503970505 08/22/2016

PATENT ASSIGNMENT COVER SHEET

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SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
RAYNOLD M. KAHN	03/05/2010
CHRISTOPHER R. ROY	05/21/2010
STEVEN KASAKITIS	05/24/2010
ERIN K. NELSON	05/21/2010
CHRISTOPHER J. CABANNE	05/25/2010
LUKE J. CROOK	05/25/2010
GREGORY VAGNATI	05/21/2010
NOREEN FONG	05/24/2010
ERIC J. BENNETT	05/21/2010

RECEIVING PARTY DATA

Name:	THE DIRECTV GROUP, INC.
Street Address:	2230 E. IMPERIAL HIGHWAY
Internal Address:	CA / LA1 / A109
City:	EL SEGUNDO
State/Country:	CALIFORNIA
Postal Code:	90245

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	15229610

CORRESPONDENCE DATA

Fax Number: (248)641-0270

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: 248-641-1600

Email: jbirkett@hdp.com

Correspondent Name: HARNESS, DICKEY & PIERCE, P.L.C. Address Line 1: 5445 CORPORATE DR. SUITE 200

Address Line 4: TROY, MICHIGAN 48098

ATTORNEY DOCKET NUMBER: DTV209053

PATENT REEL: 039498 FRAME: 0119

NAME OF SUBMITTER:	KEVIN G. MIERZWA	
SIGNATURE:	/Kevin G. Mierzwa/	
DATE SIGNED:	08/22/2016	
Total Attachments: 6		
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PATENT REEL: 039498 FRAME: 0120



ASSIGNMENT

WHEREAS, We, RAYNOLD M. KAHN, CHRISTOPHER R. ROY, STEVEN KASAKITIS, ERIN K. NELSON, CHRISTOPHER J. CABANNE, LUKE J. CROOK, GREGORY VAGNATI, NOREEN FONG and ERIC J. BENNETT, as the below named inventors of the city and state as stated below next to our names, have invented a **METHOD AND SYSTEM FOR OPERATING A MULTI-ROOM DIGITAL VIDEO RECORDING SYSTEM,** for which application for Letters Patent of the United States has been filed on December 29, 2009, as Serial No.12/648,344.

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 me, 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 me 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.

> PATENT REEL: 039498 FRAME: 0121

IN WITNESS WHEREOF, we have executed this instrument.

FULL NAME OF SOLE OR JOINT INVENTOR	INVENTOR'S SIGNATURE	DATE
DAVAGED M. KALINI	RandallMalla	3-5-201
RAYNOLD M. KAHN RESIDENCE (CITY AND STATE)		
Los Angeles, California		

OTATE OF CALIFORNIA		
STATE OF CALIFORNIA)) SS:		
COUNTY OF LOS ANGELES)		
On Norch 5, 200 before me, personally appeared RAYNOLD M. KAHN, who properson(s) whose name(s) is/are subscribed to he/she/they executed the same in his/her/their aut the instrument the person(s), or the entity upon instrument.	the within instrument and acknowl thorized capacity, and that by his/her/t	ledged to me that their signature(s) on
I certify under PENALTY OF PERJURY under paragraph is true and correct.	the laws of the State of California	that the foregoing
WITNESS my hand and official seal.	Ant E. Si	Ce 6
JANET E. SHIBATA Commission # 1816479 Notary Public - Californis Los Angeles County My Comm. Expires Oct S, 2012	Notary Public	

FULL NAME OF SOLE OR JOINT INVENTOR	INVENTOR'S SIGNATURE	DATE
CHRISTOPHER R. ROY	ICI VA	5/21/10
RESIDENCE (CITY AND STATE)		*
Los Angeles, California		
STATE OF CALIFORNIA)) SS:		
COUNTY OF LOS ANGELES)		
personally appeared CHRISTOPHER R. ROY, who person(s) whose name(s) is/are subscribed to he/she/they executed the same in his/her/their authorate instrument the person(s), or the entity upon instrument.	the within instrument and acknowle brized capacity, and that by his/her/the behalf of which the person(s) acte	ry evidence to be edged to me that eir signature(s) on ed, executed the
I certify under PENALTY OF PERJURY under the paragraph is true and correct.	le laws of the State of Camornia ti	iat the foregoing
JANET E. SHIBATA Commission # 1816479 Notary Public - California Los Angeles County My Cemm. Expires Oct 9, 2012	Notary Public	
FULL NAME OF SOLE OR JOINT INVENTOR	INVENTOR'S SIGNATURE	DATE
STEVEN KASAKITIS	1 Ca January Co	05/24/10
RESIDENCE (CITY AND STATE) Redondo Beach, California	7	
t		
STATE OF CALIFORNIA) COUNTY OF LOS ANGELES)	JANET E. SHIBATA Commission # 1816479 Notary Public - California Los Angeles County My Comm. Expires Oct 9, 2012	
On	he within instrument and acknowled prized capacity, and that by his/her/the	evidence to be the dged to me that eir signature(s) on
I certify under PENALTY OF PERJURY under the paragraph is true and correct.	ne laws of the State of California th	nat the foregoing

WITNESS my hand and official seal.

Notary Public
PATENT

REEL: 039498 FRAME: 0123

FULL NAME OF SOLE OR JOINT INVE	ENTOR	INVENTOR'S SIGNATURE	DATE
EDINIK NELCON		Ceda The Vion	5/21/10
ERIN K. NELSON RESIDENCE (CITY AND STATE)			1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
Torrance, California		***	
STATE OF CALIFORNIA	1		
OTATE OF ONE!! ONINA) SS:		
COUNTY OF LOS ANGELES)		
On	I, who proved scribed to the er/their author	e within instrument and acknowled rized capacity, and that by his/her/the	vidence to be the lged to me that ir signature(s) on
I certify under PENALTY OF PERJU paragraph is true and correct.	RY under the	e laws of the State of California th	at the foregoing
WITNESS my hand and official seal.		A	
JANET E. SHIBATA Commission # 1818479 Notary Public - California Los Angeles County My Comm. Expires Oct 9, 2)12 Š	Notary Public	
FULL NAME OF SOLE OR JOINT INVE	ENTOR	INVENTOR'S SIGNATURE	DATE
CHRISTOPHER J. CABANNE		(Mutoph alanne	5/25/2010
RESIDENCE (CITY AND STATE)		***************************************	
Woodland Hills, California			
		JANET E. SHIBATA Commission # 1816479	
STATE OF CALIFORNIA)) SS:	Notary Public - California	NNA
COUNTY OF LOS ANGELES)	Los Angeles County My Comm. Expires Oct 9, 2012	Ž.
on May 25, 2010 personally appeared CHRISTOPHER J to be the person(s) whose name(s) is/a he/she/they executed the same in his/h the instrument the person(s), or the instrument.	CABANNE, vare subscribed er/their author	to the within instrument and acknowl rized capacity, and that by his/her/the	sfactory evidence edged to me that ir signature(s) on
I certify under PENALTY OF PERJU paragraph is true and correct.	RY under the	e laws of the State of California th	at the foregoing

WITNESS my hand and official seal.

REEL: 039498 FRAME: 0124

FULL NAME OF SOLE OR JOINT INVENTOR	INVENTOR'S SIGNATURE	DATE	
LUKE J. CROOK	1 I I I I I I I	05/25/2018	
RESIDENCE (CITY AND STATE)	- Commence		
San Pedro, California			
STATE OF CALIFORNIA)) SS: COUNTY OF LOS ANGELES)	JANET E. SHIBATA Commission # 1816479 Notary Public - California Los Angeles County My Comm. Expires Oct 9, 201	12 M	
On May 25, 200 , before me, Ja personally appeared LUKE J. CROOK, who proved person(s) whose name(s) is/are subscribed to the he/she/they executed the same in his/her/their author the instrument the person(s), or the entity upon instrument.	e within instrument and acknowledgized capacity, and that by his/her/thei	idence to be the ged to me that r signature(s) on	
I certify under PENALTY OF PERJURY under the paragraph is true and correct.	e laws of the State of California tha	at the foregoing	
WITNESS my hand and official seal.	Notary Public	`. ``.	
FULL NAME OF SOLE OR JOINT INVENTOR GREGORY VAGNATI	INVENTOR'S SIGNATURE	DATE 5/21/ 10	
RESIDENCE (CITY AND STATE) Los Angeles, California			
STATE OF CALIFORNIA)) SS:	JANET E. SHIBATA Commission # 1816479 Notary Public - California		
COUNTY OF LOS ANGELES)	Los Angeles County My Comm. Expires Oct 9, 201	2	
On			

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing

WITNESS my hand and official seal.

paragraph is true and correct.

PATEN

REEL: 039498 FRAME: 0125

FULL NAME OF SOLE OR JOINT INVENTOR	INVENTOR'S SIGNATURE	DATE	
NOREEN FONG	Moun Jong	6/24/10	
RESIDENCE (CITY AND STATE) Cerritos, California	٥		
Cernios, Camornia			
STATE OF CALIFORNIA)) SS: COUNTY OF LOS ANGELES)			
On	to the within instrument and acknowle outhorized capacity, and that by his/her/th	edged to me that neir signature(s) on	
I certify under PENALTY OF PERJURY under paragraph is true and correct.	er the laws of the State of California	that the foregoing	
WITNESS my hand and official seal.	\bigcirc \bigcirc \bigcirc \bigcirc \bigcirc		
JANET E. SHIRATA Commission # 1816479 Notary Public - California Los Angeles County My Comm. Expires Oct 9, 2012	Notary Public	<u> </u>	
FULL NAME OF SOLE OR JOINT INVENTOR	INVENTOR'S SIGNATURE	DATE 5/24/2010	
ERIC J. BENNETT	1/2/Mis	5121/2010	
RESIDENCE (CITY AND STATE) Los Angeles, California			
STATE OF CALIFORNIA) SS: COUNTY OF LOS ANGELES)	JANET E. SHIBA Commission # 181 Notary Public - Calli Los Angeles Cour My Cornin, Expires Oct	6479 fornia nty	
On before me, Janet E. Shibata, a Notary Public in and for said State, personally appeared ERIC J. BENNETT, 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, 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 paragraph is true and correct.	er the laws of the State of California	that the foregoing	

RECORDED: 08/22/2016

Notary Public
PATENT
REEL: 039498 FRAME: 0126

WITNESS my hand and official seal.