

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1
 Stylesheet Version v1.2

EPAS ID: PAT4145007

SUBMISSION TYPE:	NEW ASSIGNMENT	
NATURE OF CONVEYANCE:	ASSIGNMENT	
CONVEYING PARTY DATA		
Name		Execution Date
ADAPTIVE SPECTRUM AND SIGNAL ALIGNMENT		09/19/2016
RECEIVING PARTY DATA		
Name:	ASSIA SPE LLC, C/O THE CORPORATION TRUST COMPANY	
Street Address:	1209 ORANGE ST.	
Internal Address:	CORPORATION TRUST CENTER	
City:	WILMINGTON	
State/Country:	DELAWARE	
Postal Code:	19801	
PROPERTY NUMBERS Total: 95		
Property Type	Number	
PCT Number:	US1413793	
PCT Number:	US1511470	
PCT Number:	US1440402	
PCT Number:	US1444912	
PCT Number:	US1440404	
PCT Number:	US1453008	
PCT Number:	US1453002	
PCT Number:	US1463256	
PCT Number:	US1468666	
Patent Number:	7302379	
Patent Number:	7711530	
Patent Number:	7639596	
Patent Number:	7535966	
Patent Number:	7573943	
Patent Number:	7349963	
Patent Number:	7809116	
Patent Number:	7593458	
Patent Number:	7773497	
Patent Number:	8310914	

Property Type	Number
Patent Number:	7774398
Patent Number:	7813420
Patent Number:	7852952
Patent Number:	7991122
Patent Number:	8761348
Patent Number:	7657818
Patent Number:	7688884
Patent Number:	7684546
Patent Number:	8073135
Patent Number:	7881438
Patent Number:	8948026
Patent Number:	8972549
Patent Number:	8009665
Patent Number:	8483369
Patent Number:	7924736
Patent Number:	9071534
Patent Number:	7830955
Patent Number:	8031761
Patent Number:	8428225
Patent Number:	8340279
Patent Number:	8842527
Patent Number:	8363788
Patent Number:	8045629
Patent Number:	8902958
Patent Number:	8644169
Patent Number:	9106735
Patent Number:	8730785
Patent Number:	9356654
Patent Number:	8792620
Patent Number:	8489344
Patent Number:	8589093
Patent Number:	9060054
Patent Number:	9178777
Patent Number:	9203724
Patent Number:	9391744
Patent Number:	9241077
Patent Number:	9344294
Patent Number:	9374240

Property Type	Number
Patent Number:	9369370
Patent Number:	9391668
Patent Number:	9398146
Patent Number:	9369232
Patent Number:	9491283
Patent Number:	9391834
Patent Number:	9420090
Application Number:	14685522
Application Number:	12226911
Application Number:	13254454
Application Number:	14341659
Application Number:	13995901
Application Number:	14356581
Application Number:	14362584
Application Number:	14362585
Application Number:	14384379
Application Number:	14398069
Application Number:	14394076
Application Number:	14394075
Application Number:	14414435
Application Number:	14414437
Application Number:	14434073
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Application Number:	14779942
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Application Number:	14417544
Application Number:	14443999
Application Number:	14907655
Application Number:	14771789
Application Number:	15022752
Application Number:	15028932
Application Number:	14891320
Application Number:	15104222
Application Number:	14910879
Application Number:	15034856
Application Number:	14763486
Application Number:	14767870

CORRESPONDENCE DATA**Fax Number:**

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.

Phone: 503-968-8233**Email:** kcampbell@ghmip.com**Correspondent Name:** GREEN, HOWARD, & MUGHAL, LLP**Address Line 1:** 5 CENTERPOINTE DR. SUITE 400**Address Line 4:** LAKE OSWEGO, OREGON 97035

ATTORNEY DOCKET NUMBER:	ASSIA TO SPE
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NAME OF SUBMITTER:	USMAN A. MUGHAL
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SIGNATURE:	/Usman A. Mughal/
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DATE SIGNED:	11/16/2016
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Total Attachments: 5

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ASSIGNMENT

WHEREAS, **Adaptive Spectrum and Signal Alignment, Inc. (ASSIA)**, a corporation organized under the laws of the State of California, having a place of business at **333 Twin Dolphin Drive, Suite 300, Redwood City, CA 94065**, is the **Assignor** of the patents and patent applications as listed on the attached Appendix A to this Assignment;

WHEREAS, **ASSIA SPE, LLC**, a corporation organized under the laws of the State of California, having a place of business at **ASSIA SPE, LLC, c/o The Corporation Trust Company, Corporation Trust Center, 1209 Orange Street, Wilmington, DE 19801**, is the **Assignee** of the patents and patent applications as listed on the attached Appendix A to this Assignment;

IN consideration of good and valuable consideration, the receipt of which is hereby acknowledged,

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 Assignor conveys all present and all future rights in the patents and patent applications, as listed on the attached Appendix A to this Assignment, to said Assignee;

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 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 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.

Mary
NAME
TITLE General Counsel

September 19, 2016
DATE

Adaptive Spectrum and Signal Alignment, Inc.
333 Twin Dolphin Drive,
Suite 300
Redwood City, CA 94065

APPENDIX A

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PCTUS2014053008

APPENDIX A

PCTUS2014053002
PCTUS2014063256
PCTUS2014068666