING DATA TRANSMISSIONS IN A WIRELESS NETWORK Timothy J. Speight

(b) all patents and patent applications (i) to which any of the Patents directly or indirectly claims priority, and/or (ii) for which any of the Patents directly or indirectly forms a basis for priority;

(c) all reissues, reexaminations, extensions, continuations, continuations in part, continuing prosecution applications, requests for continuing examinations, divisions, registrations of any item in any of the foregoing categories (a) and (b);

(d) all foreign patents, patent applications, and counterparts relating to any item in any of the foregoing categories (a) through (c), including, without limitation, certificates of invention, utility models, industrial design protection, design patent protection, and other governmental grants or issuances;

(e) all items in any of the foregoing in categories (b) through (d), whether or not expressly listed as Patents above and whether or not claims in any of the foregoing have been rejected, withdrawn, cancelled, or the like;

(f) inventions, invention disclosures, and discoveries described in any of the Patents and/or any item in the foregoing categories (b) through (e) that (i) are included in any claim in the Patents and/or any item in the foregoing categories (b) through (e), (ii) are subject matter capable of being reduced to a patent claim in a reissue or reexamination proceeding brought on any of the Patents and/or any item in the foregoing categories (b) through (e), and/or (iii) could have been included as a claim in any of the Patents and/or any item in the foregoing categories (b) through (e);

(g) all rights to apply in any or all countries of the world for patents, certificates of invention, utility models, industrial design protections, design patent protections, or other governmental grants or issuances of any type related to any item in any of the foregoing categories (a) through (f), including, without limitation, under the Paris Convention for the Protection of Industrial Property, the International Patent Cooperation Treaty, or any other convention, treaty, agreement, or understanding;

(h) all claims, causes of action (whether known or unknown or whether currently pending, filed, or otherwise) and other enforcement rights under, or on account of, any of the Patents and/or any item in any of the foregoing categories (b) through (g), including, without limitation, all claims, causes of action and other enforcement rights for

- (1) damages,
- (2) injunctive relief, and
- (3) any other remedies of any kind

for past, current, and future infringement; and

(i) all rights to collect royalties and other payments under or on account of any of the Patents and/or any item in any of the foregoing categories (b) through (h).

Assignee hereby accepts any and all of the aforementioned assignments.

Assignor represents, warrants and covenants that:

(1) Assignor has the full power and authority, and has obtained all third party consents, approvals and/or other authorizations required to enter into this Agreement and to carry out its obligations hereunder, including the assignment of the Patent Rights to Assignee; and

(2) Assignor owns, and by this document assigns to Assignee, all right, title, and interest to the Patent Rights, including, without limitation, all right, title, and interest to sue for



infringement of the Patent Rights. Assignor has obtained and properly recorded previously executed assignments for the Patent Rights as necessary to fully perfect its rights and title therein in accordance with governing law and regulations in each respective jurisdiction. The Patent Rights are free and clear of all liens, claims, mortgages, security interests or other encumbrances, and restrictions. There are no actions, suits, investigations, claims or proceedings threatened, pending or in progress relating in any way to the Patent Rights. There are no existing contracts, agreements, options, commitments, proposals, bids, offers, or rights with, to, or in any person to acquire any of the Patent Rights.

Assignor hereby authorizes the respective patent office or governmental agency in each jurisdiction to issue any and all patents, certificates of invention, utility models or other governmental grants or issuances that may be granted upon any of the Patent Rights in the name of Assignee, as the assignee to the entire interest therein.

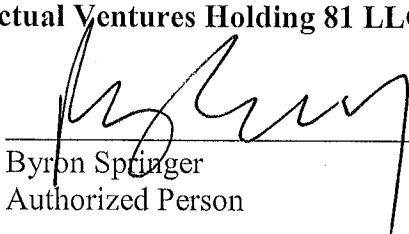
Assignor will, at the reasonable request of Assignee, do all things necessary, proper, or advisable, including without limitation, the execution, acknowledgment, and recordation of specific assignments, oaths, declarations, and other documents on a country-by-country basis, to assist Assignee in obtaining, perfecting, sustaining, and/or enforcing the Patent Rights.

The terms and conditions of this Assignment of Patent Rights will inure to the benefit of Assignee, its successors, assigns, and other legal representatives and will be binding upon Assignor, its successors, assigns, and other legal representatives.

IN WITNESS WHEREOF this Assignment of Patent Rights is executed at 10:00 am on September 1, 2015.

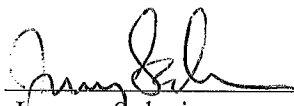
**ASSIGNOR:**

**Intellectual Ventures Holding 81 LLC**

By:   
Name: Byron Springer  
Title: Authorized Person

**ASSIGNEE:**

**Intellectual Ventures II LLC**

By:   
Name: Jeremy Salesin  
Title: Authorized Person