

## PATENT ASSIGNMENT COVER SHEET

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<b>SUBMISSION TYPE:</b>	NEW ASSIGNMENT
<b>NATURE OF CONVEYANCE:</b>	ASSIGNMENT
<b>CONVEYING PARTY DATA</b>	
<b>Name</b>	<b>Execution Date</b>
KENNETH KERPEZ	03/26/2015
GEORGE GINIS	04/13/2015
MARC GOLDBURG	03/28/2015
ARDAVAN MALEKI TEHRANI	04/14/2015
<b>RECEIVING PARTY DATA</b>	
<b>Name:</b>	ADAPTIVE SPECTRUM AND SIGNAL ALIGNMENT, INC.
<b>Street Address:</b>	333 TWIN DOLPHIN DRIVE
<b>City:</b>	REDWOOD CITY
<b>State/Country:</b>	CALIFORNIA
<b>Postal Code:</b>	94065-1417
<b>PROPERTY NUMBERS Total: 1</b>	
<b>Property Type</b>	<b>Number</b>
<b>PCT Number:</b>	US2012060115
<b>CORRESPONDENCE DATA</b>	
<b>Fax Number:</b>	(503)439-6073
<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>	
<b>Phone:</b>	503 439-8778
<b>Email:</b>	Lisa_Bennett@BSTZ.com
<b>Correspondent Name:</b>	BLAKELY SOKOLOFF TAYLOR & ZAFMAN
<b>Address Line 1:</b>	1279 OAKMEAD PARKWAY
<b>Address Line 4:</b>	SUNNYVALE, CALIFORNIA 94085-4040
<b>ATTORNEY DOCKET NUMBER:</b>	8241P074PCT
<b>NAME OF SUBMITTER:</b>	GREGORY D. CALDWELL
<b>SIGNATURE:</b>	/Gregory D. Caldwell/
<b>DATE SIGNED:</b>	07/09/2015
<b>Total Attachments: 6</b>	
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## **ASSIGNMENT**

In consideration of good and valuable consideration, the receipt of which is hereby acknowledged, I/we, the undersigned inventor(s):

**Kenneth KERPEZ; George GINIS; Marc GOLDBURG; Ardavan Maleki TEHRANI**

hereby sell, assign, and transfer to

### **Adaptive Spectrum and Signal Alignment, Inc.**

a Corporation of California, having a principal place of business at 333 Twin Dolphin Drive, Redwood City, California 94065-1417 United States ("Assignee"), and its successors, assigns, and legal representatives, the entire right, title, and interest for the United States and all other countries, in and to any and all inventions and improvements that are disclosed in the application for the patent entitled:

#### **MANAGEMENT SYSTEM AND METHODS OF MANAGING TIME-DIVISION DUPLEX (TDD) TRANSMISSION OVER COPPER**

**(I/we hereby authorize and request my attorney, associated with customer number 08791, to insert on the designated lines below, the filing date and application number of said application when known.)**

which was filed on October 12, 2012 as

International Application Number PCT/US2012/060115 and

which has been executed by the undersigned prior hereto or concurrently herewith on the date(s) indicated below,

and in and to said application and all Additional Applications, and all other patent applications that have been or shall be filed in the United States and all other countries and international filing offices on any of said inventions and improvements; and in and to all original and reissued patents that have been or shall be issued in the United States and all other countries and international filing offices on said inventions and improvements; and in and to all rights of priority resulting from the filing of said applications; as used herein "Additional Applications" includes but is not limited to design, utility, utility model, divisional, continuing, continuation-in-part, substitute, renewal, reissue, and national phase applications on said inventions and improvements;

and agree that said Assignee may apply for and receive a patent or patents for said inventions and improvements in its own name; and that, when requested, without charge to, but at the expense of, said Assignee, its successors, assigns, and legal representatives, to carry out in good faith the intent and purpose of this Assignment, the undersigned will execute all Additional Applications, and all other patent applications on any and all said inventions and improvements; execute all rightful oaths, assignments, powers of attorney, and other papers; communicate to said Assignee, its successors, assigns, and legal representatives all facts known to the undersigned relating to said inventions and improvements and the history thereof; and generally assist said Assignee, its successors, assigns, or legal representatives in securing and maintaining proper patent protection for said inventions and improvements and for vesting title to said inventions and improvements, and all applications for patents and all patents on said improvements, in said Assignee, its successors, assigns, and legal representatives; and

covenant with said Assignee, its successors, assigns, and legal representatives that no assignment, grant, mortgage, license, or other agreement affecting the rights and property herein conveyed has been made to others by the undersigned, and that full right to convey the same as herein expressed is possessed by the undersigned.

**Each Inventor: Please Sign and Date Below:**

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MARCH 26, 2015   
Date Name: Kenneth KERPEZ

\_\_\_\_\_  
Date Name: George GINIS

\_\_\_\_\_  
Date Name: Marc GOLDBURG

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Date Name: Ardavan Maleki TEHRANI

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Date Name:

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Date Name: Kenneth KERPEZ

4/13/2015 \_\_\_\_\_  
Date Name: George GINIS

\_\_\_\_\_  
Date Name: Marc GOLDBURG

4/14/2015 \_\_\_\_\_  
Date Name: Ardavan Maleki TEHRANI

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Date \_\_\_\_\_ Name: **Kenneth KERPEZ**

Date \_\_\_\_\_ Name: **George GINIS**

20 March 2015 \_\_\_\_\_

Date \_\_\_\_\_ Name: **Marc GOLDBURG**

Date \_\_\_\_\_ Name: **Ardavan Maleki TEHRANI**

Date \_\_\_\_\_ Name: \_\_\_\_\_

Date \_\_\_\_\_ Name: \_\_\_\_\_

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