

PATENT ASSIGNMENT

Electronic Version v1.1

Stylesheet Version v1.1

SUBMISSION TYPE:	NEW ASSIGNMENT												
NATURE OF CONVEYANCE:	ASSIGNMENT												
CONVEYING PARTY DATA													
<table border="1"><thead><tr><th>Name</th><th>Execution Date</th></tr></thead><tbody><tr><td>Mitchell B. Wasden</td><td>11/30/2007</td></tr><tr><td>Vishal Arya</td><td>11/28/2007</td></tr><tr><td>Daniel M. Miner</td><td>11/30/2007</td></tr><tr><td>Darren M. St. Laurent</td><td>11/20/2007</td></tr><tr><td>David T. Boltz</td><td>11/28/2007</td></tr></tbody></table>	Name	Execution Date	Mitchell B. Wasden	11/30/2007	Vishal Arya	11/28/2007	Daniel M. Miner	11/30/2007	Darren M. St. Laurent	11/20/2007	David T. Boltz	11/28/2007	
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David T. Boltz	11/28/2007												
RECEIVING PARTY DATA													
Name:	The DIRECTV Group, Inc.												
Street Address:	2230 E. Imperial Highway												
Internal Address:	P. O. Box 956												
City:	El Segundo												
State/Country:	CALIFORNIA												
Postal Code:	90245												
PROPERTY NUMBERS Total: 1													
<table border="1"><thead><tr><th>Property Type</th><th>Number</th></tr></thead><tbody><tr><td>Application Number:</td><td>11930390</td></tr></tbody></table>	Property Type	Number	Application Number:	11930390									
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Application Number:	11930390												
CORRESPONDENCE DATA													
Fax Number:	(310)964-0941												
<i>Correspondence will be sent via US Mail when the fax attempt is unsuccessful.</i>													
Email:	janet.shibata@directv.com												
Correspondent Name:	The DIRECTV Group, Inc.												
Address Line 1:	P. O. Box 956												
Address Line 2:	CA/LA1/A109												
Address Line 4:	El Segundo, CALIFORNIA 90245												
ATTORNEY DOCKET NUMBER:	PD-207103												
NAME OF SUBMITTER:	Janet Shibata												

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PATENT

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REEL: 020194 FRAME: 0489

Total Attachments: 4

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ASSIGNMENT

PD-207103

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ASSIGNMENT

WHEREAS, MITCHELL B. WASDEN, VISHAL ARYA, DANIEL M. MINER, DARREN M. ST. LAURENT and DAVID T. BOLTZ, 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 MONITORING AND ENCODING SIGNALS IN A LOCAL FACILITY AND COMMUNICATING THE SIGNALS BETWEEN A LOCAL COLLECTION FACILITY AND A REMOTE FACILITY USING AN IP NETWORK** for which application for Letters Patent of the United States was filed on October 31, 2007 as Serial No. 11/930,390.

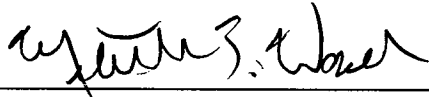
WHEREAS, The DIRECTV Group, Inc. (hereinafter referred to as the "Company"), a Delaware Corporation, having its principal place of business in El Segundo, California, is desirous of acquiring the entire and exclusive right, title and interest in, to and under said invention, said application and any 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.



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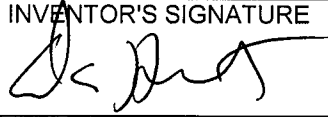
REEL: 020194 FRAME: 0491


IN WITNESS WHEREOF, we have executed this instrument.

FULL NAME OF SOLE OR JOINT INVENTOR	INVENTOR'S SIGNATURE	DATE
MITCHELL B. WASDEN		11/30/07
RESIDENCE (CITY AND STATE)		
Redondo Beach, California		

FULL NAME OF SOLE OR JOINT INVENTOR	INVENTOR'S SIGNATURE	DATE
VISHAL ARYA		11-28-07
RESIDENCE (CITY AND STATE)		
Los Angeles, California		

FULL NAME OF SOLE OR JOINT INVENTOR	INVENTOR'S SIGNATURE	DATE
DANIEL M. MINER		11-30-07
RESIDENCE (CITY AND STATE)		
Santa Clara, California Redondo Beach, California 		

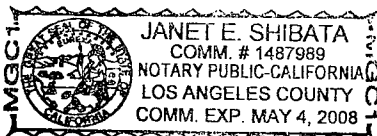
FULL NAME OF SOLE OR JOINT INVENTOR	INVENTOR'S SIGNATURE	DATE
DARREN M. ST. LAURENT		11/20/07
RESIDENCE (CITY AND STATE)		
Stevenson Ranch, California		

FULL NAME OF SOLE OR JOINT INVENTOR	INVENTOR'S SIGNATURE	DATE
DAVID T. BOLTZ		11-28-07
RESIDENCE (CITY AND STATE)		
La Mirada, California		

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

On November 30, 2007, before me, Janet E. Shibata, a Notary Public in and for said State, personally appeared MITCHELL B. WADDEN, ☐ personally known to me or ☒ 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.

WITNESS my hand and official seal.

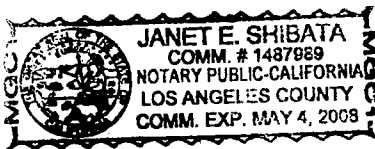


Janet E. Shibata
Notary Public

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

On November 28, 2007, before me, Janet E. Shibata, a Notary Public in and for said State, personally appeared VISHAL ARYA, ☐ personally known to me or ☒ 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.

WITNESS my hand and official seal.

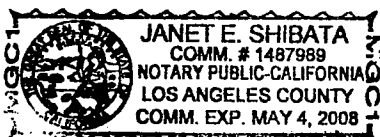


Janet E. Shibata
Notary Public

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

On November 30, 2007, before me, Janet E. Shibata, a Notary Public in and for said State, personally appeared DANIEL M. MINER, ☐ personally known to me or ☒ 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.

WITNESS my hand and official seal.

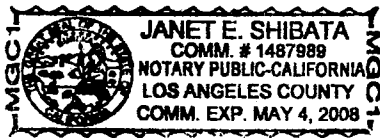


Janet E. Shibata
Notary Public

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

On November 20, 2007, before me, Janet E. Shibata, a Notary Public in and for said State, personally appeared DARREN M. ST. LAURENT, ☐ personally known to me or ☒ 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.

WITNESS my hand and official seal.

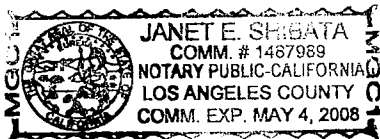


Janet E. Shibata
Notary Public

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

On November 28, 2007, before me, Janet E. Shibata, a Notary Public in and for said State, personally appeared DAVID T. BOLTZ, ☐ personally known to me or ☒ 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.

WITNESS my hand and official seal.



Janet E. Shibata
Notary Public