

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1
 Stylesheet Version v1.2

EPAS ID: PAT4510623

SUBMISSION TYPE:	NEW ASSIGNMENT	
NATURE OF CONVEYANCE:	ASSIGNMENT	
CONVEYING PARTY DATA		
	Name	Execution Date
	ROMULO PONTUAL	05/13/2011
	JOHN L. NORIN	07/28/2011
	ROBERT G. ARSENAULT	07/25/2011
	RAYNOLD M. KAHN	05/13/2011
	SUI-KY RINGO LING	05/13/2011
	LUKE J. CROOK	05/13/2011
	JOHN D. CHOI	05/16/2011
	MICHELLE L. VAGNATI	05/16/2011
	STEPHEN P. DULAC	05/16/2011
RECEIVING PARTY DATA		
Name:	THE DIRECTV GROUP, INC.	
Street Address:	2230 E. IMPERIAL HIGHWAY	
Internal Address:	PATENT DOCKET ADMINISTRATION, CA / LA5 / A109	
City:	EL SEGUNDO	
State/Country:	CALIFORNIA	
Postal Code:	90245	
PROPERTY NUMBERS Total: 1		
Property Type	Number	
Application Number:	15240387	
CORRESPONDENCE DATA		
Fax Number:	(248)641-0270	
<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>		
Phone:	2486411600	
Email:	troymailroom@hdp.com	
Correspondent Name:	HARNESS, DICKEY & PIERCE,PLC	
Address Line 1:	5445 CORPORATE DRIVE, SUITE 200	
Address Line 4:	TROY, MICHIGAN 48098	
ATTORNEY DOCKET NUMBER:	DTV210007A	

NAME OF SUBMITTER:	KEVIN G. MIERZWA
SIGNATURE:	/Kevin G. Mierzwa/
DATE SIGNED:	07/19/2017
Total Attachments: 5 source=DTV210007A-Executed_Assignment#page1.tif source=DTV210007A-Executed_Assignment#page2.tif source=DTV210007A-Executed_Assignment#page3.tif source=DTV210007A-Executed_Assignment#page4.tif source=DTV210007A-Executed_Assignment#page5.tif	



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ASSIGNMENT

WHEREAS, ROMULO PONTUAL, JOHN L. NORIN, ROBERT G. ARSENAULT, RAYNOLD M. KAHN, SUI-KY RINGO LING, LUKE J. CROOK, JOHN D. CHOI, MICHELLE L. VAGNATI and STEPHEN P. DULAC, as below named joint inventors of the city and state as stated below next to our names, have invented a(an) **METHOD AND SYSTEM FOR CHANGING COMMUNICATION PARAMETERS OF A CONTENT DELIVERY SYSTEM BASED ON FEEDBACK FROM USER DEVICES** for which application for Letters Patent of the United States was filed on May 19, 2011 as U.S. Patent Application Serial No. 13/111,221, and which application claims benefit of U.S. provisional application with Serial No. 61/346,437 filed on May 19, 2010.

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 oaths 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.

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
ROMULO PONTUAL	<i>R. Pontual</i>	5-13-2011
RESIDENCE (CITY AND STATE) Hermosa Beach, California Palos Verdes Estates, California <i>TR</i>		

FULL NAME OF SOLE OR JOINT INVENTOR	INVENTOR'S SIGNATURE	DATE
JOHN L. NORIN	<i>J. Norin</i>	7/28/2011
RESIDENCE (CITY AND STATE) Redondo Beach, California		

FULL NAME OF SOLE OR JOINT INVENTOR	INVENTOR'S SIGNATURE	DATE
ROBERT G. ARSENAULT	<i>Robert G. Arsenault</i>	7/25/11
RESIDENCE (CITY AND STATE) Redondo Beach, California		

FULL NAME OF SOLE OR JOINT INVENTOR	INVENTOR'S SIGNATURE	DATE
RAYNOLD M. KAHN	<i>Raynold M. Kahn</i>	9/13/11
RESIDENCE (CITY AND STATE) Los Angeles, California		

FULL NAME OF SOLE OR JOINT INVENTOR	INVENTOR'S SIGNATURE	DATE
SUI-KY RINGO LING	<i>Sui-Ky Ringo Ling</i>	5/13/11
RESIDENCE (CITY AND STATE) Rancho Palos Verdes, California		

FULL NAME OF SOLE OR JOINT INVENTOR	INVENTOR'S SIGNATURE	DATE
LUKE J. CROOK	<i>L. J. Crook</i>	5/13/2011
RESIDENCE (CITY AND STATE) San Pedro, California Torrance, California <i>LC</i>		

FULL NAME OF SOLE OR JOINT INVENTOR	INVENTOR'S SIGNATURE	DATE
JOHN D. CHOI	<i>J. Choi</i>	5/16/2011
RESIDENCE (CITY AND STATE) Los Angeles, California		

FULL NAME OF SOLE OR JOINT INVENTOR	INVENTOR'S SIGNATURE	DATE
MICHELLE L. VAGNATI	<i>[Signature]</i>	5/16/2011
RESIDENCE (CITY AND STATE) Los Angeles, California		

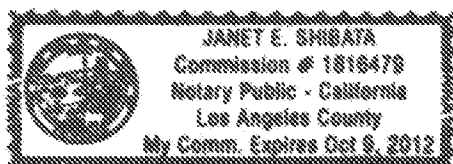
FULL NAME OF SOLE OR JOINT INVENTOR	INVENTOR'S SIGNATURE	DATE
STEPHEN P. DULAC	<i>[Signature]</i>	5/16/2011
RESIDENCE (CITY AND STATE) Santa Clarita, California		

STATE OF CALIFORNIA)
) SS:
COUNTY OF LOS ANGELES)

On May 13, 2011, before me, Janet E. Shibata, a Notary Public in and for said State, personally appeared ROMULO PONTUAL and RAYMOND M. KAHN, 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.



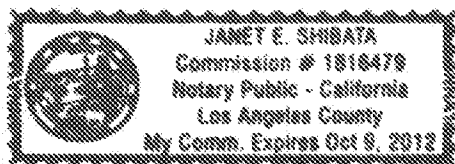
[Signature]
Notary Public

STATE OF CALIFORNIA)
) SS:
COUNTY OF LOS ANGELES)

On May 13, 2011, before me, Janet E. Shibata, a Notary Public in and for said State, personally appeared SU-KY RINGO LINA and LUKE J. CROOK, 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.



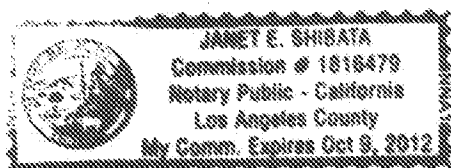
[Signature]
Notary Public

STATE OF CALIFORNIA)
) SS:
COUNTY OF LOS ANGELES)

On May 16, 2011, before me, Janet E. Shibata, a Notary Public in and for said State, personally appeared JOHN D. CHOI, MICHELLE L. VAGNATI, STEPHEN P. DULAC, 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
Notary Public

STATE OF CALIFORNIA)
) SS:
COUNTY OF LOS ANGELES)

On May , 2011, before me, Janet E. Shibata, a Notary Public in and for said State, personally appeared _____, 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.

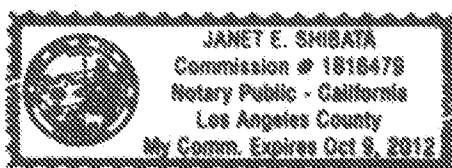
Notary Public

STATE OF CALIFORNIA)
) SS:
COUNTY OF LOS ANGELES)

On July 25, 2011, before me, Janet E. Shibata, a Notary Public in and for said State, personally appeared ROBERT G. ARSENAULT, 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.



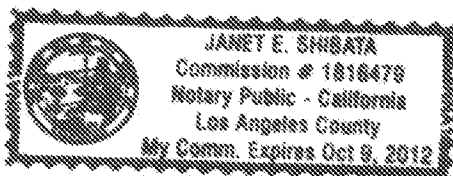

Notary Public

STATE OF CALIFORNIA)
) SS:
COUNTY OF LOS ANGELES)

On July ~~25~~ ²⁸, 2011, before me, Janet E. Shibata, a Notary Public in and for said State, personally appeared JOHN L. NORIN, 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