503612373 12/15/2015

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT3659004

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
SEONG-YOUP SUH	12/01/2014
ADESOJI J. SAJUYIGBE	12/02/2014
HARRY G. SKINNER	12/01/2014

RECEIVING PARTY DATA

Name:	INTEL CORPORATION
Street Address:	2200 MISSION COLLEGE BOULEVARD
City:	SANTA CLARA
State/Country:	CALIFORNIA
Postal Code:	95054

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	14547772

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.

Email: legal@forefrontlawgroup.com

Correspondent Name: EMMANUEL RIVERA

Address Line 1: 13492 RESEARCH BLVD, SUITE 120 #211

Address Line 4: AUSTIN, TEXAS 78750

ATTORNEY DOCKET NUMBER:	P77599
NAME OF SUBMITTER:	EMMANUEL A. RIVERA
SIGNATURE:	/Emmanuel A. Rivera/
DATE SIGNED:	12/15/2015

Total Attachments: 6

source=P77599_Executed Assignment_Intel_Inventors#page1.tif source=P77599_Executed Assignment_Intel_Inventors#page2.tif source=P77599_Executed Assignment_Intel_Inventors#page3.tif source=P77599_Executed Assignment_Intel_Inventors#page4.tif source=P77599_Executed Assignment_Intel_Inventors#page5.tif

PATENT 503612373 REEL: 037295 FRAME: 0093

source=P77599_Executed Assignment_Intel_Inventors#page6.tif

PATENT REEL: 037295 FRAME: 0094

ASSIGNMENT

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

MAJID MANTEGHI; SALEHI MOHSEN; SEONG-YOUP SUH; ADESOJI J. SAJUYIGBE; HARRY G. SKINNER

hereby sell, assign, and transfer to:

Intel Corporation

a corporation of Delaware, having a principal place of business at 2200 Mission College Boulevard, Santa Clara, California, 95054 USA ("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:

WIDEBAND FREQUENCY SHIFT MODULATION USING TRANSIENT STATE OF ANTENNA

(I hereby authorize and request any attorney having appropriate authority from the assignee to	insert on the
designated lines below, the filing date and application number of said application when known.)	

which was filed on November	19, 2014	as	
US COUNTRY or International Off	Application Number	14/547,772	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

PATENT REEL: 037295 FRAME: 0095

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.

Majid Manteghi	Date signed	
Salehi Mohsen	Date signed	
John Settyen	Pec. 1, 2014	
Seong-Youp Suh	Date signed	
Adesoji J. Sajuyigbe	Date signed	
Harry G. Skinner	Date signed	

ASSIGNMENT

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

MAJID MANTEGHI; SALEHI MOHSEN; SEONG-YOUP SUH; ADESOJI J. SAJUYIGBE; HARRY G. SKINNER

hereby sell, assign, and transfer to:

Intel Corporation

a corporation of Delaware, having a principal place of business at 2200 Mission College Boulevard, Santa Clara, California, 95054 USA ("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:

WIDEBAND FREQUENCY SHIFT MODULATION USING TRANSIENT STATE OF ANTENNA

(I hereby authorize and request any attorney having appropriate authority from the assignee to insert on the designated lines below, the filing date and application number of said application when known.)

which was filed on November	19, 2014	33	
COUNTRY or International Offi	Application Number	14/547.772	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

PATENT REEL: 037295 FRAME: 0097

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.

Majid Manteghi	Date signed
Salehi Mohsen	Date signed
Seong-Youp Suh	Date signed
	12 2 2014
Adesoji J. Sajuyigbe	Date signed
Harry G. Skinner	Date sioned

ASSIGNMENT

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

MAJID MANTEGHI; SALEHI MOHSEN; SEONG-YOUP SUH; ADESOJI J. SAJUYIGBE; HARRY G. SKINNER

hereby sell, assign, and transfer to:

Intel Corporation

a corporation of Delaware, having a principal place of business at 2200 Mission College Boulevard, Santa Clara, California, 95054 USA ("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:

WIDEBAND FREQUENCY SHIFT MODULATION USING TRANSIENT STATE OF ANTENNA

(I hereby authorize and request designated lines below, the filing	any attorney having appropriate : g date and application number of s	authority from the assignee aid application when know	to insert on the n.)
which was filed on	lovember 19, 2014	as	
US	Application Number	14/547,772	and
COUNTRY or Internal	ional Office		
which has been executed by the u	ndersigned prior hereto or concurren	itly herewith on the date(s) in	dicated 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 o	other countries and international filin	g offices on any of said inve	ntions and
improvements; and in and to all o	riginal and reissued patents that have	e been or shall be issued in th	e United States and
all other countries and internation	al filing offices on said inventions a	nd improvements; and in and	to all rights of
priority resulting from the filing of	of said applications; as used herein "	'Additional Applications" inc	ludes but is not
The state of the s	nodel, divisional, continuing, continu		
national phase applications on sa	id 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

Page 1 of 2

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.

Majid Manteghi	Date signed		
Salehi Mohsen	Date signed		
Seong-Youp Suh	Date signed		
Adesoji J. Sajuyigbe	Date signed		
Hang G Strain	Dec 15+ 2014		
Harry G. Skinner	Date signed		

Page 2 of 2