

## PATENT ASSIGNMENT

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SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT
CONVEYING PARTY DATA	
Name	Execution Date
Pulse-LINK, Inc.	05/30/2012
RECEIVING PARTY DATA	
Name:	Intellectual Ventures Holding 73 LLC
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State/Country:	NEVADA
Postal Code:	89128
PROPERTY NUMBERS Total: 2	
Property Type	Number
Application Number:	13317177
Application Number:	13317224
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NAME OF SUBMITTER:	Paul S. Hunter
Total Attachments: 11	
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# **ASSIGNMENT OF PATENT RIGHTS**

For good and valuable consideration, the receipt of which is hereby acknowledged, Pulse-LINK, Inc., debtor in possession, a Delaware corporation, with an office at 2270-E Camino Vida Roble, Carlsbad, CA 92011 ("**Assignor**"), does hereby sell, assign, transfer, and convey unto Intellectual Ventures Holding 73 LLC, a Nevada limited liability company, with an address at 7251 W Lake Mead Blvd, Ste 300, Las Vegas, NV 89128 ("**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 or Application No.</u>	<u>Country</u>	<u>Filing Date</u>	<u>Title of Patent and First Named Inventor</u>
6996075	US	12/21/2000	Pre-testing and certification of multiple access codes  John H. Santhoff
6947492	US	03/09/2001	Encoding and decoding ultra-wideband information  John H. Santhoff
6937674	US	03/09/2001	Mapping radio-frequency noise in an ultra-wideband communication system  John H. Santhoff
6907244	US	03/12/2001	Hand-off between ultra-wideband cell sites  John H. Santhoff
7397867	US	09/02/2004	Mapping radio-frequency spectrum in a communication system  Steve Moore
7349485	US	04/27/2005	Mapping radio-frequency noise in an ultra-wideband communication system  John H. Santhoff
EP05783328.7	EP	08/09/2005	Mapping radio-frequency spectrum in a communication system  John Santhoff

<u>Patent or Application No.</u>	<u>Country</u>	<u>Filing Date</u>	<u>Title of Patent and First Named Inventor</u>
PCT/US2003/027592	WO	09/03/2003	Unable to Verify Unable to Verify
6836226	US	11/12/2002	Ultra-wideband pulse modulation system and method Steven A. Moore
6781530	US	12/29/2003	Ultra-wideband pulse modulation system and method Steven A. Moore
6836223	US	12/29/2003	Ultra-wideband pulse modulation system and method Steven A. Moore
6919838	US	11/08/2002	Ultra-wideband imaging system John H. Santhoff
6952456	US	06/21/2000	Ultra wide band transmitter Roberto Aiello
6980613	US	11/21/2003	Ultra-wideband correlating receiver Ivan Krivokapic
7027483	US	06/06/2003	Ultra-wideband communication through local power lines John Santhoff
7167525	US	12/23/2003	Ultra-wideband communication through twisted-pair wire media John Santhoff
7486742	US	10/25/2007	Optimization of ultra-wideband communication through a wire medium John Santhoff

<u>Patent or Application No.</u>	<u>Country</u>	<u>Filing Date</u>	<u>Title of Patent and First Named Inventor</u>
IL164965	IL	06/10/2003	Ultra-wideband communication through a wire medium  John Santhoff
JP2007-515069	JP	04/05/2005	Ultra-wideband communication through a wire medium  John Santhoff
MXPA04012583	MX	06/10/2003	Ultra-wideband communication through a wire medium  John Santhoff
7023833	US	09/10/1999	Baseband wireless network for isochronous communication  Roberto Aiello
7031294	US	09/07/2001	Baseband wireless network for isochronous communication  Roberto Aiello
8031690	US	06/14/2005	Ultra wide band communication network  Roberto Aiello
6275544	US	11/03/1999	Baseband receiver apparatus and method  Roberto Aiello
7480324	US	08/23/2004	Ultra wide band communication systems and methods  Roberto Aiello
7403576	US	03/26/2004	Systems and methods for receiving data in a wireless communication network  Ismail Lakkis
7352806	US	03/26/2004	Systems and methods for transmitting data in a wireless communication network

<u>Patent or Application No.</u>	<u>Country</u>	<u>Filing Date</u>	<u>Title of Patent and First Named Inventor</u>
			Ismail Lakkis
7257156	US	09/23/2004	Systems and methods for equalization of received signals in a wireless communication network
			Ismail Lakkis
7349439	US	10/08/2004	Ultra-wideband communication systems and methods
			Ismail Lakkis
7391815	US	10/12/2004	Systems and methods to recover bandwidth in a communication system
			Ismail Lakkis
7450637	US	10/13/2004	Ultra-wideband communication apparatus and methods
			Ismail Lakkis
8045935	US	02/09/2005	High data rate transmitter and receiver
			Ismail Lakkis
7929596	US	10/25/2007	Ultra-wideband communication apparatus and methods
			Ismail Lakkis
CN200680004378.2	CN	01/26/2006	High data rate transmitter and receiver
			Ismail Lakkis
IN1501/kolnp/2007	IN	10/04/2005	Ultra-wideband communication apparatus and methods
			Ismail Lakkis
7406647	US	09/27/2004	Systems and methods for forward error correction in a wireless communication

<u>Patent or Application No.</u>	<u>Country</u>	<u>Filing Date</u>	<u>Title of Patent and First Named Inventor</u>
			network Ismail Lakkis
7349478	US	11/12/2004	Ultra-wideband communication apparatus and methods Ismail Lakkis
EP05723727.3	EP	02/23/2005	Systems and methods for implementing an open loop architecture in a wireless communication network Ismail Lakkis
7483483	US	11/08/2004	Ultra-wideband communication apparatus and methods Ismail Lakkis
JP2007-523548	JP	04/27/2005	Common signaling method and apparatus Steve A. Moore
6782048	US	06/21/2002	Ultra-wideband communication through a wired network John Santhoff
AT1516434	AT	06/10/2003	Ultra-wideband communication through a wired network John Santhoff
DE60339489.2	DE	06/10/2003	Ultra-wideband communication through a wired network John Santhoff
FR1516434	FR	06/10/2003	Ultra-wideband communication through a wired network John Santhoff
GB1516434	GB	06/10/2003	Ultra-wideband

<u>Patent or Application No.</u>	<u>Country</u>	<u>Filing Date</u>	<u>Title of Patent and First Named Inventor</u>
			communication through a wired network  John Santhoff
IN01699/2004	IN	06/10/2003	Ultra-wideband communication through a wire network  John Santhoff
LU1516434	LU	06/10/2003	Ultra-wideband communication through a wired network  John Santhoff
MXPA04012593	MX	06/10/2003	Ultra-wideband communication through a wire network  John Santhoff
NL1516434	NL	06/10/2003	Ultra-wideband communication through a wired network  John Santhoff
6944148	US	09/10/1999	Apparatus and method for managing variable-sized data slots within a time division multiple access frame  Stephan W. Gehring
09/480837	US	01/10/2000	Apparatus and method for managing variable-sized data slots with timestamp counters within a TDMA frame  Stephan W. Gehring
10/449789	US	05/30/2003	Ultra-wideband communication system and method  John Santhoff
11/037786	US	01/18/2005	Ultra-wideband communication system and method



<u>Patent or Application No.</u>	<u>Country</u>	<u>Filing Date</u>	<u>Title of Patent and First Named Inventor</u>
			John Santhoff
7339883	US	09/15/2003	Ultra-wideband communication protocol
			John Santhoff
EP04812994.4	EP	12/03/2004	Common signaling method
			John Santhoff
IN1326/KOLNP/2007	IN	09/27/2005	Buffered waveforms for high speed digital to analog conversion
			John Santhoff
7031371	US	09/25/2000	CDMA/TDMA communication method and apparatus for wireless communication using cyclic spreading codes
			Ismail A. Lakkis
7339955	US	10/08/2004	TDMA communication method and apparatus using cyclic spreading codes
			Ismail Lakkis
CN200680031122.0	CN	07/10/2006	Ultra-wideband communications system and method
			John Eldon
7353436	US	07/21/2004	Synchronization code methods
			Ali Taha
6597683	US	09/10/1999	Medium access control protocol for centralized wireless network communication management
			Stephan Gehring
6246377	US	08/27/1999	Antenna comprising two separate wideband notch regions on one coplanar substrate

<u>Patent or Application No.</u>	<u>Country</u>	<u>Filing Date</u>	<u>Title of Patent and First Named Inventor</u>
			G. Roberto Aiello
6292153	US	10/19/2000	Antenna comprising two wideband notch regions on one coplanar substrate  G. Roberto Aiello
6895034	US	07/02/2002	Ultra-wideband pulse generation system and method  Patrick O'Neal Nunally
6970448	US	06/21/2000	Wireless TDMA system and method for network communications  Carlton Sparrell
7035246	US	03/13/2001	Maintaining a global time reference among a group of networked devices  James L. Taylor
7145961	US	08/28/2003	Ultra wideband transmitter  David Carbonari
6992609	US	09/17/2004	Digital to analog converter  Denis Zelenin
7358901	US	10/18/2005	Antenna system and apparatus  Paul Eberhardt
13/317177	US	10/12/2011	High Data Rate Transmitter and Receiver  Ismail Lakkis
13/317224	US	10/12/2011	High Data Rate Transmitter and Receiver  Ismail Lakkis

(b) all patents and patent applications (i) to which any of the Patents directly or indirectly claims priority, (ii) for which any of the Patents directly or indirectly forms a basis for priority, and/or (iii) that were co-owned applications that incorporate by reference, or are incorporated by reference into, the Patents;

(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 below 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 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 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).

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 and without demanding any further consideration therefore, 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 San Diego  
on 5-30-2012.

**ASSIGNOR:**

**Pulse-LINK, Inc., debtor in possession**

By:   
Name: John Santhoff  
Title: CEO  
(Signature MUST be attested)

**ATTESTATION OF SIGNATURE PURSUANT TO 28 U.S.C. § 1746**

The undersigned witnessed the signature of John Santhoff to the above Assignment of Patent Rights on behalf of Pulse-LINK, Inc., debtor in possession and makes the following statements:

1. I am over the age of 18 and competent to testify as to the facts in this Attestation block if called upon to do so.

2. John Santhoff is personally known to me (or proved to me on the basis of satisfactory evidence) and appeared before me on May 30, 2012 to execute the above Assignment of Patent Rights on behalf of Pulse-LINK, Inc., debtor in possession.

3. John Santhoff subscribed to the above Assignment of Patent Rights on behalf of Pulse-LINK, Inc., debtor in possession.

I declare under penalty of perjury under the laws of the United States of America that the statements made in the three (3) numbered paragraphs immediately above are true and correct.

EXECUTED on May 30, 2012 (date)

Patricia Sayles  
Print Name: Patricia Sayles