# 503297797 05/07/2015

# PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2

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EPAS ID: PAT3344415

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

#### **CONVEYING PARTY DATA**

Name	Execution Date
YANGYANG SHI	03/27/2015
ERNEST C. CHEN	04/30/2015
CECILIA C. COMEAUX	03/19/2015

### **RECEIVING PARTY DATA**

Name:	The DIRECTV Group, Inc.
Street Address:	2230 E. Imperial Highway
City:	El Segundo
State/Country:	CALIFORNIA
Postal Code:	90245

# **PROPERTY NUMBERS Total: 1**

Property Type	Number
Application Number:	14660868

### **CORRESPONDENCE DATA**

**Fax Number:** (310)964-0941

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: janet.shibata@directv.com
Correspondent Name: THE DIRECTV GROUP, INC.
Address Line 1: 2230 E. IMPERIAL HIGHWAY

Address Line 2: CA/LA5/A109

Address Line 4: EL SEGUNDO, CALIFORNIA 90245

ATTORNEY DOCKET NUMBER:	PD-212061
NAME OF SUBMITTER:	JANET SHIBATA
SIGNATURE:	/Janet Shibata/
DATE SIGNED:	05/07/2015

# **Total Attachments: 6**

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PATENT 503297797 REEL: 035591 FRAME: 0316

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#### ASSIGNMENT

WHEREAS, YANGYANG SHI, ERNEST C. CHEN and CECILIA C. COMEAUX, as below named joint inventors of the city and state as stated below next to our names, have invented a(an) METHODS AND SYSTEMS FOR ALIGNING A SATELLITE RECEIVER DISH USING A SMARTPHONE OR TABLET DEVICE for which application for Letters Patent of the United States was filed on March 17, 2015 as U.S. Patent Application Serial No. 14/660,868, and which application claims benefit of U.S. Provisional Application Serial No. 62/098,255 filed on December 30, 2014.

WHEREAS, The DIRECTV Group, Inc. (hereinafter referred to as the "Company"), a Delaware Corporation, having its principal place of business in El Segundo, California, is desirous of acquiring the entire and exclusive right, title and interest in, to and under said invention, said application and any and all Letters Patent that may be granted therefore in the United States and throughout the world;

NOW, THEREFORE, in consideration of the obligations voluntarily assumed by us and set forth in invention agreements between us and our employer, effective the date as stated below next to our names, and other good and valuable consideration, receipt of which is hereby acknowledged, we do hereby sell, assign and transfer to the Company, its successors, assigns or other legal representatives, the entire and exclusive right, title and interest in and to said invention invented by us, to said application and any and all applications which are continuations, continuations-in- part, divisions or substitutes of said application and any and all Letters Patent that may be granted therefore in the United States and throughout the world on any of said applications and to any and all reexaminations, reissues, renewals or extensions of said Letters Patent in the United States and throughout the world for the full term or terms for which said Letters patent may be granted in the United States and throughout the world; authorize and request The Commissioner of Patents and Trademarks of the United States and all foreign countries to issue all such Letters Patent to said Company, its successors, assigns or other legal representatives; covenant that no assignment, sale, agreement, transfer or encumbrance has been, or will be, made or entered into which would conflict with this assignment, sale and transfer, and agree to communicate to the Company, its successors, assigns or other legal representatives, upon request and at no cost or expense to us, any facts known by us respecting said invention, do all lawful acts, including the execution and delivery of all papers and proper caths and giving of testimony that is deemed necessary or desirable by the Company, its successors, assigns or other legal representatives with regard to said invention for protecting, obtaining, maintaining and enforcing any and all of said Letters Patent in the United States and throughout the world for said invention and for perfecting, affirming, recording and maintaining the title of the Company, its successors, assigns or other legal representatives, and generally cooperate to the fullest extent in all matters pertaining to said invention, and any and all of said Letters Patent and the title thereto in the Company, its successors, assigns or other legal representatives.

IN WITNESS WHEREOF, we have executed this instrument.

FULL NAME OF SOLE OR JOINT INVENTOR	INVENTOR'S SIGNATURE	DATE
YANGYANG SHI		3-27-2015
RESIDENCE (CITY AND STATE)	3 de grande de la companya della companya della companya de la companya della com	
Belmont, California	**	
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FULL NAME OF SOLE OR JOINT INVENTOR	INVENTOR'S SIGNATURE	TOATE
ERNEST C. CHEN		
RESIDENCE (CITY AND STATE)		
San Pedro, California		
FULL NAME OF SOLE OR JOINT INVENTOR	INVENTOR'S SIGNATURE	Trare
LOTT HAME OL FOTE OK POHAL HAZIATOK	HAKEMIOUS SIGNATORE	DATE
CECILIA C. COMEAUX		
RESIDENCE (CITY AND STATE)		
Redondo Beach, California		
A notary public or other officer completing this cert	ificate verifies only the identity of the indiv	idual who
signed the document to which the certificate is atta	iched, and not the truthfulness, accuracy,	or validity of that
document.		j
STATE OF CALIFORNIA )		
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COUNTY OF 1/1/2		
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On <u>22 /%/20/ 20/5</u> , before me, <u>/</u>	RAZENCH MELLEZÄÄ	a Notary Public
in and for said State, personally appeared YANGY		
evidence to be the person(s) whose name(s) is/are	•	
me that he/she/they executed the same in his/her/t		=:
signature(s) on the instrument the person(s), or the	The state of the s	
executed the instrument.		
I certify under PENALTY OF PERJURY under the	laws of the State of California that the fore	going
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IN WITNESS WHEREOF, we have executed this instrument.

FULL NAME OF SOLE OR JOINT INVENTOR	INVENTOR'S SIGNATURE	DATE
YANGYANG SHI		
RESIDENCE (CITY AND STATE)		
Belmont, California		
FULL NAME OF SOLE OR JOINT INVENTOR	INVENTOR'S SIGNATURE	DATE
POLL MANUE OF SOLL OF TORK SHALLETON	ast Che	A01 30, >015
ERNEST C. CHEN	Land Che	10/1 2 213
RESIDENCE (CITY AND STATE)		
San Pedro, California		
FULL NAME OF SOLE OR JOINT INVENTOR	INVENTOR'S SIGNATURE	DATE
CECILIA C. COMEAUX RESIDENCE (CITY AND STATE)	1	
Redondo Beach, California		
A notary public or other officer completing this certif	icate verifies only the identity of the	e individual who
signed the document to which the certificate is attac document.	med, and not the truthtliness, aco	macy, or vanony or mar
- MacCarrinosta		
STATE OF CALIFORNIA ) SS:		
COUNTY OF		
7		
Ca. hotoro mo		a Notary Public
On, before me,, in and for said State, personally appeared YANGY/	ANG SHI, who proved to me on the	basis of satisfactory
evidence to be the person(s) whose name(s) is/are	subscribed to the within instrumen	t and acknowledged to
me that he/she/they executed the same in his/her/ti	neir authorized capacity(ies), and it	hat by his/her/their
signature(s) on the instrument the person(s), or the	entity upon behalf of which the pe	rson(s) acted,
executed the instrument.		
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I certify under PENALTY OF PERJURY under the I	aws of the State of Calibbia digit	H& FOLGORIUM
paragraph is true and correct.		<u>.</u>
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WITNESS my hand and official seal.		, o
WITNESS my hand and official seal.		, v
WITNESS my hand and official seal.	Notary Publi	

IN WITNESS WHEREOF, we have executed this instrument.

FULL NAME OF SOLE OR JOINT INVENTOR	INVENTOR'S SIGNATURE	DATE
YANGYANG SHI		
RESIDENCE (CITY AND STATE)		***************************************
Belmont, California		
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FULL NAME OF SOLE OR JOINT INVENTOR	INVENTOR'S SIGNATURE	DATE
ERNEST C. CHEN		
RESIDENCE (CITY AND STATE)	***************************************	
San Pedro, California		
FULL NAME OF SOLE OR JOINT INVENTOR	INVENTOR'S SIGNATURE	DATE
CECILIA C. COMEAUX	1 Clark C. Gruh	3/10/15
RESIDENCE (CITY AND STATE)	A AMILE CONTRACTOR OF THE PROPERTY OF THE PROP	
Redondo Beach, California	`	
A notary public or other officer completing this cert signed the document to which the certificate is atta		
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STATE OF CALIFORNIA )		
) \$S: COUNTY OF		
COO(8) ) Or		
On, before me,		a Notary Public
in and for said State, personally appeared YANGY	•	•
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certify under PENALTY OF PERJURY under the	laws of the State of California that the fore	andipa Malapa
paragraph is true and correct.		(AALUA
WITNESS my hand and official seal.		
	Notary Public	

document
STATE OF CALIFORNIA ) SS:
On 4/30/2015 before me, JONATHAN IF a Notary Public in and for said State, personally appeared ERNEST C. CHEN, who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.
I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.
WITNESS my hand and official seal.
Commission # 2062212 Notary Public Los Angeles County Notary Public
My Comm. Expires Sep 15, 2018
A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which the certificate is attached, and not the truthfulness, accuracy, or validity of that document.
STATE OF CALIFORNIA )
OUNTY OF LOS ANGELES )
On March 2015, before me, Janet E. Shibata, a Notary Public in and for said State, personally appeared CECILIA C. COMEAUX, who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.
I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.
WITNESS my hand and official seal.
Richard Problin
Notary Public

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which the certificate is attached, and not the truthfulness, accuracy, or validity of that

signed the document to which the certificate is attached, and not the truthfulness, accuracy, or validity of that document. STATE OF CALIFORNIA ) SS: COUNTY OF , before me, in and for said State, personally appeared ERNEST C. CHEN, who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument. I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct. WITNESS my hand and official seal. Notary Public A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which the cartificate is attached, and not the truthfulness, accuracy, or validity of that document. STATE OF CALIFORNIA COUNTY OF LOS ANGELES On March 🐧 , 2015, before me, Janet E. Shibata, a Notary Public in and for said State, personally appeared CECILIA C. COMEAUX, who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument. I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct. WITNESS my hand and official seal. JANET E SHIBATA Commission # 1990823 Notary Public - California Los Angeles County My Camm. Expires Oct 9, 2016

A notary public or other officer completing this certificate verifies only the identity of the individual who

PATENT REEL: 035591 FRAME: 0323

**RECORDED: 05/07/2015**