Based on FORM PTO-1595 (Rev. 08/05) as modified by Blakely, Sokoloff, Taylor & Zafman (wir) 11/30/2005

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John M. Cioffi; Wonjong Rhee; Georgios Ginis; Sumanth Jagannathan; Peter Joshua Silverman; Mehdi Mohseni	Name: Adaptive Spectrum and Signal Alignment, Inc.			
Additional name(s) of conveying party(les) attached? ☑ No ☐ Yes	Internal Address: Street Address: 303 Twin Dolphin Drive, Suite 203			
3. Nature of Conveyance:	City: Redwood City State: CA Zip: 94065-1417			
Execution Date: 4/2/08; 3/28/08; 3/28/08; 3/20/08; 3/26/08; 3/28/08	Additional name(s)& address(es) attached? ■ No □ Yes			
4. Application number(s) or patent number(s): ☐ Thi A. Patent Application No.(s) 12/089,044	s document is being filed together with a new application. B. Patent No.(s)			
Additional numbers attached? ⊠ No ☐ Yes				
5. Name and address of party to whom correspondence concerning document should be mailed:	6. Total number of applications and patents involved: 1			
Name: Blakely, Sokoloff, Taylor & Zafman LLP Internal Address:	7. Total Fee (37 CFR 3.41)\$ 40.00 ☐ Enclosed ☑ Authorized to be charged to deposit account			
Street Address: 1279 Oakmead Parkway	8. Deposit Account Number:			
City: Sunnyvale State: CA ZIP: 94085 Phone Number: (503) 439-8778 Fax Number: (503) 439-6073 E-mail Address: greg.d.caldwell@bstz.com	02-2666 (Attach duplicate copy of this page if paying by deposit account)			
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9. Statement and signature. To the best of my knowledge and belief, the foregoing is true and correct and any attached copy is a true copy of the original document.				
Gregory D. Caldwell Name of Person Signing	Signature Date			
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Director of the US Patent and Trademark Office

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Docket No. 8241P029

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Attorney's Docket No.: 8241P029

ASSIGNMENT

In consideration of good and valuable consideration, the receipt of which is hereby acknowledged, we, the undersigned:

John M. Cioffi; Wonjong Rhee; Georgios Ginis; Sumanth Jagannathan; Peter Silverman; Mehdi Mohseni

hereby sell, assign, and transfer to

Adaptive Spectrum and Signal Alignment, Inc.

a Corporation of California, having a principal place of business at 303 Twin Dolphin Drive, Suite 203, Redwood City, California 94065-1417 USA ("Assignee"), and its successors, assigns, and legal representatives, the entire right, title, and interest for the United States and all foreign countries, in and to any and all inventions or improvements that are disclosed in the application (provisional or non-provisional) for the United States patent which may have a declaration executed by the undersigned prior hereto or concurrently herewith and is entitled

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said patent application also identified as follows (when known):

[I/we hereby authorize an attorney or agen	for said Assignee to insert below the application number and
filing date of said patent application when known.]	

United States Patent Application Number	Unassigned	filed	
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and in and to said application (provisional or non-provisional) and all provisional applications, non-provisional applications, utility applications, design applications, divisional applications, continuation applications, continued prosecution applications, continuation-in-part applications, substitute applications, renewal applications, reissue applications, reexaminations, extensions, and all other patent applications that have been or shall be filed in the United States and all foreign countries on any of said inventions or improvements; and in and to all original patents, reissued patents, reexamination certificates, and extensions, that have been or shall be issued in the United States and all foreign countries on said inventions or improvements; and in and to all rights of priority resulting from the filing of said United States application;

agree that said Assignee may apply for and receive a patent or patents for said inventions or 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 provisional applications, non-provisional applications, utility applications, design applications, divisional applications, continuation applications, continued prosecution applications, continuation-in-part applications, substitute applications, renewal applications, reissue applications, reexaminations, extensions, and all other patent applications on any and all said inventions or 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 or 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 or improvements and for vesting title to said inventions or improvements, and all applications for patents and all patents on said inventions or improvements, in said Assignee, its successors, assigns, and legal representatives; and

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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:

4/2/08	John Colle
Date ' l	Name: John M. Cioffi
3/28/20°F	Wanjung Khel
Date	Name: Wonjong Rhee
3/28/2008	1. Parus
Date	Name: Georgios Ginis
03/20/2008	Sumanthit
Date	Name: Sumanth Jagannathan
Date	Name: Peter Silverman
13-28-2008	Mahana
Date	Name: Mehdi Mohseni
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Date	Name:
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Date	Name:
Date	Name:
Date	Name:
Date	Name:

Assignment Document Return Address: BLAKELY, SOKOLOFF, TAYLOR & ZAFMAN LLP 1279 Oakmead Parkway Sunnyvale, CA 94085-4040 Telephone: (503) 439-8778

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Attorney's Docket No.: 8241P029

ASSIGNMENT

In consideration of good and valuable consideration, the receipt of which is hereby acknowl undersigned:	Tool (Jugarana)
John M. Cioffi; Wonjong Rhee; Georgios Ginis; Sumanth Jagannathan; Peter Mehdi Mohseni	Silverman;
hereby sell, assign, and transfer to Adaptive Spectrum and Signal Alignment, Inc.	
a Corporation of California, having a principal place of business at 303 Twin Dolphin Drive, Suite	203, Redwood
City, California 94065-1417 USA ("Assignee"), and its successors, assigns, and legal representation right, title, and interest for the United States and all foreign countries, in and to any and all improvements that are disclosed in the application (provisional or non-provisional) for the United which may have a declaration executed by the undersigned prior hereto or concurrently herewith and	l inventions, or d States patent
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[L'we hereby authorize an attorney or agent for said Assignee to insert below the application number and

filed

filing date of said patent application when known.]

said patent application also identified as follows (when known):

United States Patent Application Number

and in and to said application (provisional or non-provisional) and all provisional applications, non-provisional applications, utility applications, design applications, divisional applications, continued prosecution applications, continuation-in-part applications, substitute applications, renewal applications, reissue applications, reexaminations, extensions, and all other patent applications that have been or shall be filed in the United States and all foreign countries on any of said inventions or improvements; and in and to all original patents, reissued patents, reexamination certificates, and extensions, that have been or shall be issued in the United States and all foreign countries on said inventions or improvements; and in and to all rights of priority resulting from the filing of said United States application;

Unassigned

agree that said Assignee may apply for and receive a patent or patents for said inventions or 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 provisional applications, non-provisional applications, utility applications, design applications, divisional applications, continued prosecution applications, continuation-in-part applications, substitute applications, renewal applications, reissue applications, reexaminations, extensions, and all other patent applications on any and all said inventions or 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 or 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 or improvements and for vesting title to said inventions or improvements, and all applications for patents and all patents on said inventions or improvements, in said Assignee, its successors, assigns, and legal representatives; and

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Each Inventor: Please Sign and Date Below:

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coverant 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.

Date	Name: John M. Cioffi	
Date	Name: Wonjong Rhee	_
Date	Name: Georgios Ginis	···
Date	Name: Sumanth Jagannathan	
3/26/2003 Date	Name: Peter Silverman. Peter Joshum \$ 3/15/64	Si luerma. N
Date	Name: Mehdi Mohseni	
Date	Name:	_
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Date	Name:	
	Assignment Document Peturn	Address:

BLAKELY, SOKOLOFF, TAYLOR & ZAFMAN LLP 1279 Oakmead Parkway Sunnyvale, CA 94085-4040 Telephone: (503) 439-8778

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