508576748 05/31/2024

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 Assignment ID: PATI268287

		NEW ASSIGNMENT			
NATURE OF CONVEYANCE:		ASSIGNMENT	ASSIGNMENT		
CONVEYING PARTY DA	ATA				
		Name	Execution Date		
Robert Alan Orlowski			07/22/2014		
RECEIVING PARTY DA	ТА				
Company Name:	Comcast	Cable Communications, LLC			
Street Address:	1701 JFK	1701 JFK Boulevard			
City:	Philadelp	hia			
State/Country:	PENNSY	LVANIA			
Postal Code:	19103				
PROPERTY NUMBERS	Total: 1				
Property Type		Number			
Application Number:	18	3138590			
CORRESPONDENCE D	ΑΤΑ				
Fax Number: <i>Correspondence will be using a fax number, if p</i> Phone: Email: Correspondent Name: Address Line 1: Address Line 2:	e sent to ta provided; 1 20 Di Ba 11 #1	he e-mail address first; if that is unsu if that is unsuccessful, it will be sent 28243353 Belson@bannerwitcoff.com anner Witcoff 100 13th St NW 1200	via US Mail.		
Fax Number: <i>Correspondence will be</i> <i>using a fax number, if p</i> Phone: Email: Correspondent Name: Address Line 1: Address Line 2: Address Line 4:	e sent to ta provided; 1 20 Di Ba 11 #1 W	<i>if that is unsuccessful, it will be sent</i> of 28243353 Belson@bannerwitcoff.com anner Witcoff 100 13th St NW 1200 /ashington, DISTRICT OF COLUMBIA 20	via US Mail.		
Fax Number: <i>Correspondence will be</i> <i>using a fax number, if p</i> Phone: Email: Correspondent Name: Address Line 1: Address Line 2: Address Line 4: ATTORNEY DOCKET NU	e sent to ta provided; 1 20 Di Ba 11 #1 W	if that is unsuccessful, it will be sent 028243353 Belson@bannerwitcoff.com anner Witcoff 100 13th St NW 1200 /ashington, DISTRICT OF COLUMBIA 20 007412.06328	via US Mail.		
Fax Number: <i>Correspondence will be</i> <i>using a fax number, if p</i> Phone: Email: Correspondent Name: Address Line 1: Address Line 2: Address Line 4: ATTORNEY DOCKET NUMARE OF SUBMITTER:	e sent to ta provided; 1 20 Di Ba 11 #1 W	if that is unsuccessful, it will be sent of 28243353 Belson@bannerwitcoff.com anner Witcoff 100 13th St NW 1200 /ashington, DISTRICT OF COLUMBIA 20 007412.06328 Deirdre Belson	via US Mail.		
Fax Number: <i>Correspondence will be using a fax number, if p</i> Phone: Email: Correspondent Name: Address Line 1: Address Line 2: Address Line 4: ATTORNEY DOCKET NUMATORNEY DOCKET NUMATOR SUBMITTER: BIGNATURE:	e sent to ta provided; 1 20 Di Ba 11 #1 W	if that is unsuccessful, it will be sent 28243353 Belson@bannerwitcoff.com anner Witcoff 100 13th St NW 1200 /ashington, DISTRICT OF COLUMBIA 20 007412.06328 Deirdre Belson Deirdre Belson	via US Mail.		
Fax Number: <i>Correspondence will be</i> <i>using a fax number, if p</i> Phone: Email: Correspondent Name: Address Line 1: Address Line 2: Address Line 4: ATTORNEY DOCKET NU	e sent to ta provided; 1 20 Di Ba 11 #1 W	if that is unsuccessful, it will be sent of 28243353 Belson@bannerwitcoff.com anner Witcoff 100 13th St NW 1200 /ashington, DISTRICT OF COLUMBIA 20 007412.06328 Deirdre Belson	via US Mail.		

PATENT ASSIGNMENT

WHEREAS, Comcast Cable Communications, LLC, a Delaware limited liability company, with offices at One Comcast Center, 1701 John F. Kennedy Boulevard, Philadelphia, Pennsylvania 19103-2838 ("ASSIGNEE"), desires to obtain any and all of ASSIGNORS' rights, title and interests of every kind and character throughout the world, legal, beneficial and otherwise, that ASSIGNORS individually and collectively have now or in the future or are deemed to have now or in the future in and to certain patents and patent applications;

or in the future in and to certain patents and patent applications; **WHEREAS**, Robert Alan Orlowski, annatural person residing at 7090 E. Hinsdale Place, Centennial, CO 80112, on behalf of himself, his affiliates, and their respective successors, assignees and any other transferee in interest (collectively and individually "ASSIGNORS") desire to irrevocably transfer to ASSIGNEE any and all of ASSIGNORS' rights, title and interests of every kind and character throughout the world, legal, beneficial and otherwise, that ASSIGNORS individually and collectively have now or in the future or are deemed to have now or in the future, if any;

Now, THEREFORE, in consideration of the good and valuable consideration provided by ASSIGNEE to ASSIGNORS, the receipt and sufficiency of which is mutually acknowledged, ASSIGNORS, on behalf of themselves, their affiliates, and their respective successors, assignees and other transferees in interest, each do hereby irrevocably assign, convey, sell, grant and transfer and agree to assign, convey, sell, grant and transfer to ASSIGNEE any and all of their rights, title and interests of every kind and character throughout the world, legal, beneficial and otherwise, they individually and collectively have now or in the future or are deemed to have now or in the future in and to the patents and patent applications set forth in Attachment 1 hereto and all inventions disclosed or claimed in the patents and patent applications to the full extent of their ownership, rights, title and interests in and to the patents, applications and inventions, including without limitation (1) all domestic and foreign patent applications and registrations therefor (and all patents that issue therefrom) and all divisions, continuations, continuations-inpart, reexaminations, substitutions, reissues, extensions and renewals of such applications, registrations and patents, and the right to apply for any of the foregoing, (2) all rights to causes of action and remedies related to any of the items in foregoing clause (1), including without limitation the right to sue for past, present or future infringement, misappropriation or violation of rights related to the foregoing and to retain any damages and profits due or accrued in relation thereto, and (3) any and all other ownership rights and interests arising out of, in connection with or in relation to the items in foregoing clause 1.

[signature page follows]

[signature page]

IN WITNESS WHEREOF, ASSIGNORS have caused this Patent Assignment to be duly executed by an authorized officer or other person.

Robert Alan Orlowski By: Rostor And Openersky, INDIVIDUAL, ARTIFICIAL PERSON. Name: RUBERT ALAN ORLOWSKI Title: INDIVIDUAL, FICTITIONS ENTITY, ARTIFICIAL PERSON Date: July 22, 2014 STATE OF <u>COLORADO</u> COUNTY OF <u>Arapahoe</u>) ss. On <u>JUIY 22Nd</u>, 2014, before me, the undersigned notary public in and for said County and State, personally appeared <u>POBERT ALAN ONOWSKI</u> personally known to me [or] proved to me on the basis of satisfactory evidence X is subscribed to the within instrument and to be the person(s) whose name(s) executed the same in his acknowledged to me that he authorized capacity(ies) and that, by his signature(s) on the instrument, the person(s) or the entity(ies) upon behalf of which the person(s) acted executed the instrument. WITNESS my hand and official seal. 4/15/2015 MOLLIE SULLIVAN My commission expires on Notary Public State of Colorado

Attachment 1 to Patent Assignment

PATENTS

SERIAL Number or Registration Number	Country	Filing or Issue Date	TITLE
Pat. No. 8,365,212	United States of America	Issued January 29, 2013	SYSTEM AND METHOD FOR ANALYZING HUMAN INTERACTION WITH ELECTRONIC DEVICES THAT ACCESS A COMPUTER SYSTEM THROUGH A NETWORK
Pat. No. 8,365,213	United States of America	Issued January 29, 2013	SYSTEM AND METHOD FOR MEASURING TELEVISION ADVERTISING AND PROGRAM VIEWING AT A SECOND-BY- SECOND LEVEL AND FOR MEASURING EFFECTIVENESS OF TARGETED ADVERTISING
Appl. No. 13360704	United States of America	Filed January 28, 2012	SYSTEM AND METHOD FOR MEASURING LONGITUDINAL VIDEO ASSET VIEWING AT A SECOND-BY-SECOND LEVEL TO UNDERSTAND BEHAVIOR OF VIEWERS AS THEY INTERACT WITH VIDEO ASSET VIEWING DEVICES THAT ACCESS A COMPUTER SYSTEM THROUGH A NETWORK
Appl. No. 13567073	United States of America	Filed August 5, 2012	SYSTEM AND METHOD FOR MEASURING LINEAR, DVR, AND VOD VIDEO PROGRAM VIEWING AT A SECOND-BY-SECOND LEVEL TO UNDERSTAND BEHAVIOR OF VIEWERS AS THEY INTERACT WITH VIDEO ASSET VIEWING DEVICES DELIVERING CONTENT THROUGH A NETWORK
Appl. No. 13740199	United States of America	Filed January 13, 2013	SYSTEM AND METHOD FOR MEASURING DEMOGRAPHIC-BASED HOUSEHOLD ADVERTISING REACH; IMPRESSIONS, SHARE, HUT, RATING, AND CUMULATIVE AUDIENCE; AND VIDEO PROGRAM VIEWING, BASED ON SECOND-BY-SECOND HOUSE LEVEL VIEWING ACTIVITY, TO

SERIAL NUMBER OR REGISTRATION NUMBER	COUNTRY	Filing or Issue Date	TITLE
			UNDERSTAND BEHAVIOR OF VIEWERS AS THEY INTERACT WITH VIDEO ASSET VIEWING DEVICES DELIVERING CONTENT THROUGH A NETWORK
Appl. No. 14013031	United States of America	Filed August 29, 2013	SYSTEM AND METHOD FOR USING THE HADOOP MAPREDUCE FRAMEWORK TO MEASURE VIDEO CONTENT VIEWING ON SECOND-BY-SECOND LEVEL TO UNDERSTAND BEHAVIOR OF VIEWERS AS THEY INTERACT WITH VIDEO ASSET VIEWING DEVICES DELIVERING CONTENT THROUGH A NETWORK
Appl. No. 14020778	United States of America	Filed September 6, 2013	SYSTEM AND METHOD FOR USING THE HADOOP MAPREDUCE FRAMEWORK TO MEASURE LINEAR, DVR, AND VOD VIDEO PROGRAM VIEWING INCLUDING MEASURING TRICK PLAY ACTIVITY ON SECOND-BY-SECOND LEVEL TO UNDERSTAND BEHAVIOR OF VIEWERS AS THEY INTERACT WITH VIDEO ASSET VIEWING DEVICES DELIVERING CONTENT THROUGH A NETWORK
Appl. No. 14037352	United States of America	Filed September 25, 2013	SYSTEM AND METHOD TO REDUCE THE WORKLOAD ON THE HADOOP MAPREDUCE FRAMEWORK BY IMPLEMENTING DATA TRANSLATION STRATEGIES PRIOR TO AGGREGATING LINEAR, DVR, AND VOD SECOND-BY- SECOND VIDEO VIEWING ACTIVITY USING MAPREDUCE

RECORDED: 05/31/2024