

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1
Stylesheet Version v1.2

EPAS ID: PAT8402966

SUBMISSION TYPE:	NEW ASSIGNMENT	
NATURE OF CONVEYANCE:	SECURITY AGREEMENT	
CONVEYING PARTY DATA		
	Name	Execution Date
	DIRECTV, LLC	01/24/2024
RECEIVING PARTY DATA		
Name:	THE BANK OF NEW YORK MELLON TRUST COMPANY, N.A., AS COLLATERAL AGENT	
Street Address:	601 TRAVIS STREET, 16TH FLOOR	
City:	HOUSTON	
State/Country:	TEXAS	
Postal Code:	77002	
PROPERTY NUMBERS Total: 753		
Property Type	Number	
Application Number:	09587960	
Application Number:	09613938	
Application Number:	09620833	
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Application Number:	09976651	
Application Number:	09978144	
Application Number:	09978170	
Application Number:	09978452	

PATENT

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Application Number:	18309537
Application Number:	29922384
Application Number:	18393493
Application Number:	18375403
Application Number:	15697990

CORRESPONDENCE DATA

Fax Number: (800)914-4240
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: 800-713-0755
Email: Michael.Violet@wolterskluwer.com
Correspondent Name: CT CORPORATION
Address Line 1: 4400 EASTON COMMONS WAY
Address Line 2: SUITE 125
Address Line 4: COLUMBUS, OHIO 43219

NAME OF SUBMITTER:	DORIS KA
SIGNATURE:	/Doris Ka/
DATE SIGNED:	01/25/2024

Total Attachments: 79

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PATENT SECURITY AGREEMENT

This PATENT SECURITY AGREEMENT (this “Patent Security Agreement”) is entered into as of January 24, 2024, by and among DIRECTV, LLC, a California limited liability company (“Grantor”) and The Bank of New York Mellon Trust Company, N.A., in its capacity as collateral agent for the Secured Parties (in such capacity, together with its successors and permitted assigns, the “Collateral Agent”).

PRELIMINARY STATEMENTS

WHEREAS, Grantor is party to a Pledge and Security Agreement, dated as of January 24, 2024 (as it may be from time to time amended, restated, amended and restated, supplemented or otherwise modified, the “Security Agreement”), in favor of the Collateral Agent pursuant to which Grantor granted to the Secured Parties a security interest in and continuing lien on, certain intellectual property rights owned by the Grantor and pursuant to which Grantor is required to execute and deliver this Patent Security Agreement;

NOW, THEREFORE, in consideration of the premises, Grantor hereby agrees with the Collateral Agent as follows:

SECTION 1. Defined Terms. Unless otherwise defined herein, terms defined in the Security Agreement and used herein have the meaning given to them in the Security Agreement.

SECTION 2. Grant of Security Interest in Patent Collateral. Grantor hereby pledges and grants to the Collateral Agent for itself and the ratable benefit of the Secured Parties a continuing lien on and security interest in and to all of its right, title and interest in, to and under: (a) all Patents owned by Grantor, including but not limited to the Patents listed on Schedule I attached hereto; (b) all inventions, designs and improvements described and claimed therein; (c) all reissues, divisions, continuations, renewals, extensions, and continuations-in-part thereof; (d) all income, royalties, damages, claims, and payments now or hereafter due or payable under and with respect thereto, including, without limitation, damages and payments for past and future infringements thereof; (e) all rights to sue for past, present, and future infringements thereof; and (f) all Proceeds of the foregoing, including, without limitation, royalties, income, payments, claims, damages and proceeds of suit (collectively, the “Patent Collateral”). Notwithstanding the foregoing or anything herein to the contrary, in no event shall the “Patent Collateral” include, or the security interests attach to, any Excluded Asset.

SECTION 3. Security Agreement. The security interest granted pursuant to this Patent Security Agreement is granted in conjunction with the security interest granted to the Collateral Agent pursuant to the Security Agreement, and should not be deemed to grant a broader security interest in the Patent Collateral than what is granted by the Grantor to the Collateral Agent in the Security Agreement. Grantor hereby acknowledges and affirms that the rights and remedies of the Collateral Agent with respect to the security interest in the Patent Collateral made and granted hereby are more fully set forth in the Security Agreement (and are expressly subject to the terms and conditions thereof), the terms and provisions of which are incorporated by reference as if fully set forth herein. In the event that any provision of this Patent Security Agreement is deemed to conflict with the Security Agreement, the provisions of the Security Agreement shall control.

SECTION 4. Termination. Upon the termination of the Security Agreement in accordance with its terms, the Collateral Agent shall execute, acknowledge and deliver to Grantor an instrument in writing

in recordable form releasing the collateral pledge, grant, lien and security interest in the Patent Collateral under this Patent Security Agreement.

SECTION 5. Counterparts. This Patent Security Agreement may be executed in any number of counterparts (and by different parties hereto on different counterparts), each of which shall constitute an original, but all of which when taken together shall constitute a single contract. Delivery of an executed counterpart of a signature page to this Patent Security Agreement by facsimile or other electronic imaging (including in .pdf format) means shall be effective as delivery of a manually executed counterpart of this Patent Security Agreement. The words "delivery," "execution," "execute," "signed," "signature," and words of like import in or related to any document to be signed in connection with this Patent Security Agreement and the transactions contemplated hereby shall be deemed to include electronic signatures, each of which shall be of the same legal effect, validity or enforceability as a manually executed signature or physical delivery thereof, as the case may be, to the extent and as provided for in any applicable Law, including the Federal Electronic Signatures in Global and National Commerce Act, the New York State Electronic Signatures and Records Act, or any other similar state laws based on the Uniform Electronic Transactions Act.

SECTION 6. GOVERNING LAW. THIS PATENT SECURITY AGREEMENT SHALL BE GOVERNED BY, AND CONSTRUED IN ACCORDANCE WITH, THE LAW OF THE STATE OF NEW YORK.

SECTION 7. Concerning the Collateral Agent. The Bank of New York Mellon Trust Company, N.A. is entering into this Patent Security Agreement solely in its capacity as Collateral Agent under the Indenture and the Security Agreement and shall be entitled to all of the rights, privileges, protections, benefits and immunities granted to the Collateral Agent under the Indenture and the Security Agreement as if such rights, privileges, protections, benefits and immunities were set forth herein. The recitals herein shall be taken as the statements of the Grantor and the Collateral Agent assumes no responsibility for their correctness. The Collateral Agent makes no representation as to the validity or sufficiency of this Patent Security Agreement.

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IN WITNESS WHEREOF, Grantor has caused this Patent Security Agreement to be executed and delivered by its duly authorized officer as of the date first set forth above.

DIRECTV, LLC


By: John Rutledge
Name: Johnathan Rutledge
Title: Senior Vice President and Treasurer

[Signature Page to Patent Security Agreement (Bonds)]

PATENT
REEL: 066371 FRAME: 0715

Accepted and Agreed:

THE BANK OF NEW YORK MELLON TRUST COMPANY, N.A.,
as Collateral Agent

By: 
Name: April Bradley
Title: Vice President

SCHEDULE I
to
PATENT SECURITY AGREEMENT

UNITED STATES ISSUED PATENTS AND PATENT APPLICATIONS:

	Assignee	Patent Title	Serial No. / Applicati on No.	Filing Date	Patent No.	Issue Date
1.	DIRECTV, LLC	Resource allocation method for multi-platform communication system	09587960	06/06/2000	7215954	05/08/2007
2.	DIRECTV, LLC	System employing threaded space-time architecture for transporting symbols and receivers for multi-user detection and decoding of symbols	09613938	07/11/2000	6898248	05/24/2005
3.	DIRECTV, LLC	Secure storage and replay of media programs using a hard-paired receiver and storage device	09620833	07/21/2000	8140859	03/20/2012
4.	DIRECTV, LLC	Stratospheric-based communication system for mobile users using additional phased array elements for interference rejection	09661725	09/14/2000	7317916	01/08/2008
5.	DIRECTV, LLC	Method and system of efficient spectrum utilization by communications satellites	09664940	09/19/2000	6810249	10/26/2004
6.	DIRECTV, LLC	Dynamic cell CDMA code assignment system and method	09735861	12/12/2000	6891813	05/10/2005
7.	DIRECTV, LLC	Daypart based navigation paradigm	09818230	03/27/2001	8046799	10/25/2011
8.	DIRECTV, LLC	DVR with enhanced functionality	09837844	04/18/2001	8312490	11/13/2012

	Assignee	Patent Title	Serial No. / Applicati on No.	Filing Date	Patent No.	Issue Date
9.	DIRECTV, LLC	Method and system for extending recording	09855813	05/14/2001	7356246	04/08/2008
10.	DIRECTV, LLC	Simultaneous tuning of multiple satellite frequencies	09870323	05/30/2001	7240357	07/03/2007
11.	DIRECTV, LLC	Method and apparatus for adaptive channel selection	09910161	07/20/2001	7299484	11/20/2007
12.	DIRECTV, LLC	Method and system for remote television replay control	09925120	08/08/2001	8949374	02/03/2015
13.	DIRECTV, LLC	Application of complex codes to maximize user link utilization	09945483	08/31/2001	7245599	07/17/2007
14.	DIRECTV, LLC	Method and apparatus for encrypting media programs for later purchase and viewing	09960824	09/21/2001	7409562	08/05/2008
15.	DIRECTV, LLC	Application of complex codes to maximize feeder link utilization	09967691	09/28/2001	7236508	06/26/2007
16.	DIRECTV, LLC	One click web records	09972424	10/04/2001	9171851	10/27/2015
17.	DIRECTV, LLC	Method and apparatus for identifying MPEG picture coding types	09976651	10/12/2001	7206501	04/17/2007
18.	DIRECTV, LLC	Method and system for dynamic ad placement	09978144	10/15/2001	8571934	10/29/2013
19.	DIRECTV, LLC	Method and system for pause ads	09978170	10/15/2001	8078493	12/13/2011
20.	DIRECTV, LLC	Method, system and computer program product for aircraft multimedia distribution	09978452	10/17/2001	7610602	10/27/2009
21.	DIRECTV, LLC	Space-time trellis code for orthogonal frequency division multiplexing (OFDM)	10011631	11/05/2001	7177365	02/13/2007

	Assignee	Patent Title	Serial No. / Applicati on No.	Filing Date	Patent No.	Issue Date
22.	DIRECTV, LLC	Advertisements in a television recordation system	10033401	12/26/2001	8571933	10/29/2013
23.	DIRECTV, LLC	Exploitation of null packets in packetized digital television systems	10038174	01/03/2002	7376159	05/20/2008
24.	DIRECTV, LLC	Content filtering using static source routes	10040773	12/28/2001	7953087	05/31/2011
25.	DIRECTV, LLC	Time shifted targeted advertisements based upon user profiles	10046841	01/15/2002	8782691	07/15/2014
26.	DIRECTV, LLC	Proactive internet searching tool	10051933	01/17/2002	6996564	02/07/2006
27.	DIRECTV, LLC	System and methodology for video compression	10074765	02/12/2002	9894379	02/13/2018
28.	DIRECTV, LLC	Audio-video synchronization for digital systems	10079992	02/20/2002	7379653	05/27/2008
29.	DIRECTV, LLC	Asynchronous configuration	10085860	02/28/2002	7275163	09/25/2007
30.	DIRECTV, LLC	Method and apparatus for filtering data displayed in an electronic television program guide	10101799	03/20/2002	8321892	11/27/2012
31.	DIRECTV, LLC	Direct broadcast receiver utilizing LNB in cascade	10116266	04/04/2002	7149470	12/12/2006
32.	DIRECTV, LLC	Method and apparatus for tuning used in a broadcast data system	10119202	04/09/2002	8073955	12/06/2011
33.	DIRECTV, LLC	Interface for resolving recording conflicts with network devices	10124064	04/16/2002	7917008	03/29/2011
34.	DIRECTV, LLC	Accessing programs using networked digital video recording devices	10124190	04/16/2002	9602862	03/21/2017

	Assignee	Patent Title	Serial No. / Applicati on No.	Filing Date	Patent No.	Issue Date
35.	DIRECTV, LLC	Methods and apparatus for sending content between client devices	10124583	04/16/2002	8214422	07/03/2012
36.	DIRECTV, LLC	System and method for improved blackfield detection	10132968	04/26/2002	7251413	07/31/2007
37.	DIRECTV, LLC	Method and apparatus for providing higher order modulation that is backwards compatible with quaternary phase shift keying (QPSK) or offset quaternary phase shift keying (OQPSK)	10142703	05/10/2002	7260159	08/21/2007
38.	DIRECTV, LLC	Satellite TWTA on-line non-linearity measurement	10165710	06/07/2002	7778365	08/17/2010
39.	DIRECTV, LLC	Apparatus and method for processing content signals from multiple signal sources	10209165	09/20/2002	7930712	04/19/2011
40.	DIRECTV, LLC	Network video unit	10215904	08/09/2002	8875198	10/28/2014
41.	DIRECTV, LLC	Signal, interference and noise power measurement	10236414	09/06/2002	7822154	10/26/2010
42.	DIRECTV, LLC	Direct broadcast signal distribution methods	10255344	09/25/2002	7954127	05/31/2011
43.	DIRECTV, LLC	Apparatus and method for preserving routable IP addresses using ARP proxy	10295431	11/15/2002	7512136	03/31/2009
44.	DIRECTV, LLC	Systems and methods for sharing uplink bandwidth among satellites in a common orbital slot	10305490	11/26/2002	7068975	06/27/2006

	Assignee	Patent Title	Serial No. / Applicati on No.	Filing Date	Patent No.	Issue Date
45.	DIRECTV, LLC	System and method for persistent storage of common user information for interactive television using a centrally located repository	10313780	12/05/2002	7844994	11/30/2010
46.	DIRECTV, LLC	Reusable application software for generating interactive television applications	10319046	12/13/2002	7984476	07/19/2011
47.	DIRECTV, LLC	Distributed storage and processing of viewing usage data	10339002	01/08/2003	8561096	10/15/2013
48.	DIRECTV, LLC	Digital recording and playback	10339012	01/08/2003	8873929	10/28/2014
49.	DIRECTV, LLC	Antenna/feed alignment system for reception of multibeam DBS signals	10339949	01/10/2003	6693587	02/17/2004
50.	DIRECTV, LLC	Technique for data compression by decoding binary encoded data	10387177	03/12/2003	7936787	05/03/2011
51.	DIRECTV, LLC	System and method for navigation of indexed video content	10393599	03/20/2003	7735104	06/08/2010
52.	DIRECTV, LLC	Apparatus for viewing television with pause capability	10396229	03/24/2003	8428438	04/23/2013
53.	DIRECTV, LLC	System for monitoring direct broadcast wireless signals	10400726	03/26/2003	7380265	05/27/2008
54.	DIRECTV, LLC	Methods and apparatus for monitoring compressed bitstreams	10425120	04/28/2003	7424160	09/09/2008
55.	DIRECTV, LLC	Audio level control for compressed audio	10426664	04/30/2003	7647221	01/12/2010
56.	DIRECTV, LLC	Advertising spots for fast-forward play	10426732	04/30/2003	9066131	06/23/2015

	Assignee	Patent Title	Serial No. / Applicati on No.	Filing Date	Patent No.	Issue Date
57.	DIRECTV, LLC	Media delivery assurance in broadcast distribution services	10434352	05/08/2003	7895615	02/22/2011
58.	DIRECTV, LLC	Methods and apparatus for distributing digital content	10441505	05/20/2003	7369660	05/06/2008
59.	DIRECTV, LLC	System and method for evaluating callback functionality in a satellite television network	10444042	05/22/2003	7367039	04/29/2008
60.	DIRECTV, LLC	Adaptive return link for two-way satellite communication systems	10464113	06/18/2003	7653349	01/26/2010
61.	DIRECTV, LLC	Audio/video satellite broadcast network	10464228	06/18/2003	8997157	03/31/2015
62.	DIRECTV, LLC	On-screen user interface device	10464312	06/18/2003	7607107	10/20/2009
63.	DIRECTV, LLC	Method and apparatus for controlling paired operation of a conditional access module and an integrated receiver and decoder	10490261	08/05/2004	7797552	09/14/2010
64.	DIRECTV, LLC	Amplitude and phase matching for layered modulation reception	10532524	04/25/2005	7474710	01/06/2009
65.	DIRECTV, LLC	Feeder link configurations to support layered modulation for digital signals	10532631	04/25/2005	7423987	09/09/2008
66.	DIRECTV, LLC	Chassis spring finger tortuous path with improved manufacturability	10607744	06/27/2003	7132609	11/07/2006
67.	DIRECTV, LLC	Modified electronic program guide	10640111	08/13/2003	8347333	01/01/2013

	Assignee	Patent Title	Serial No. / Applicati on No.	Filing Date	Patent No.	Issue Date
68.	DIRECTV, LLC	Automatic measurement of audio presence and level by direct processing of an MPEG data stream	10660952	09/12/2003	7912226	03/22/2011
69.	DIRECTV, LLC	Receiver interface with multiple access cards	10680862	10/07/2003	8484671	07/09/2013
70.	DIRECTV, LLC	Television interactive gaming having local storage of game portal	10687474	10/14/2003	8025571	09/27/2011
71.	DIRECTV, LLC	Smart card reader	10723617	11/25/2003	7195161	03/27/2007
72.	DIRECTV, LLC	Distribution of video content using a trusted network key for sharing content	10758811	01/16/2004	7599494	10/06/2009
73.	DIRECTV, LLC	Distribution of broadcast content for remote decryption and viewing	10758818	01/16/2004	7548624	06/16/2009
74.	DIRECTV, LLC	Distribution of video content using client to host pairing of integrated receivers/decoders	10758865	01/16/2004	7580523	08/25/2009
75.	DIRECTV, LLC	Collection and correlation over time of private viewing usage data	10790465	03/01/2004	7343375	03/11/2008
76.	DIRECTV, LLC	Video on demand in a broadcast network	10790466	03/01/2004	7801303	09/21/2010
77.	DIRECTV, LLC	Multiprocessor conditional access module and method for using the same	10791934	03/03/2004	7530108	05/05/2009
78.	DIRECTV, LLC	Method and apparatus for verifying memory contents	10792484	03/03/2004	8122215	02/21/2012
79.	DIRECTV, LLC	Satellite television network and near real-time method for downloading and verifying a subscriber remote record request	10813948	03/31/2004	8782711	07/15/2014

	Assignee	Patent Title	Serial No. / Applicati on No.	Filing Date	Patent No.	Issue Date
80.	DIRECTV, LLC	Automatic reporting of antenna installation	10827809	04/20/2004	8112779	02/07/2012
81.	DIRECTV, LLC	Method and system for providing digital video distribution	10843766	05/12/2004	8707373	04/22/2014
82.	DIRECTV, LLC	Method and system for providing multi-input-multi-output (MIMO) downlink transmission	10849101	05/19/2004	7492749	02/17/2009
83.	DIRECTV, LLC	Video loop apparatus and methods for use with digital television systems	10851838	05/21/2004	9071861	06/30/2015
84.	DIRECTV, LLC	Efficient message delivery in a multi-channel uni-directional communications system	10866291	06/10/2004	7684409	03/23/2010
85.	DIRECTV, LLC	Video bit stream test	10900845	07/27/2004	7391434	06/24/2008
86.	DIRECTV, LLC	Method and apparatus for navigating content in a personal video recorder	10918721	08/12/2004	7522816	04/21/2009
87.	DIRECTV, LLC	Automatic software update detection and flexible installer for set-top boxes	10934606	09/02/2004	7673297	03/02/2010
88.	DIRECTV, LLC	Method and system for adaptive transcoding and transrating in a video network	10939669	09/13/2004	7555006	06/30/2009
89.	DIRECTV, LLC	Method of using feedback from consumer terminals to adaptively control a satellite system	10947624	09/21/2004	7532860	05/12/2009
90.	DIRECTV, LLC	Equalization for traveling wave tube amplifier nonlinearity measurements	10961579	10/08/2004	7502429	03/10/2009

	Assignee	Patent Title	Serial No. / Applicati on No.	Filing Date	Patent No.	Issue Date
91.	DIRECTV, LLC	Coherent averaging for measuring traveling wave tube amplifier nonlinearity	10962346	10/08/2004	7502430	03/10/2009
92.	DIRECTV, LLC	Adaptive error correction	10993656	11/19/2004	7861132	12/28/2010
93.	DIRECTV, LLC	Tri-head KaKuKa feed for single-offset dish antenna	11015705	12/17/2004	7202833	04/10/2007
94.	DIRECTV, LLC	Method and apparatus for distributing media in a pay per play architecture with remote playback within an enterprise	11021096	12/22/2004	9160976	10/13/2015
95.	DIRECTV, LLC	Method and system for reconfiguring a selection system based on layers of categories descriptive of recordable events	11030422	01/05/2005	7290211	10/30/2007
96.	DIRECTV, LLC	Method and system for displaying a series of recordable events	11030692	01/05/2005	7657151	02/02/2010
97.	DIRECTV, LLC	Transponder tuning and mapping	11097479	04/01/2005	7950038	05/24/2011
98.	DIRECTV, LLC	Automatic level control for incoming signals of different signal strengths	11097480	04/01/2005	7958531	06/07/2011
99.	DIRECTV, LLC	Signal injection via power supply	11097481	04/01/2005	8621525	12/31/2013
100.	DIRECTV, LLC	Backwards-compatible frequency translation module for satellite video delivery	11097482	04/01/2005	8024759	09/20/2011
101.	DIRECTV, LLC	System architecture for control and signal distribution on coaxial cable	11097615	04/01/2005	7987486	07/26/2011
102.	DIRECTV, LLC	Narrow bandwidth signal delivery system	11097625	04/01/2005	7945932	05/17/2011

	Assignee	Patent Title	Serial No. / Applicati on No.	Filing Date	Patent No.	Issue Date
103.	DIRECTV, LLC	Power balancing signal combiner	11097724	04/01/2005	8549565	10/01/2013
104.	DIRECTV, LLC	Digital media conditional access system for handling digital media content	11119712	05/02/2005	7590243	09/15/2009
105.	DIRECTV, LLC	Combining transponder bandwidths for source and forward error correction encoding efficiency	11193856	07/29/2005	8200149	06/12/2012
106.	DIRECTV, LLC	Method and apparatus for connecting satellite receiver telephone modems over coaxial cable	11205249	08/16/2005	8763059	06/24/2014
107.	DIRECTV, LLC	Network fraud prevention via registration and verification	11219418	09/02/2005	7937732	05/03/2011
108.	DIRECTV, LLC	Code design and implementation improvements for low density parity check codes for wireless routers using 802.11N protocol	11222084	09/08/2005	7562280	07/14/2009
109.	DIRECTV, LLC	Comprehensive network monitoring at broadcast satellite sites located outside of the broadcast service area	11222085	09/08/2005	7580708	08/25/2009
110.	DIRECTV, LLC	Antenna pointing aid	11274771	11/15/2005	7663560	02/16/2010
111.	DIRECTV, LLC	Method and apparatus for increasing the quality of service for digital video services for mobile reception	11305853	12/16/2005	7738768	06/15/2010
112.	DIRECTV, LLC	Method and apparatus for controlling handoffs in a mobile system	11320318	12/28/2005	8023883	09/20/2011

	Assignee	Patent Title	Serial No. / Applicati on No.	Filing Date	Patent No.	Issue Date
113.	DIRECTV, LLC	Remote control mode on-screen displays and methods for producing the same	11346499	02/02/2006	8531275	09/10/2013
114.	DIRECTV, LLC	Methods and apparatus to select tornado error correction parameters	11351760	02/10/2006	7480848	01/20/2009
115.	DIRECTV, LLC	Methods and apparatus to test receivers	11376055	03/15/2006	7817184	10/19/2010
116.	DIRECTV, LLC	Adaptive coding and modulation for spot beam satellite broadcast	11376813	03/16/2006	9485010	11/01/2016
117.	DIRECTV, LLC	Command, control and communications with intelligent antennas	11431251	05/10/2006	7642960	01/05/2010
118.	DIRECTV, LLC	Methods and apparatus to provide content on demand in content broadcast systems	11433969	05/15/2006	7992175	08/02/2011
119.	DIRECTV, LLC	Secure content transfer systems and methods to operate the same	11434404	05/15/2006	8775319	07/08/2014
120.	DIRECTV, LLC	Methods and apparatus to conditionally authorize content delivery at receivers in pay delivery systems	11434437	05/15/2006	8001565	08/16/2011
121.	DIRECTV, LLC	Methods and apparatus to conditionally authorize content delivery at content servers in pay delivery systems	11434538	05/15/2006	8095466	01/10/2012
122.	DIRECTV, LLC	Customizable user interface for external devices	11475743	06/27/2006	9015382	04/21/2015
123.	DIRECTV, LLC	Distributed media-protection systems and methods to operate the same	11499635	08/04/2006	9178693	11/03/2015

	Assignee	Patent Title	Serial No. / Applicati on No.	Filing Date	Patent No.	Issue Date
124.	DIRECTV, LLC	Distributed media-aggregation systems and methods to operate the same	11499636	08/04/2006	9225761	12/29/2015
125.	DIRECTV, LLC	Secure delivery of program content via a removable storage medium	11501985	08/10/2006	9325944	04/26/2016
126.	DIRECTV, LLC	Administrative tool for video programming	11509929	08/25/2006	8677403	03/18/2014
127.	DIRECTV, LLC	Methods and apparatuses for determining scrambling codes for signal transmission	11510244	08/25/2006	7961880	06/14/2011
128.	DIRECTV, LLC	Mosaic channel video stream with interactive services	11513992	08/31/2006	8056099	11/08/2011
129.	DIRECTV, LLC	Multiple dwelling unit satellite television delivery system	11523218	09/18/2006	7788694	08/31/2010
130.	DIRECTV, LLC	Reconfigurable notched spectrum for wireless data transmission	11523382	09/18/2006	8509158	08/13/2013
131.	DIRECTV, LLC	Method of manufacturing a chassis assembly to reduce electromagnetic interference	11528229	09/27/2006	7581303	09/01/2009
132.	DIRECTV, LLC	Method and system for operating a satellite communication system with regional redundant sites and a central site	11529840	09/29/2006	7693483	04/06/2010
133.	DIRECTV, LLC	Method and system for broadcasting in a satellite communication system when switching between a primary site and a diverse site	11529915	09/29/2006	7706747	04/27/2010

	Assignee	Patent Title	Serial No. / Applicati on No.	Filing Date	Patent No.	Issue Date
134.	DIRECTV, LLC	Method and system for determining attenuation and controlling uplink power in a satellite communication system	11529918	09/29/2006	7715788	05/11/2010
135.	DIRECTV, LLC	Antenna hub configuration	11529932	09/29/2006	7720433	05/18/2010
136.	DIRECTV, LLC	Audio video timing measurement and synchronization	11529941	09/29/2006	7948558	05/24/2011
137.	DIRECTV, LLC	Method and system for determining delays between a primary site and diverse site in a satellite communication system	11529949	09/29/2006	7596350	09/29/2009
138.	DIRECTV, LLC	Method and apparatus for connecting primary and diverse sites in a satellite communication system	11529950	09/29/2006	7783248	08/24/2010
139.	DIRECTV, LLC	Method and system for receiving a beacon signal in a satellite communication system	11540037	09/29/2006	7761054	07/20/2010
140.	DIRECTV, LLC	Method and apparatus for controlling a mobile device beyond an area of interest boundary	11545278	10/10/2006	9316738	04/19/2016
141.	DIRECTV, LLC	Ka/Ku antenna alignment	11545845	10/11/2006	7636067	12/22/2009
142.	DIRECTV, LLC	Alignment method for multi-satellite consumer receiver antennas	11545846	10/11/2006	7663543	02/16/2010
143.	DIRECTV, LLC	Triple band combining approach to satellite signal distribution	11546116	10/11/2006	7991348	08/02/2011
144.	DIRECTV, LLC	Single local oscillator sharing in multi-band ka-band LNBS	11546118	10/11/2006	9282299	03/08/2016

	Assignee	Patent Title	Serial No. / Applicati on No.	Filing Date	Patent No.	Issue Date
145.	DIRECTV, LLC	Dynamic current sharing in Ka/Ku LNB design	11546689	10/12/2006	8515342	08/20/2013
146.	DIRECTV, LLC	Passive system and method to equalize distortion in an RF satellite chain	11586383	10/25/2006	8126044	02/28/2012
147.	DIRECTV, LLC	Passive system and method to determine distortion in an RF satellite chain	11586414	10/25/2006	7925231	04/12/2011
148.	DIRECTV, LLC	Method and system for moving and playing content from home-based system to mobile system	11593711	11/07/2006	8942618	01/27/2015
149.	DIRECTV, LLC	Apparatus for mounting a satellite antenna in a vehicle	11595315	11/10/2006	7847744	12/07/2010
150.	DIRECTV, LLC	Method and apparatus for providing emergency information to a mobile receiving device	11595393	11/10/2006	7720431	05/18/2010
151.	DIRECTV, LLC	Mobile receiver solutions for accessing broadband video-on-demand services	11595394	11/10/2006	7925216	04/12/2011
152.	DIRECTV, LLC	Method and apparatus for receiving dual band signals from an orbital location using an outdoor unit with a subreflector and additional antenna feed	11602821	11/21/2006	7860453	12/28/2010
153.	DIRECTV, LLC	Method and apparatus for receiving dual band signals from a common orbital location with an outdoor unit using a frequency selective subreflector and additional antenna feed	11602823	11/21/2006	7639980	12/29/2009

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154.	DIRECTV, LLC	Method and system for securely providing content to a portable media player device	11603632	11/22/2006	8875206	10/28/2014
155.	DIRECTV, LLC	Method and system for enabling transfer of content between a storage device and a portable media player device	11603743	11/22/2006	8107626	01/31/2012
156.	DIRECTV, LLC	Method and system for targeted marketing to a portable media player device owner	11603768	11/22/2006	7747703	06/29/2010
157.	DIRECTV, LLC	Method and system for updating file segments of content on a portable media player device	11603878	11/22/2006	9317507	04/19/2016
158.	DIRECTV, LLC	Method and system for providing content to a portable media player device and maintaining licensing rights	11603879	11/22/2006	9143734	09/22/2015
159.	DIRECTV, LLC	Reliable event broadcaster with multiplexing and bandwidth control functions	11626707	01/24/2007	8149771	04/03/2012
160.	DIRECTV, LLC	Method and system for providing a predeactivation warning in a system having a conditional access authorization expiration in a mobile receiving device	11638202	12/13/2006	8243923	08/14/2012
161.	DIRECTV, LLC	Method and apparatus for providing preauthorization for a mobile receiving device to access wireless networks	11656758	01/22/2007	8175514	05/08/2012
162.	DIRECTV, LLC	Blind identification of advanced modulation and coding modes	11672461	02/07/2007	7715786	05/11/2010

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163.	DIRECTV, LLC	Interactive mosaic channel video stream with additional programming sources	11701151	02/01/2007	8832738	09/09/2014
164.	DIRECTV, LLC	Amalgamation of user data for geographical trending	11707496	02/16/2007	8458745	06/04/2013
165.	DIRECTV, LLC	Tri-head KaKuKa feed for single-offset dish antenna	11712327	02/28/2007	7466282	12/16/2008
166.	DIRECTV, LLC	Method and apparatus for transcribing or transcoding content for a terminal within a vehicle	11715179	03/07/2007	7974293	07/05/2011
167.	DIRECTV, LLC	Method and system for generating uplink signals from a ground segment	11728378	03/26/2007	8619822	12/31/2013
168.	DIRECTV, LLC	Method and system for inserting digital video effects into a video stream in redundant paths before routing	11728379	03/26/2007	8239913	08/07/2012
169.	DIRECTV, LLC	Method and system for inserting digital video effects into a video stream at a multiplexing device after routing	11728394	03/26/2007	9055316	06/09/2015
170.	DIRECTV, LLC	Method and system for marking video signals for identification	11728552	03/26/2007	7934228	04/26/2011
171.	DIRECTV, LLC	Method and system for distributing content using device-specific content delivery networks	11782554	07/24/2007	10097291	10/09/2018
172.	DIRECTV, LLC	Method and system for associating business rules with received content in a content processing system and generating a content list therefrom	11782563	07/24/2007	9104987	08/11/2015

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173.	DIRECTV, LLC	Method and system for distributing content to a user device through allocated assets of a satellite network and a broadband network	11782565	07/24/2007	9077855	07/07/2015
174.	DIRECTV, LLC	Method and system for remotely controlling content at a set top box	11782576	07/24/2007	8869188	10/21/2014
175.	DIRECTV, LLC	Intuitive electronic program guide display	11782787	07/25/2007	7849482	12/07/2010
176.	DIRECTV, LLC	Method and apparatus for lipsync measurement and correction	11784758	04/07/2007	7948559	05/24/2011
177.	DIRECTV, LLC	Method and apparatus for file sharing between a group of user devices with separately sent crucial portions and non-crucial portions	11786100	04/11/2007	7895341	02/22/2011
178.	DIRECTV, LLC	Method and system for using a website to perform a remote action on a set top box with a secure authorization	11786136	04/11/2007	8364778	01/29/2013
179.	DIRECTV, LLC	Method and apparatus for file sharing between a group of user devices with crucial portions sent via satellite and non-crucial portions sent using a peer-to-peer network	11786214	04/11/2007	8244884	08/14/2012
180.	DIRECTV, LLC	Method and system for file sharing between a group of user devices using obtained permissions	11786215	04/11/2007	7890047	02/15/2011
181.	DIRECTV, LLC	Method and apparatus for authenticating a code image upon starting a device	11787409	04/16/2007	9092629	07/28/2015

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182.	DIRECTV, LLC	Infrastructure for interactive television applications	11803649	05/15/2007	8782719	07/15/2014
183.	DIRECTV, LLC	Method and apparatus for programming a remote control using broadcast data	11820532	06/20/2007	8402501	03/19/2013
184.	DIRECTV, LLC	Method for suppression of OFDM energy spectral density for minimization of out of band emission or utilization of fractured spectrum	11824723	07/02/2007	7869530	01/11/2011
185.	DIRECTV, LLC	Method and apparatus for warning a mobile user approaching a boundary of an area of interest	11825263	07/05/2007	8971926	03/03/2015
186.	DIRECTV, LLC	Method and system for managing content lifecycle in a content processing system	11828292	07/25/2007	9832424	11/28/2017
187.	DIRECTV, LLC	Method for arranging virtual channels and linear channels for a content processing system	11828486	07/26/2007	9628761	04/18/2017
188.	DIRECTV, LLC	Method and system for preordering content in a user device associated with a content processing system	11828490	07/26/2007	9693106	06/27/2017
189.	DIRECTV, LLC	Method and system for communicating and displaying broadband content availability using information received through a satellite	11828494	07/26/2007	10063813	08/28/2018
190.	DIRECTV, LLC	Method and system for positioning row advertising in a program guide	11828500	07/26/2007	8209718	06/26/2012

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191.	DIRECTV, LLC	Method and system for generating row advertising in a program guide	11828503	07/26/2007	9357155	05/31/2016
192.	DIRECTV, LLC	Method and system for using various content and content information in multiple menu structures	11828507	07/26/2007	8281255	10/02/2012
193.	DIRECTV, LLC	Method and system for associating content and content information in a menu structure	11828519	07/26/2007	8856835	10/07/2014
194.	DIRECTV, LLC	Method and system for distributing content to a user device through a satellite network and a broadband network	11828520	07/26/2007	8572660	10/29/2013
195.	DIRECTV, LLC	Method and system of managing files within a content processing system based on publication time	11828534	07/26/2007	8462271	06/11/2013
196.	DIRECTV, LLC	Method and system for controlling communication between a user device and a content delivery network	11828551	07/26/2007	8793748	07/29/2014
197.	DIRECTV, LLC	Method and system for controlling the operation of a user device to receive content	11828556	07/26/2007	9451326	09/20/2016
198.	DIRECTV, LLC	Method and system for forming a content stream with conditional access information and a content file	11828601	07/26/2007	9060096	06/16/2015
199.	DIRECTV, LLC	Method and system for forming a formatted content stream and using a cyclic redundancy check	11828605	07/26/2007	9564988	02/07/2017

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200.	DIRECTV, LLC	Method and system for receiving content in a content processing system using a workflow system	11828625	07/26/2007	8875209	10/28/2014
201.	DIRECTV, LLC	Method and system for performing multi-level program guide category searches	11828935	07/26/2007	9727562	08/08/2017
202.	DIRECTV, LLC	Methods and apparatus to present audio and video at non-native rates	11831074	07/31/2007	8842971	09/23/2014
203.	DIRECTV, LLC	Reducing spectral roll-off factors to increase spectral efficiency	11831821	07/31/2007	7844213	11/30/2010
204.	DIRECTV, LLC	Advertisements for use in a program guide	11832073	08/01/2007	8677408	03/18/2014
205.	DIRECTV, LLC	Mosaic channel video stream with personalized interactive services	11833915	08/03/2007	8949895	02/03/2015
206.	DIRECTV, LLC	Method and system for placing inserts into a broadcast television signal	11852915	09/10/2007	8938751	01/20/2015
207.	DIRECTV, LLC	Method and system for interrupting inserted material in a content signal	11852954	09/10/2007	9277182	03/01/2016
208.	DIRECTV, LLC	Method and system for tracking actual channel content output	11852956	09/10/2007	9681102	06/13/2017
209.	DIRECTV, LLC	Method and system for monitoring a content signal	11852957	09/10/2007	9247285	01/26/2016
210.	DIRECTV, LLC	Method and system for forming a countdown clock channel output	11852963	09/10/2007	7926081	04/12/2011
211.	DIRECTV, LLC	Method and system for real-time reconciliation for unused content	11852984	09/10/2007	8127328	02/28/2012

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212.	DIRECTV, LLC	Method and system for processing signals from a local collection facility at a signal processing facility	11853736	09/11/2007	8170069	05/01/2012
213.	DIRECTV, LLC	Method and system for monitoring a receiving circuit module and controlling switching to a back-up receiving circuit module at a local collection facility from a remote facility	11853737	09/11/2007	9313457	04/12/2016
214.	DIRECTV, LLC	Method and system for switching to an engineering signal processing system from a production signal processing system	11853740	09/11/2007	8072874	12/06/2011
215.	DIRECTV, LLC	Method and system for operating a receiving circuit for multiple types of input channel signals	11853742	09/11/2007	9300412	03/29/2016
216.	DIRECTV, LLC	Method and system for monitoring and switching between a primary and diverse site in a satellite communication system	11853744	09/11/2007	8472871	06/25/2013
217.	DIRECTV, LLC	Method and system for operating a monitoring system for a satellite communication system	11853746	09/11/2007	9473751	10/18/2016
218.	DIRECTV, LLC	Method and system for monitoring and switching between a primary encoder and a back-up encoder in a communication system	11853747	09/11/2007	8424044	04/16/2013

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219.	DIRECTV, LLC	Method and system for monitoring and simultaneously displaying a plurality of signal channels in a communication system	11853749	09/11/2007	8973058	03/03/2015
220.	DIRECTV, LLC	Method and system for monitoring and displaying signals corresponding to a transponder of a satellite in a satellite communication system	11853753	09/11/2007	8875190	10/28/2014
221.	DIRECTV, LLC	Method and system for monitoring various signals in a continuous processing circuit for a single channel in a communication system	11853758	09/11/2007	9461758	10/04/2016
222.	DIRECTV, LLC	Method and system for monitoring and switching between primary and back-up uplink signal processing circuits in a satellite communication system	11853761	09/11/2007	8165060	04/24/2012
223.	DIRECTV, LLC	Method and system for controlling a back-up receiver and encoder in a local collection facility from a remote facility	11854408	09/12/2007	7861270	12/28/2010
224.	DIRECTV, LLC	Method and system for controlling a back-up multiplexer in a local collection facility from a remote facility	11854417	09/12/2007	8988986	03/24/2015
225.	DIRECTV, LLC	Method and system for monitoring and controlling a local collection facility from a remote facility using an asynchronous transfer mode (ATM) network	11854433	09/12/2007	8479234	07/02/2013

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226.	DIRECTV, LLC	Method and system for controlling a back-up network adapter in a local collection facility from a remote facility	11854442	09/12/2007	8724635	05/13/2014
227.	DIRECTV, LLC	Hidden identification	11862101	09/26/2007	8583922	11/12/2013
228.	DIRECTV, LLC	Method and system for providing content to a content distribution system suitable for a multiple dwelling unit using an authorization list	11862883	09/27/2007	9800838	10/24/2017
229.	DIRECTV, LLC	Method and system for securely providing and storing content in a multiple dwelling unit system	11863041	09/27/2007	8532293	09/10/2013
230.	DIRECTV, LLC	Method and system for ordering video content from a mobile device	11871983	10/13/2007	8561114	10/15/2013
231.	DIRECTV, LLC	Method and system for ordering and prioritizing the downloading of content from an interactive interface	11871985	10/13/2007	8046802	10/25/2011
232.	DIRECTV, LLC	Method and system for quickly recording linear content from an interactive interface	11871986	10/13/2007	8707361	04/22/2014
233.	DIRECTV, LLC	Method and system for confirming the download of content at a user device	11871988	10/13/2007	9824389	11/21/2017
234.	DIRECTV, LLC	Method and system for securely requesting download of content to a user device from another device	11871989	10/13/2007	7953872	05/31/2011

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235.	DIRECTV, LLC	Method and system for reconfiguring a selection system based on layers of categories descriptive of recordable events	11876181	10/22/2007	7765479	07/27/2010
236.	DIRECTV, LLC	Method and apparatus for file sharing of missing content between a group of user devices in a peer-to-peer network	11876832	10/23/2007	8345869	01/01/2013
237.	DIRECTV, LLC	Method and apparatus for providing higher order modulation that is backwards compatible with quaternary phase shift keying(QPSK) or offset quaternary phase shift keying (OQPSK)	11879607	07/18/2007	8199847	06/12/2012
238.	DIRECTV, LLC	Method and system for monitoring and controlling a local collection facility from a remote facility through an IP network	11929252	10/30/2007	9037074	05/19/2015
239.	DIRECTV, LLC	Method and system for monitoring and controlling a back-up receiver in local collection facility from a remote facility using an IP network	11929373	10/30/2007	9049354	06/02/2015
240.	DIRECTV, LLC	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	11930390	10/31/2007	9049037	06/02/2015
241.	DIRECTV, LLC	Method and system for controlling redundancy of individual components of a remote facility system	11930601	10/31/2007	8077706	12/13/2011

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242.	DIRECTV, LLC	SMATV headend using IP transport stream input and method for operating the same	11930745	10/31/2007	9942618	04/10/2018
243.	DIRECTV, LLC	Methods and apparatus to distinguish elements of a user interface	11931760	10/31/2007	8683524	03/25/2014
244.	DIRECTV, LLC	AAS direct signaling framing methodologies to support high capacity wireless links	11936786	11/07/2007	8009552	08/30/2011
245.	DIRECTV, LLC	Method and system of wirelessly retrieving lost content segments of broadcasted programming at a user device from another device	11945868	11/27/2007	9281891	03/08/2016
246.	DIRECTV, LLC	Interactive gaming channel video stream with nested features	11955214	12/12/2007	9015772	04/21/2015
247.	DIRECTV, LLC	Consumption profile for mobile media	11956138	12/13/2007	8671021	03/11/2014
248.	DIRECTV, LLC	Seamlessly switching among unicast, multicast, and broadcast mobile media content	11956162	12/13/2007	8219134	07/10/2012
249.	DIRECTV, LLC	Encoding and transcoding for mobile media	11956171	12/13/2007	9064010	06/23/2015
250.	DIRECTV, LLC	Mobile media pause and resume	11956186	12/13/2007	8995815	03/31/2015
251.	DIRECTV, LLC	Mediation and settlement for mobile media	11956194	12/13/2007	9697280	07/04/2017
252.	DIRECTV, LLC	Method and apparatus for mutually authenticating a user device of a primary service provider	11959060	12/18/2007	9692602	06/27/2017

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253.	DIRECTV, LLC	Method and system for authenticating a user receiving device into a primary service provider system to communicate with a partner service provider	11960471	12/19/2007	8621646	12/31/2013
254.	DIRECTV, LLC	Method and system for securely communicating between a primary service provider and a partner service provider	11960496	12/19/2007	8533852	09/10/2013
255.	DIRECTV, LLC	Method and system for securely communicating between a user network device, a primary service provider and a partner service provider	11960526	12/19/2007	8453251	05/28/2013
256.	DIRECTV, LLC	Method and system for providing a generic program guide data from a primary content provider to a user network device through a partner service provider	11960560	12/19/2007	9137018	09/15/2015
257.	DIRECTV, LLC	Method and system for providing program guide data from a content provider to a user device through a partner service provider based upon user attributes	11960574	12/19/2007	8341675	12/25/2012
258.	DIRECTV, LLC	Method and system for remotely requesting recording at a user network device for a user recording system	11960585	12/19/2007	9532007	12/27/2016

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259.	DIRECTV, LLC	Method and apparatus for communicating between a user device and a gateway device to form a system to allow a partner service to be provided to the user device	11960869	10/11/1998	9143493	09/22/2015
260.	DIRECTV, LLC	Method and apparatus for communicating between a user device and a user device locating module to allow a partner service to be provided to a user device	11960951	12/20/2007	8789149	07/22/2014
261.	DIRECTV, LLC	Method and apparatus for communicating between a requestor and a user receiving device using a user device locating module	11960984	12/20/2007	8200968	06/12/2012
262.	DIRECTV, LLC	ODU alignment procedure using circularly polarized squint	11971800	01/09/2008	7978142	07/12/2011
263.	DIRECTV, LLC	Space-time coded OFDM system for MMDS applications	12011658	01/29/2008	8374272	02/12/2013
264.	DIRECTV, LLC	Location specific event broadcasting	12022914	01/30/2008	8102864	01/24/2012
265.	DIRECTV, LLC	Video camera tracking system based on geoposition data feedback	12026735	02/06/2008	9008354	04/14/2015
266.	DIRECTV, LLC	Live video management system	12026995	02/06/2008	8910209	12/09/2014
267.	DIRECTV, LLC	Live integration of push-to-talk (PTT) audio with independent video feed	12027876	02/07/2008	8566881	10/22/2013
268.	DIRECTV, LLC	Single-wire multiswitch and channelized RF cable test meter	12032807	02/18/2008	7912427	03/22/2011

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269.	DIRECTV, LLC	Asset allocation system and method for allocating satellite resources in a satellite broadcast communication system	12041952	03/04/2008	8763037	06/24/2014
270.	DIRECTV, LLC	Method and system for changing allocation charts in a satellite broadcasting system	12042098	03/04/2008	9723276	08/01/2017
271.	DIRECTV, LLC	Method and system for communicating changes in a broadcast system to other broadcast components	12042185	03/04/2008	8255954	08/28/2012
272.	DIRECTV, LLC	Method for swapping channel assignments in a broadcast system	12042226	03/04/2008	8578427	11/05/2013
273.	DIRECTV, LLC	Method and system for initiating an emergency alert in a broadcast system	12042248	03/04/2008	8347328	01/01/2013
274.	DIRECTV, LLC	Method and apparatus for redirecting a receiving device in the event of a programming blackout	12047406	03/13/2008	9131125	09/08/2015
275.	DIRECTV, LLC	Method and system for allowing multiple receiving units in a network to record the same content while minimizing network resource use	12060944	04/02/2008	8966552	02/24/2015
276.	DIRECTV, LLC	Method and system for arbitrating recording requests from multiple receiving units in a network to receive the same content	12060973	04/02/2008	9066142	06/23/2015
277.	DIRECTV, LLC	System and method for evaluating callback functionality in a satellite television network	12075779	03/13/2008	7937731	05/03/2011

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278.	DIRECTV, LLC	System for monitoring direct broadcast wireless signals	12077169	03/17/2008	8015587	09/06/2011
279.	DIRECTV, LLC	Method and apparatus of verifying that requested content matches content to be downloaded	12079579	03/27/2008	8185922	05/22/2012
280.	DIRECTV, LLC	Method and apparatus for identifying co-channel interference	12098235	04/04/2008	8213553	07/03/2012
281.	DIRECTV, LLC	Mosaic channel video stream with interactive services	12098747	04/07/2008	9654736	05/16/2017
282.	DIRECTV, LLC	Method and system of extending recording time for a run-over program	12102362	04/14/2008	9723254	08/01/2017
283.	DIRECTV, LLC	Video bit stream test	12110689	04/28/2008	7710454	05/04/2010
284.	DIRECTV, LLC	Receiver unit changing between a high definition mode and standard mode and method therefor	12112604	04/30/2008	8799963	08/05/2014
285.	DIRECTV, LLC	Method and system of marking and recording content of interest in a broadcast stream	12132122	06/03/2008	8661463	02/25/2014
286.	DIRECTV, LLC	Methods and apparatus to save search data	12132173	06/03/2008	8583629	11/12/2013
287.	DIRECTV, LLC	Method and system for converting content into multiple formats	12150153	04/25/2008	9003465	04/07/2015
288.	DIRECTV, LLC	Television advertisement monitoring system	12172126	07/11/2008	8209713	06/26/2012
289.	DIRECTV, LLC	Integrated ODU controller for antenna pointing	12185018	08/01/2008	8982004	03/17/2015
290.	DIRECTV, LLC	Tool to automatically align outdoor unit	12186435	08/05/2008	8451171	05/28/2013

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291.	DIRECTV, LLC	Feeder link configurations to support layered modulation for digital signals	12190526	08/12/2008	8259641	09/04/2012
292.	DIRECTV, LLC	User interface for displaying highlights of an event or plurality of events	12200863	08/28/2008	9032296	05/12/2015
293.	DIRECTV, LLC	Method and system for forming content in a fantasy sporting event	12200868	08/28/2008	9524072	12/20/2016
294.	DIRECTV, LLC	Method and system for assigning a channel to data in a data stream	12200886	08/28/2008	9351048	05/24/2016
295.	DIRECTV, LLC	Method and system for ordering content using a voice menu system	12200905	08/28/2008	10827066	11/03/2020
296.	DIRECTV, LLC	Method and system for updating programming listing data for a broadcasting system	12203760	09/03/2008	9485536	11/01/2016
297.	DIRECTV, LLC	Maximizing power and spectral efficiencies for layered and conventional modulations	12207462	09/09/2008	7920643	04/05/2011
298.	DIRECTV, LLC	Method and system for discontinuing a channel stream in a multi-terminal system	12210850	09/15/2008	10021437	07/10/2018
299.	DIRECTV, LLC	Method and system for inserting local channel insertion in a multi-terminal system	12210867	09/15/2008	9992525	06/05/2018
300.	DIRECTV, LLC	Method and system of processing multiple playback streams via a single playback channel	12241323	09/30/2008	9049473	06/02/2015

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301.	DIRECTV, LLC	Method and system for abstracting external devices via a high level communications protocol	12241335	09/30/2008	9710055	07/18/2017
302.	DIRECTV, LLC	Method and system for controlling a low power mode for external devices	12241354	09/30/2008	9494986	11/15/2016
303.	DIRECTV, LLC	Method and system of scaling external resources for a receiving device	12241366	09/30/2008	9148693	09/29/2015
304.	DIRECTV, LLC	Method and system for predicting use of an external device and removing the external device from a low power mode	12241466	09/30/2008	8291247	10/16/2012
305.	DIRECTV, LLC	Method and system for dynamically changing a user interface for added or removed resources	12241545	09/30/2008	8671429	03/11/2014
306.	DIRECTV, LLC	Method and system for bandwidth shaping to optimize utilization of bandwidth	12241577	09/30/2008	9426497	08/23/2016
307.	DIRECTV, LLC	Ka/Ku outdoor unit configuration using a frequency selective surface	12244684	10/02/2008	7982687	07/19/2011
308.	DIRECTV, LLC	Method and system for operating a receiving circuit module to encode a channel signal into multiple encoding formats	12264435	11/04/2008	9762973	09/12/2017
309.	DIRECTV, LLC	Method and system for controlling a multi-terminal system	12266829	11/07/2008	8132216	03/06/2012
310.	DIRECTV, LLC	Antenna peak strength finder	12269811	11/12/2008	8134512	03/13/2012

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311.	DIRECTV, LLC	Sample generation method and system for digital simulation processes	12275498	11/21/2008	8332449	12/11/2012
312.	DIRECTV, LLC	Systems and methods for channel based beamforming for stacked carrier multiple access	12276261	11/21/2008	8300742	10/30/2012
313.	DIRECTV, LLC	Methods and apparatus to select tornado error correction parameter	12332052	12/10/2008	8301958	10/30/2012
314.	DIRECTV, LLC	Interactive remote control programming method	12341976	12/22/2008	8754992	06/17/2014
315.	DIRECTV, LLC	Customizable graphical elements for use in association with a user interface	12343825	12/24/2008	9635195	04/25/2017
316.	DIRECTV, LLC	Methods and apparatus to conditionally display icons in a user interface	12343914	12/24/2008	8499256	07/30/2013
317.	DIRECTV, LLC	Method and system for providing multi-input-multi-output (MIMO) downlink transmission	12363455	01/30/2009	8243706	08/14/2012
318.	DIRECTV, LLC	Equalizers for layered modulated and other signals	12404253	03/13/2009	8208526	06/26/2012
319.	DIRECTV, LLC	Progressive download playback	12418576	04/04/2009	8892761	11/18/2014
320.	DIRECTV, LLC	Optimized uplink efficiencies for transmission of satellite data	12421485	04/09/2009	7859330	12/28/2010
321.	DIRECTV, LLC	Method and system for interfacing content between devices	12436695	05/06/2009	9414023	08/09/2016
322.	DIRECTV, LLC	Datacasting system with intermittent listener capability	12436706	05/06/2009	8311048	11/13/2012

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323.	DIRECTV, LLC	Datacasting system with automatic delivery of service mangement capability	12436724	05/06/2009	8127041	02/28/2012
324.	DIRECTV, LLC	Method and system for communicating customer service requests	12482167	06/10/2009	9794612	10/17/2017
325.	DIRECTV, LLC	Method and apparatus for communicating interactive content in a broadcast communication system	12482179	06/10/2009	9113204	08/18/2015
326.	DIRECTV, LLC	Method and system for adaptive transcoding and transrating in a video network	12494091	06/29/2009	9143814	09/22/2015
327.	DIRECTV, LLC	Code design and implementation improvements for low density parity check codes for wireless routers using 802.11N protocol	12496443	07/01/2009	8615697	12/24/2013
328.	DIRECTV, LLC	Satellite seeding of a peer-to-peer content distribution network	12502185	07/13/2009	10045083	08/07/2018
329.	DIRECTV, LLC	Variable PHY margin to combat ingress noise	12612994	11/05/2009	8611218	12/17/2013
330.	DIRECTV, LLC	Method and apparatus for managing software downloads in a broadcast communication system	12615880	11/10/2009	10200500	02/05/2019
331.	DIRECTV, LLC	Method and apparatus for monitoring a transport processing system in a software download broadcast communication system	12615915	11/10/2009	9602628	03/21/2017
332.	DIRECTV, LLC	Command, control and communications with intelligent antennas	12624018	11/23/2009	8760346	06/24/2014

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333.	DIRECTV, LLC	Ka/Ku antenna alignment	12634530	12/09/2009	8106842	01/31/2012
334.	DIRECTV, LLC	Method and system for registering a client device in a multi-room digital video recording system	12647895	12/28/2009	8521852	08/27/2013
335.	DIRECTV, LLC	Methods and apparatus to control audio leveling in media presentation devices	12649143	12/29/2009	8849434	09/30/2014
336.	DIRECTV, LLC	Content distribution network selector	12649153	12/29/2009	9137302	09/15/2015
337.	DIRECTV, LLC	Method and system for displaying a series of recordable events	12686090	01/12/2010	8442387	05/14/2013
338.	DIRECTV, LLC	Automatic software update detection and flexible installer for set-top boxes	12686219	01/12/2010	8347281	01/01/2013
339.	DIRECTV, LLC	Method and system for authenticating a request	12717808	03/04/2010	8806198	08/12/2014
340.	DIRECTV, LLC	Method and system for retrieving data from multiple sources	12717812	03/04/2010	9654829	05/16/2017
341.	DIRECTV, LLC	Blind identification of advanced modulation and coding modes	12719098	03/08/2010	8023888	09/20/2011
342.	DIRECTV, LLC	Method and apparatus for establishing an accurate low bit time stamp in a remotely created watermark	12766811	04/23/2010	8416983	04/09/2013
343.	DIRECTV, LLC	Method and apparatus for remotely inserting watermark into encrypted compressed video bitstream	12766813	04/23/2010	8611531	12/17/2013

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344.	DIRECTV, LLC	Method and system for pushing content in a broadcast communication system	12773782	05/04/2010	8490139	07/16/2013
345.	DIRECTV, LLC	Method and system for controlling a queue for communicating content in a broadcast communication system	12773795	05/04/2010	8931013	01/06/2015
346.	DIRECTV, LLC	Multi-ring IP multicast network and method using autonomous instances of interior gateway protocol (IGP)	12779871	05/13/2010	8509056	08/13/2013
347.	DIRECTV, LLC	Method and system for sharing playlists for content stored within a network	12789836	05/28/2010	9258175	02/09/2016
348.	DIRECTV, LLC	Method and apparatus to search for program content via a remote control interface	12795523	06/07/2010	9332317	05/03/2016
349.	DIRECTV, LLC	Omnidirectional switchable broadband wireless antenna system	12797412	06/09/2010	8571464	10/29/2013
350.	DIRECTV, LLC	Integrated satellite-TV broadband wireless system	12797570	06/09/2010	9894410	02/13/2018
351.	DIRECTV, LLC	Method and system for reconfiguring a selection system based on layers of categories descriptive of recordable events	12797664	06/10/2010	9258513	02/09/2016
352.	DIRECTV, LLC	Method and system for testing an integrated receiver decoder with signals from outside the local market area	12840029	07/20/2010	8756636	06/17/2014

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353.	DIRECTV, LLC	Multiple dwelling unit satellite television delivery system	12846699	07/29/2010	8627382	01/07/2014
354.	DIRECTV, LLC	Managing signal delivery to a plurality of display platforms	12877767	09/08/2010	8775553	07/08/2014
355.	DIRECTV, LLC	Method and system for rebooting a client device within a local area network from a central server	12878822	09/09/2010	9830243	11/28/2017
356.	DIRECTV, LLC	Method and system for updating a software image at a client device	12878827	09/09/2010	9678736	06/13/2017
357.	DIRECTV, LLC	Mobile streaming processing system for video and audio content	12879957	09/10/2010	9225939	12/29/2015
358.	DIRECTV, LLC	Method and system for controlling closed captioning at a content distribution system	12881006	09/13/2010	8458758	06/04/2013
359.	DIRECTV, LLC	Method and system for forming an audio overlay for streaming content of a content distribution system	12881016	09/13/2010	8862761	10/14/2014
360.	DIRECTV, LLC	Method and system for controlling a display buffer in a content distribution system	12881027	09/13/2010	8521810	08/27/2013
361.	DIRECTV, LLC	Method and system for distributing content	12881043	09/13/2010	8671211	03/11/2014
362.	DIRECTV, LLC	Method and system for transferring control of a user interface of a content distribution system	12881054	09/13/2010	8447840	05/21/2013
363.	DIRECTV, LLC	Method and system for storing program guide data in a user device	12895645	09/30/2010	10048745	08/14/2018

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364.	DIRECTV, LLC	Digital rights management in a mobile environment	12903125	10/12/2010	9124650	09/01/2015
365.	DIRECTV, LLC	Apparatus for mounting a satellite antenna in a trunk of a vehicle	12913706	10/27/2010	8593356	11/26/2013
366.	DIRECTV, LLC	Intuitive electronic program guide display	12914629	10/28/2010	8434110	04/30/2013
367.	DIRECTV, LLC	System and method for sharing television programming information using universal identifier	12947518	11/16/2010	10091535	10/02/2018
368.	DIRECTV, LLC	Method and system for accessing content in another format in a communications system	12957186	11/30/2010	9872057	01/16/2018
369.	DIRECTV, LLC	Method and system for collecting client usage data for a user device	12957221	11/30/2010	8819713	08/26/2014
370.	DIRECTV, LLC	Method and apparatus for file sharing between a group of user devices with separately sent crucial portions and non-crucial portions	13012656	01/24/2011	8255547	08/28/2012
371.	DIRECTV, LLC	Method and apparatus for communicating and updating logo identifiers	13024277	02/09/2011	9781471	10/03/2017
372.	DIRECTV, LLC	Method and system for providing different categories of programming data to a user device from head end systems	13028150	02/15/2011	10341702	07/02/2019
373.	DIRECTV, LLC	Method and system for authenticating service providers to communicate with a primary service provider	13031094	02/18/2011	9794239	10/17/2017

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374.	DIRECTV, LLC	Method and system for authorizing user devices to communicate with a primary service provider using a limited number of streams	13031099	02/18/2011	9854308	12/26/2017
375.	DIRECTV, LLC	Method and system for discovering an identity provider	13031105	02/18/2011	9838727	12/05/2017
376.	DIRECTV, LLC	Method and system for ingesting content schedule data from an external source	13031113	02/18/2011	8612598	12/17/2013
377.	DIRECTV, LLC	Method and system for entitling a user device to receive content from data from an external source	13031119	02/18/2011	8886674	11/11/2014
378.	DIRECTV, LLC	Method and system for prioritizing content in a delivery queue of a content delivery system	13039118	03/02/2011	8533767	09/10/2013
379.	DIRECTV, LLC	Automatic measurement of audio presence and level by direct processing of an MPEG data stream	13053019	03/21/2011	8848928	09/30/2014
380.	DIRECTV, LLC	Just in time delivery of entitlement control messages (ECMs) and other essential data elements for television programming	13053100	03/21/2011	8532294	09/10/2013
381.	DIRECTV, LLC	Method and system for operating a communication system encoded into multiple independently communicated encoding formats	13080551	04/05/2011	9831971	11/28/2017
382.	DIRECTV, LLC	Network fraud prevention via registration and verification	13093642	04/25/2011	9936171	04/03/2018

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383.	DIRECTV, LLC	Method and system for changing communication parameters of a content delivery system based on feedback from user devices	13111221	05/19/2011	9456247	09/27/2016
384.	DIRECTV, LLC	Method and system for controlling a storage location of content in a user device	13111239	05/19/2011	9883242	01/30/2018
385.	DIRECTV, LLC	Method and system of building a wanted list queue for a user in a content distribution system	13111249	05/19/2011	9137556	09/15/2015
386.	DIRECTV, LLC	AAS direct signaling framing methodologies to support high capacity wireless links	13171108	06/28/2011	8547822	10/01/2013
387.	DIRECTV, LLC	Methods and apparatus to provide content on demand in content broadcast systems	13179433	07/08/2011	9485469	11/01/2016
388.	DIRECTV, LLC	Method for creating interactive applications for television	13183246	07/14/2011	8959564	02/17/2015
389.	DIRECTV, LLC	Backwards-compatible frequency translation module for satellite video delivery	13212341	08/18/2011	8689263	04/01/2014
390.	DIRECTV, LLC	Method and system for searching for content in a user device	13222986	08/31/2011	9495415	11/15/2016
391.	DIRECTV, LLC	Method and system for using a second screen device for interacting with a set top box to enhance a user experience	13224206	09/01/2011	9032451	05/12/2015

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392.	DIRECTV, LLC	Method and system for communicating conditional access packet signals through a network	13270115	10/10/2011	8885491	11/11/2014
393.	DIRECTV, LLC	Mosaic channel video stream with interactive services	13278872	10/21/2011	9282290	03/08/2016
394.	DIRECTV, LLC	Method and system for controlling a controlled device with a remote control device through a display device	13285917	10/31/2011	9532097	12/27/2016
395.	DIRECTV, LLC	Method and system for adding local channels and program guide data at a user receiving device in an aggregated content distribution system	13285931	10/31/2011	8856843	10/07/2014
396.	DIRECTV, LLC	Aggregated content distribution system and method for operating the same	13285955	10/31/2011	8595770	11/26/2013
397.	DIRECTV, LLC	Method and system for controlling user devices in an aggregated content distribution system	13285967	10/31/2011	8621530	12/31/2013
398.	DIRECTV, LLC	System and method for drawing anti-aliased lines in any direction	13294146	11/10/2011	9098938	08/04/2015
399.	DIRECTV, LLC	Method and system for detecting unauthorized use of a set top box using weather profiles	13340033	12/29/2011	9467725	10/11/2016
400.	DIRECTV, LLC	Method and system for remotely transcoding content	13349271	01/12/2012	8887207	11/11/2014
401.	DIRECTV, LLC	Location specific event broadcasting	13355421	01/20/2012	8325747	12/04/2012

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402.	DIRECTV, LLC	Method and system for managing digital rights for content	13370170	02/09/2012	8745654	06/03/2014
403.	DIRECTV, LLC	System and method for providing multiple rating versions in media programming	13403716	02/23/2012	8793721	07/29/2014
404.	DIRECTV, LLC	Maintaining linear beamforming weights in communications systems	13411507	03/02/2012	8755475	06/17/2014
405.	DIRECTV, LLC	Wireless communications systems and methods	13411510	03/02/2012	9088446	07/21/2015
406.	DIRECTV, LLC	Method and system for detecting unauthorized use of a user device using receiver identification in a network	13413815	03/07/2012	9210456	12/08/2015
407.	DIRECTV, LLC	Method and system for detecting unauthorized use of a set top box using expected terrestrial signal identification	13413822	03/07/2012	9124933	09/01/2015
408.	DIRECTV, LLC	Reliable event broadcaster with multiplexing and bandwidth control functions	13418275	03/12/2012	8711696	04/29/2014
409.	DIRECTV, LLC	Method and apparatus for providing preauthorization for a mobile receiving device to access wireless networks	13439450	04/04/2012	8892027	11/18/2014
410.	DIRECTV, LLC	Method and system for using saved search results in menu structure searching for obtaining faster search results	13452693	04/20/2012	10229197	03/12/2019

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411.	DIRECTV, LLC	Method and system for searching content using a content time based window within a user device	13452716	04/20/2012	10334298	06/25/2019
412.	DIRECTV, LLC	Seamlessly switching among unicast, multicast, and broadcast mobile media content	13454489	04/24/2012	8805270	08/12/2014
413.	DIRECTV, LLC	Method and apparatus for programming a remote control using a device identifier received through an interface	13458661	04/27/2012	10448104	10/15/2019
414.	DIRECTV, LLC	Datacasting system with hierarchical delivery quality of service management capability	13470129	05/11/2012	8423660	04/16/2013
415.	DIRECTV, LLC	Combining transponder bandwidths for source and forward error correction encoding efficiency	13484756	05/31/2012	9979464	05/22/2018
416.	DIRECTV, LLC	Method and system for positioning row advertising in a program guide	13485326	05/31/2012	8893181	11/18/2014
417.	DIRECTV, LLC	Method and system for displaying content or conflicts from multiple receiving devices on a second screen device	13492517	06/08/2012	10368126	07/30/2019
418.	DIRECTV, LLC	Television advertisement monitoring system	13492656	06/08/2012	8752084	06/10/2014
419.	DIRECTV, LLC	Dual pitch jack screw for ODU alignment	13494853	06/12/2012	9768488	09/19/2017
420.	DIRECTV, LLC	Method and system for obtaining viewing data and providing content recommendations at a set top box	13529040	06/21/2012	9800929	10/24/2017

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421.	DIRECTV, LLC	Method and system for obtaining feedback for a content recommendation by various algorithms	13529048	06/21/2012	10055746	08/21/2018
422.	DIRECTV, LLC	Frequency drift estimation for low cost outdoor unit frequency conversions and system diagnostics	13554022	07/20/2012	8509722	08/13/2013
423.	DIRECTV, LLC	Method and system for providing on-demand and pay-per-view content through a hospitality system	13557111	07/24/2012	9277249	03/01/2016
424.	DIRECTV, LLC	Computationally efficient design for broadcast satellite single wire and/or direct demod interface	13566193	08/03/2012	8611809	12/17/2013
425.	DIRECTV, LLC	Method and system for providing multi-input-multi-output (MIMO) downlink transmission	13566701	08/03/2012	8902840	12/02/2014
426.	DIRECTV, LLC	Method for remotely controlling a streaming media server with a pause and resume functionality	13568873	08/07/2012	8855469	10/07/2014
427.	DIRECTV, LLC	System and method for distributing high-quality 3D video in a 2D format	13609708	09/11/2012	9743064	08/22/2017
428.	DIRECTV, LLC	Method and system for authorizing playback from multiple devices	13611640	09/12/2012	8752206	06/10/2014
429.	DIRECTV, LLC	Method and system for communicating between a host device and user device through an intermediate device using a composite video signal	13611998	09/12/2012	10521250	12/31/2019

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430.	DIRECTV, LLC	Method and system for communicating between a host device and a user device through an intermediate device using a composite graphics signal	13612367	09/12/2012	9535722	01/03/2017
431.	DIRECTV, LLC	Method and system for communicating between a host device and user device through an intermediate device using syntax translation	13612389	09/12/2012	9137501	09/15/2015
432.	DIRECTV, LLC	Method and system for communicating descriptive data in a television broadcast system	13626749	09/25/2012	8804035	08/12/2014
433.	DIRECTV, LLC	Datacasting system with intermittent listener capability	13648635	10/10/2012	8953627	02/10/2015
434.	DIRECTV, LLC	System and method for providing service to a multi-dwelling unit	13670137	11/06/2012	8726320	05/13/2014
435.	DIRECTV, LLC	MSS headend caching strategies	13682700	11/20/2012	9432444	08/30/2016
436.	DIRECTV, LLC	Method and apparatus for data traffic distribution among independent processing centers	13682704	11/20/2012	9191336	11/17/2015
437.	DIRECTV, LLC	Location specific event broadcasting	13705006	12/04/2012	9088428	07/21/2015
438.	DIRECTV, LLC	Method and apparatus for file sharing of missing content between a group of user devices in a peer-to-peer network	13721655	12/20/2012	9537944	01/03/2017

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439.	DIRECTV, LLC	Method and system for using a website to perform a remote action on a set top box with a secure authorization	13737890	01/09/2013	9032084	05/12/2015
440.	DIRECTV, LLC	Method and system for providing access to content data for previously broadcasted content	13743230	01/16/2013	9973823	05/15/2018
441.	DIRECTV, LLC	Method and system for securing content communication in chunks from a content delivery network to a user receiving device	13751807	01/28/2013	9420019	08/16/2016
442.	DIRECTV, LLC	Method and system for communicating content to a client device by pulling content from a publisher from a content delivery network when first requested by the client device	13767499	02/14/2013	10257249	04/09/2019
443.	DIRECTV, LLC	Presentation modes for various format bit streams	13768116	02/15/2013	8978084	03/10/2015
444.	DIRECTV, LLC	Method and system for displaying recommended content such as movies associated with a cluster	13803004	03/14/2013	10148375	12/04/2018
445.	DIRECTV, LLC	Method and system for recording recommended content using clustering	13803121	03/14/2013	9053419	06/09/2015
446.	DIRECTV, LLC	Method and system for recording recommended content within a user device	13803395	03/14/2013	9788069	10/10/2017
447.	DIRECTV, LLC	Method and system for recording recommended content within a user device and indicating recording capacity	13803516	03/14/2013	10003780	06/19/2018

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448.	DIRECTV, LLC	Method and apparatus for transmitting high bandwidth signals with low bandwidth transponders	13829916	03/14/2013	9525978	12/20/2016
449.	DIRECTV, LLC	Method and system for controlling a user receiving device using voice commands	13832680	03/15/2013	9894312	02/13/2018
450.	DIRECTV, LLC	Method and system of bookmarking content in a mobile device	13832745	03/15/2013	10585568	03/10/2020
451.	DIRECTV, LLC	Method and system for improving responsiveness of a voice recognition system	13832790	03/15/2013	9538114	01/03/2017
452.	DIRECTV, LLC	Method and system for generating dynamic text responses for display after a search	13832874	03/15/2013	10067934	09/04/2018
453.	DIRECTV, LLC	Method for combining voice signals to form a continuous conversation in performing a voice search	13832924	03/15/2013	9414004	08/09/2016
454.	DIRECTV, LLC	Method and system for displaying a series of recordable events	13890744	05/09/2013	9253463	02/02/2016
455.	DIRECTV, LLC	Time synchronizing of distinct video and data feeds that are delivered in a single mobile IP data network compatible stream	13917078	06/13/2013	9571902	02/14/2017
456.	DIRECTV, LLC	Method and system for registering a client device in a multi-room digital video recording system	13921940	06/19/2013	9065733	06/23/2015

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457.	DIRECTV, LLC	Method and system for using saved search results in menu structure searching for obtaining faster search results	13923996	06/21/2013	9160441	10/13/2015
458.	DIRECTV, LLC	Methods and apparatus to conditionally display icons in a user interface	13932917	07/01/2013	8812981	08/19/2014
459.	DIRECTV, LLC	Frequency drift estimation for low cost outdoor unit frequency conversions and system diagnostics	13964940	08/12/2013	9203536	12/01/2015
460.	DIRECTV, LLC	Reconfigurable notched spectrum for wireless data transmission	13964997	08/12/2013	9231741	01/05/2016
461.	DIRECTV, LLC	Antenna systems for wireless devices	13966982	08/14/2013	9147927	09/29/2015
462.	DIRECTV, LLC	Electronic device cooling systems	13967011	08/14/2013	9247676	01/26/2016
463.	DIRECTV, LLC	Method and system for securely providing and storing content in a multiple dwelling unit system	13967253	08/14/2013	9055087	06/09/2015
464.	DIRECTV, LLC	Method and system for ordering video content from a mobile device	14030188	09/18/2013	8701146	04/15/2014
465.	DIRECTV, LLC	AAS direct signaling framing methodologies to support high capacity wireless links	14041192	09/30/2013	9100093	08/04/2015
466.	DIRECTV, LLC	Power balancing signal combiner	14042599	09/30/2013	8839312	09/16/2014
467.	DIRECTV, LLC	Method and system for securely performing callbacks in a content distribution system	14044399	10/02/2013	9313532	04/12/2016

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468.	DIRECTV, LLC	Digital storage media command and control data indexing	14047932	10/07/2013	9277193	03/01/2016
469.	DIRECTV, LLC	Method and system for dynamic ad placement	14058393	10/21/2013	10380630	08/13/2019
470.	DIRECTV, LLC	Systems and methods for immersive viewing experience	14106242	12/13/2013	9271048	02/23/2016
471.	DIRECTV, LLC	Method and system for communicating from a client device to a server device in a centralized content distribution system	14137237	12/20/2013	9674306	06/06/2017
472.	DIRECTV, LLC	Code design and implementation improvements for low density parity check codes for wireless routers using 802.11n protocol	14137665	12/20/2013	9203492	12/01/2015
473.	DIRECTV, LLC	Method and system for using a second screen device to tune a set top box to display content playing on the second screen device	14137886	12/20/2013	9232279	01/05/2016
474.	DIRECTV, LLC	System and method to detect garbled closed captioning	14188558	02/24/2014	8913187	12/16/2014
475.	DIRECTV, LLC	Method and system for ordering video content from a first device	14190502	02/26/2014	8813139	08/19/2014
476.	DIRECTV, LLC	Method and systems for using a second screen device for interacting with a set top box to enhance a user experience	14191276	02/26/2014	10356464	07/16/2019

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477.	DIRECTV, LLC	Method and system for using a second screen device for interacting with a set top box to enhance a user experience	14191288	02/26/2014	10341707	07/02/2019
478.	DIRECTV, LLC	Method and system for operating user receiving devices with user profiles	14200565	03/07/2014	10296487	05/21/2019
479.	DIRECTV, LLC	Method and system for transferring user settings to another user receiving device using a mobile user device	14207345	03/12/2014	10063924	08/28/2018
480.	DIRECTV, LLC	Method and system for transferring user settings to another user receiving device	14207354	03/12/2014	9351040	05/24/2016
481.	DIRECTV, LLC	Method and system for transferring the display of content from a first device to a second device	14246835	04/07/2014	9594482	03/14/2017
482.	DIRECTV, LLC	Detecting and logging triggered events in a data stream	14285457	05/22/2014	9043823	05/26/2015
483.	DIRECTV, LLC	Seamlessly switching among unicast, multicast, and broadcast mobile media content	14290441	05/29/2014	9064011	06/23/2015
484.	DIRECTV, LLC	Method and system for authorizing playback from multiple devices	14294368	06/03/2014	9571867	02/14/2017
485.	DIRECTV, LLC	System and method for providing multiple rating versions in media programming	14296156	06/04/2014	9363556	06/07/2016
486.	DIRECTV, LLC	Television advertisement monitoring system	14298584	06/06/2014	9549215	01/17/2017

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487.	DIRECTV, LLC	Dynamic determination of presentation of multiple video cells in an on-screen display	14299234	06/09/2014	9143836	09/22/2015
488.	DIRECTV, LLC	Secure content transfer systems and methods to operate the same	14321436	07/01/2014	9811789	11/07/2017
489.	DIRECTV, LLC	Method and system for automating advertising insertion and reconciliation	14334516	07/17/2014	9736516	08/15/2017
490.	DIRECTV, LLC	Bracket for mounting a user receiving device	14447150	07/30/2014	9657891	05/23/2017
491.	DIRECTV, LLC	Method and system for using hierarchical metadata for searching and recording content	14454653	08/07/2014	9451316	09/20/2016
492.	DIRECTV, LLC	Method and system for assembling content streams with advertisements from multiple advertisement vendors	14469154	08/26/2014	11205201	12/21/2021
493.	DIRECTV, LLC	Method and system for prepositioning content and distributing content in a local distribution system	14488015	09/16/2014	9363566	06/07/2016
494.	DIRECTV, LLC	Television distribution component enclosure	14489776	09/18/2014	9351414	05/24/2016
495.	DIRECTV, LLC	Automated content tag processing for mobile media	14501560	09/30/2014	10083234	09/25/2018
496.	DIRECTV, LLC	Progressive download playback	14503516	10/01/2014	9866604	01/09/2018
497.	DIRECTV, LLC	Method and system for remotely transcoding content	14518616	10/20/2014	9794622	10/17/2017

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498.	DIRECTV, LLC	Mobile media pause and resume	14531370	11/03/2014	10180982	01/15/2019
499.	DIRECTV, LLC	System and method for providing a callback proxy for a set top box of with support of ISM-band wide area network access	14551404	11/24/2014	9635412	04/25/2017
500.	DIRECTV, LLC	Seamlessly switching among unicast, multicast, and broadcast mobile media content	14553813	11/25/2014	10031969	07/24/2018
501.	DIRECTV, LLC	System and method to detect garbled closed captioning	14561088	12/04/2014	9154816	10/06/2015
502.	DIRECTV, LLC	Method and system for communicating inserted material to a client device in a centralized content distribution system	14563460	12/08/2014	10136166	11/20/2018
503.	DIRECTV, LLC	Method and system for setting and receiving user notifications for content available far in the future	14575934	12/18/2014	10667008	05/26/2020
504.	DIRECTV, LLC	Peripheral transponder bonding module	14586141	12/30/2014	9432728	08/30/2016
505.	DIRECTV, LLC	Data distribution amongst transponder carriers	14586210	12/30/2014	9584838	02/28/2017
506.	DIRECTV, LLC	Systems and methods for managing television tuners	14586245	12/30/2014	9479837	10/25/2016
507.	DIRECTV, LLC	Remote display of satellite receiver information	14586777	12/30/2014	9521378	12/13/2016
508.	DIRECTV, LLC	System and method for aligning a multi-satellite receiver antenna	14586804	12/30/2014	9451220	09/20/2016

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509.	DIRECTV, LLC	Systems and methods for personalized feature setup and parental guidance sensing	14587496	12/31/2014	10334303	06/25/2019
510.	DIRECTV, LLC	Method and system for controlling a centralized content distribution system with a remote control	14587700	12/31/2014	9621961	04/11/2017
511.	DIRECTV, LLC	Method and system for user configuration of channel order in electronic program guide	14587920	12/31/2014	10623820	04/14/2020
512.	DIRECTV, LLC	Systems and methods for controlling purchasing and/or reauthorization to access content using quick response codes and text messages	14587930	12/31/2014	9693083	06/27/2017
513.	DIRECTV, LLC	Streamlined viewing of recorded programs based on markers	14589831	01/05/2015	9973808	05/15/2018
514.	DIRECTV, LLC	Methods for determining localized outages and distributed signal verification of set-top boxes	14590216	01/06/2015	9769471	09/19/2017
515.	DIRECTV, LLC	Methods and systems for recording and sharing digital video	14590893	01/06/2015	9621962	04/11/2017
516.	DIRECTV, LLC	Systems and methods for providing broadcast content via distributed kiosks	14590938	01/06/2015	9473811	10/18/2016
517.	DIRECTV, LLC	Methods and systems for variable speed playback with bi-directionality	14592142	01/08/2015	9451328	09/20/2016
518.	DIRECTV, LLC	Systems and methods for accessing bookmarked content	14592825	01/08/2015	10057616	08/21/2018

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519.	DIRECTV, LLC	Systems and methods for controlling advertising, upselling, cross-selling, and purchasing of products and services via user receiving devices and mobile devices	14592828	01/08/2015	10839416	11/17/2020
520.	DIRECTV, LLC	Audio scheduling and recording systems and methods	14592829	01/08/2015	9992548	06/05/2018
521.	DIRECTV, LLC	Systems and methods for triggering user interfaces for product and/or service transactions via user receiving devices and mobile devices	14592835	01/08/2015	10051340	08/14/2018
522.	DIRECTV, LLC	Systems and methods for spotted advertising and control of corresponding user interfaces and transactions via user receiving devices and mobile devices	14592838	01/08/2015	10356478	07/16/2019
523.	DIRECTV, LLC	Method for capturing and serving content based on user location	14598046	01/15/2015	9380422	06/28/2016
524.	DIRECTV, LLC	Method and system for monitoring and simultaneously displaying a plurality of signal channels in a communication system	14618812	02/10/2015	10349014	07/09/2019
525.	DIRECTV, LLC	Datacasting system with intermittent listener capability	14618948	02/10/2015	9992284	06/05/2018
526.	DIRECTV, LLC	Messaging between set top box and head end systems	14629145	02/23/2015	9538259	01/03/2017
527.	DIRECTV, LLC	Hybrid wireless-wireline communications system and method	14630582	02/24/2015	9743383	08/22/2017

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528.	DIRECTV, LLC	Method and system for using a second screen device for interacting with a set top box to enhance a user experience	14631076	02/25/2015	10419803	09/17/2019
529.	DIRECTV, LLC	Switching splitter and method of operating the same	14635767	03/02/2015	9729935	08/08/2017
530.	DIRECTV, LLC	Methods and systems for aligning a satellite receiver dish using a smartphone or tablet device	14660868	03/17/2015	9503177	11/22/2016
531.	DIRECTV, LLC	Method and system for personalizing the display of recordings stored in a user receiving device	14676020	04/01/2015	10397659	08/27/2019
532.	DIRECTV, LLC	Redundant universal transport processing system	14682968	04/09/2015	9510060	11/29/2016
533.	DIRECTV, LLC	Systems and methods for controlling a single-wire multiswitch device	14693663	04/22/2015	9924233	03/20/2018
534.	DIRECTV, LLC	Systems and methods for frequency and bandwidth optimization with a single-wire multiswitch device	14694513	04/23/2015	9461693	10/04/2016
535.	DIRECTV, LLC	Dynamic segment slicing for faster video playback	14734329	06/09/2015	9979926	05/22/2018
536.	DIRECTV, LLC	Antenna reflector hydrophobic coating and method for applying same	14753928	06/29/2015	9680230	06/13/2017
537.	DIRECTV, LLC	Wireless communications systems and methods	14804094	07/20/2015	10003394	06/19/2018
538.	DIRECTV, LLC	Location specific event broadcasting	14804231	07/20/2015	9648113	05/09/2017

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539.	DIRECTV, LLC	Method and system for directing service offerings corresponding to a customer risk profile	14805564	07/22/2015	9912976	03/06/2018
540.	DIRECTV, LLC	System and method for drawing anti-aliased lines in any direction	14812824	07/29/2015	9338498	05/10/2016
541.	DIRECTV, LLC	AAS direct signaling framing methodologies to support high capacity wireless links	14814971	07/31/2015	9509539	11/29/2016
542.	DIRECTV, LLC	System and method to detect garbled closed captioning	14849499	09/09/2015	9426521	08/23/2016
543.	DIRECTV, LLC	Rotation pointed antenna for fixed wireless wide area networks	14858944	09/18/2015	9653800	05/16/2017
544.	DIRECTV, LLC	Method and system for synchronizing playback of independent audio and video streams through a network	14869569	09/29/2015	11044386	06/22/2021
545.	DIRECTV, LLC	Method and system for allocating resources in a gateway device	14871628	09/30/2015	10200213	02/05/2019
546.	DIRECTV, LLC	Method and system for communicating between a media processor and network processor in a gateway device	14871711	09/30/2015	9608717	03/28/2017
547.	DIRECTV, LLC	Method and system for resetting processors of a gateway device	14871787	09/30/2015	10181991	01/15/2019
548.	DIRECTV, LLC	Method and system for preventing congestion of communication signals in a gateway device	14871832	09/30/2015	9872055	01/16/2018

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549.	DIRECTV, LLC	Systems and methods for provisioning multi-dimensional rule based entitlement offers	14871835	09/30/2015	9467726	10/11/2016
550.	DIRECTV, LLC	Method and system for performing diagnostics in a gateway device based on monitoring parameters	14871864	09/30/2015	10142240	11/27/2018
551.	DIRECTV, LLC	Method and system for applying quality of service policies to communication signals communicated to non-deep packet inspection devices	14871917	09/30/2015	9794985	10/17/2017
552.	DIRECTV, LLC	Method and system for analyzing performance of a gateway device	14871944	09/30/2015	10652114	05/12/2020
553.	DIRECTV, LLC	Systems and methods for providing advertisements to point of presence devices including mapping different types of advertisement messages of respective content providers	14880871	10/12/2015	9961377	05/01/2018
554.	DIRECTV, LLC	Circular video player controls	14981530	12/28/2015	11023115	06/01/2021
555.	DIRECTV, LLC	Video frame bookmarking user interface component	14981551	12/28/2015	10219040	02/26/2019
556.	DIRECTV, LLC	Advertisement viewing bypass prevention user interface component	14981590	12/28/2015	10359847	07/23/2019
557.	DIRECTV, LLC	Outdoor unit configured for customer installation and method of aligning same	14982271	12/29/2015	10181634	01/15/2019
558.	DIRECTV, LLC	Network address translator (NAT) traversal for out of home streaming	14982326	12/29/2015	10085070	09/25/2018

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559.	DIRECTV, LLC	Method and system for providing audio signals to an in-vehicle infotainment system	14982920	12/29/2015	10555026	02/04/2020
560.	DIRECTV, LLC	Method and system for obtaining content data in an in-vehicle infotainment system from a set top box	14982955	12/29/2015	10142670	11/27/2018
561.	DIRECTV, LLC	Method and system of notifying users using an in-vehicle infotainment system	14982988	12/29/2015	10798463	10/06/2020
562.	DIRECTV, LLC	Method and system for resuming content playback after content playback at an in-vehicle infotainment system	14983199	12/29/2015	9578157	02/21/2017
563.	DIRECTV, LLC	Method of controlling a content displayed in an in-vehicle system	14983214	12/29/2015	9928022	03/27/2018
564.	DIRECTV, LLC	Method and system for displaying a position of a vehicle at a remotely located device	14983231	12/29/2015	10388156	08/20/2019
565.	DIRECTV, LLC	Campus content distribution systems and methods	14992624	01/11/2016	10116723	10/30/2018
566.	DIRECTV, LLC	Method and system for controlling a user receiving device using voice commands	15015848	02/04/2016	9912977	03/06/2018
567.	DIRECTV, LLC	Method and system for viewing sports content within a virtual reality environment	15069723	03/14/2016	10412438	09/10/2019
568.	DIRECTV, LLC	Method and system for selecting and viewing sports content and a scoreguide in a virtual reality device	15069737	03/14/2016	9894403	02/13/2018

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569.	DIRECTV, LLC	Method and system for performing a function at a user device by combining category display areas	15085919	03/30/2016	10015545	07/03/2018
570.	DIRECTV, LLC	Secure delivery of program content via a removable storage medium	15138150	04/25/2016	9876990	01/23/2018
571.	DIRECTV, LLC	Method and system for assigning a channel to data in a data stream	15148219	05/06/2016	10095373	10/09/2018
572.	DIRECTV, LLC	Method to insert program boundaries in linear video for adaptive bitrate streaming	15189202	06/22/2016	10944806	03/09/2021
573.	DIRECTV, LLC	Method and apparatus for controlling access to custom browser functionality	15211900	07/15/2016	10462145	10/29/2019
574.	DIRECTV, LLC	Method and system for controlling a low power mode for external devices	15213455	07/19/2016	10212384	02/19/2019
575.	DIRECTV, LLC	Determining ambient noise in a device under test electromagnetic compatibility test environment	15217577	07/22/2016	10110336	10/23/2018
576.	DIRECTV, LLC	Method and apparatus to present multiple audio content	15219813	07/26/2016	10205906	02/12/2019
577.	DIRECTV, LLC	Apparatus and method for providing programming information for media content to a wearable device	15221014	07/27/2016	9918129	03/13/2018
578.	DIRECTV, LLC	Method and system for operating a multi-room digital video recording system	15229610	08/05/2016	9979996	05/22/2018

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579.	DIRECTV, LLC	Triplexer signal combiner	15236927	08/15/2016	10306076	05/28/2019
580.	DIRECTV, LLC	Method and system for changing communication parameters of a content delivery system based on feedback from user devices	15240387	08/18/2016	9819982	11/14/2017
581.	DIRECTV, LLC	MSS headend caching strategies	15240816	08/18/2016	9854054	12/26/2017
582.	DIRECTV, LLC	Television advertisement monitoring system	15242305	08/19/2016	10165323	12/25/2018
583.	DIRECTV, LLC	Methods and systems for provisioning a user profile on a media processor	15245704	08/24/2016	10419558	09/17/2019
584.	DIRECTV, LLC	Methods and systems for rendering binaural audio content	15250261	08/29/2016	9913061	03/06/2018
585.	DIRECTV, LLC	Methods and systems for providing multiple video content streams	15251059	08/30/2016	10028016	07/17/2018
586.	DIRECTV, LLC	Method and apparatus for extending content access	15266305	09/15/2016	10819793	10/27/2020
587.	DIRECTV, LLC	Systems and methods for provisioning multi-dimensional rule based entitlement offers	15266539	09/15/2016	10264304	04/16/2019
588.	DIRECTV, LLC	Method and system for using hierarchical metadata for searching and recording content	15268696	09/19/2016	10231026	03/12/2019
589.	DIRECTV, LLC	Systems and methods for frequency and bandwidth optimization with a single-wire multiswitch device	15270065	09/20/2016	9859926	01/02/2018
590.	DIRECTV, LLC	Determining recommended media programming from sparse consumption data	15289626	10/10/2016	10223359	03/05/2019

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591.	DIRECTV, LLC	Methods and apparatus to provide content on demand in content broadcast systems	15339559	10/31/2016	9967521	05/08/2018
592.	DIRECTV, LLC	Remote display of satellite receiver information	15341816	11/02/2016	9888217	02/06/2018
593.	DIRECTV, LLC	Creating a manifest file at a time of creating recorded content	15363416	11/29/2016	10123061	11/06/2018
594.	DIRECTV, LLC	Messaging between set top box and head end systems	15364059	11/29/2016	10085075	09/25/2018
595.	DIRECTV, LLC	Facilitating mixed service use of bonded satellite transponders	15365166	11/30/2016	10306329	05/28/2019
596.	DIRECTV, LLC	Enhanced streaming source change	15366122	12/01/2016	10187681	01/22/2019
597.	DIRECTV, LLC	Scrolling score guide with quick tune feature	15370590	12/06/2016	10768800	09/08/2020
598.	DIRECTV, LLC	Content scheduling	15371172	12/06/2016	10798453	10/06/2020
599.	DIRECTV, LLC	Search for content data in content	15371183	12/06/2016	10277953	04/30/2019
600.	DIRECTV, LLC	Context-based icon for control via a touch sensitive interface	15371186	12/06/2016	10698565	06/30/2020
601.	DIRECTV, LLC	Devices for presenting video program segments in accordance with definition documents	15376522	12/12/2016	10469884	11/05/2019
602.	DIRECTV, LLC	Systems and methods for integrating a set-top box with internet content	15376819	12/13/2016	10015555	07/03/2018
603.	DIRECTV, LLC	Method and apparatus for transmitting high bandwidth signals with low bandwidth transponders	15384124	12/19/2016	10080045	09/18/2018

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604.	DIRECTV, LLC	Time synchronizing of distinct video and data feeds that are delivered in a single mobile IP data network compatible stream	15405805	01/13/2017	10327044	06/18/2019
605.	DIRECTV, LLC	Data distribution amongst transponder carriers	15410247	01/19/2017	10057611	08/21/2018
606.	DIRECTV, LLC	Accessing programs using networked digital video recording devices	15418053	01/27/2017	10142673	11/27/2018
607.	DIRECTV, LLC	Systems and methods for controlling purchasing and/or reauthorization to access content using quick response codes and text messages	15421059	01/31/2017	10298981	05/21/2019
608.	DIRECTV, LLC	Optical character recognition text export from video program	15422861	02/02/2017	10657406	05/19/2020
609.	DIRECTV, LLC	Providing options to live stream multimedia content	15426146	02/07/2017	10462498	10/29/2019
610.	DIRECTV, LLC	Method and system for communicating between a media processor and network processor in a gateway device	15426431	02/07/2017	10057299	08/21/2018
611.	DIRECTV, LLC	Single button selection to facilitate actions in a communications network	15426545	02/07/2017	9918135	03/13/2018
612.	DIRECTV, LLC	Smart channel device	15427538	02/08/2017	10462527	10/29/2019
613.	DIRECTV, LLC	Coordination of connected home devices to provide immersive entertainment experiences	15433301	02/15/2017	10798442	10/06/2020

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614.	DIRECTV, LLC	Method and system for determining a location of a mobile device and utilizing the location in content services	15438469	02/21/2017	10609453	03/31/2020
615.	DIRECTV, LLC	Preventing inadvertent viewing of media content	15440272	02/23/2017	10694251	06/23/2020
616.	DIRECTV, LLC	Edge cache segment prefetching	15440387	02/23/2017	10601946	03/24/2020
617.	DIRECTV, LLC	Context sensitive presentation of media content	15441164	02/23/2017	9973163	05/15/2018
618.	DIRECTV, LLC	Shared control of vehicle functions	15441172	02/23/2017	10180682	01/15/2019
619.	DIRECTV, LLC	Interactive alert for a viewable highlight	15442044	02/24/2017	10715875	07/14/2020
620.	DIRECTV, LLC	Methods and systems for recording and sharing digital video	15444887	02/28/2017	9832537	11/28/2017
621.	DIRECTV, LLC	Method and system for controlling a centralized content distribution system with a remote control	15445090	02/28/2017	10390100	08/20/2019
622.	DIRECTV, LLC	Method and apparatus for media content streaming and reminder notifications	15445397	02/28/2017	10440439	10/08/2019
623.	DIRECTV, LLC	Method and apparatus for access to media content	15446424	03/01/2017	10015526	07/03/2018
624.	DIRECTV, LLC	Broadband backup to satellite-based set-top boxes	15447171	03/02/2017	10419796	09/17/2019
625.	DIRECTV, LLC	Controlling content presentation and display of program information in an electronic program guide	15451077	03/06/2017	10356458	07/16/2019

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626.	DIRECTV, LLC	Broadband live streaming hub for a media processor	15454798	03/09/2017	10349090	07/09/2019
627.	DIRECTV, LLC	Automated end-to-end application deployment in a data center	15455919	03/10/2017	10834176	11/10/2020
628.	DIRECTV, LLC	Collective determination of interesting portions of a media presentation, media tagging and jump playback	15459225	03/15/2017	10390077	08/20/2019
629.	DIRECTV, LLC	Dynamic advertisement insertion	15460831	03/16/2017	10187689	01/22/2019
630.	DIRECTV, LLC	Method and apparatus for recording advertised media content	15461680	03/17/2017	10110955	10/23/2018
631.	DIRECTV, LLC	Hybrid media stream delivery using multiple network connections	15462761	03/17/2017	10250658	04/02/2019
632.	DIRECTV, LLC	Dynamically scaling the color temperature and luminance of a display output	15476282	03/31/2017	10264231	04/16/2019
633.	DIRECTV, LLC	Method and system for detecting unauthorized use of a set top box using satellite signal identification	15581355	04/28/2017	10271081	04/23/2019
634.	DIRECTV, LLC	Sports recommender system utilizing content based filtering	15596773	05/16/2017	10231020	03/12/2019
635.	DIRECTV, LLC	Mediation and settlement for mobile media	15608650	05/30/2017	10078694	09/18/2018
636.	DIRECTV, LLC	Method and system for determining a location of a mobile device and utilizing the location in content services	15620879	06/13/2017	10285018	05/07/2019

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637.	DIRECTV, LLC	Scalable calculation of the similarity content graph	15625284	06/16/2017	10491952	11/26/2019
638.	DIRECTV, LLC	System method for audio-video playback recommendations	15656859	07/21/2017	10743045	08/11/2020
639.	DIRECTV, LLC	System and method to monitor audio loudness and provide audio automatic gain control	15671033	08/07/2017	9917564	03/13/2018
640.	DIRECTV, LLC	Method and system for recording recommended content within a user device	15692649	08/31/2017	10341740	07/02/2019
641.	DIRECTV, LLC	Methods for determining localized outages and distributed signal verification of set-top boxes	15694382	09/01/2017	10070124	09/04/2018
642.	DIRECTV, LLC	Method and system for remotely transcoding content	15701489	09/12/2017	10063915	08/28/2018
643.	DIRECTV, LLC	Method and system for obtaining viewing data and providing content recommendations at a set top box	15704333	09/14/2017	10182259	01/15/2019
644.	DIRECTV, LLC	Secure content transfer systems and methods to operate the same	15724918	10/04/2017	10977631	04/13/2021
645.	DIRECTV, LLC	Methods and systems for recording and sharing digital video	15789696	10/20/2017	10149021	12/04/2018
646.	DIRECTV, LLC	Systems and methods for frequency and bandwidth optimization with a single-wire multiswitch device	15820496	11/22/2017	10153790	12/11/2018
647.	DIRECTV, LLC	Media transcoding based on priority of media	15845471	12/18/2017	10764396	09/01/2020

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648.	DIRECTV, LLC	Remote display of satellite receiver information	15861331	01/03/2018	10805580	10/13/2020
649.	DIRECTV, LLC	Method and system for controlling a user receiving device using voice commands	15876978	01/22/2018	10708645	07/07/2020
650.	DIRECTV, LLC	Methods and systems for rendering binaural audio content	15879028	01/24/2018	10129680	11/13/2018
651.	DIRECTV, LLC	Apparatus and Method for Providing Programming Information for Media Content to a Wearable Device	15879147	01/24/2018	10433011	10/01/2019
652.	DIRECTV, LLC	Single button selection to facilitate actions in a communications network	15884530	01/31/2018	10834467	11/10/2020
653.	DIRECTV, LLC	Systems and methods for controlling a single-wire multiswitch device	15887197	02/02/2018	10764647	09/01/2020
654.	DIRECTV, LLC	Method of controlling a content displayed in an in-vehicle system	15901085	02/21/2018	10528314	01/07/2020
655.	DIRECTV, LLC	Flexible event recording system and method	15910481	03/02/2018	10582254	03/03/2020
656.	DIRECTV, LLC	Streamlined viewing of recorded programs based on markers	15950555	04/11/2018	10805685	10/13/2020
657.	DIRECTV, LLC	Method and System For Providing Access to Content Data For Previously Broadcasted Content	15959748	04/23/2018	10412458	09/10/2019

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658.	DIRECTV, LLC	Method and system for recording recommended content within a user device and playback content from an earlier position when live content is selected	15966154	04/30/2018	10841554	11/17/2020
659.	DIRECTV, LLC	Method and system for performing a function at a user device by combining category display areas	15982286	05/17/2018	10271101	04/23/2019
660.	DIRECTV, LLC	Method and apparatus for access to media content	16006407	06/12/2018	10390052	08/20/2019
661.	DIRECTV, LLC	Methods and systems for providing multiple video content streams	16011078	06/18/2018	10491946	11/26/2019
662.	DIRECTV, LLC	Method and system for communicating between a media processor and network processor in a gateway device	16021278	06/28/2018	10237307	03/19/2019
663.	DIRECTV, LLC	Systems and methods for integrating a set-top box with internet content	16022168	06/28/2018	10291963	05/14/2019
664.	DIRECTV, LLC	Method and system for transferring user settings to another user receiving device using a mobile user device	16028680	07/06/2018	11323773	05/03/2022
665.	DIRECTV, LLC	Method and System for Storing Program Guide Data in a User Device	16029782	07/09/2018	10824221	11/03/2020
666.	DIRECTV, LLC	Data distribution amongst transponder carriers	16038651	07/18/2018	10298976	05/21/2019
667.	DIRECTV, LLC	Methods for determining localized outages and distributed signal verification of set-top boxes	16040735	07/20/2018	10306220	05/28/2019

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668.	DIRECTV, LLC	Method and system for remotely transcoding content	16045068	07/25/2018	10225606	03/05/2019
669.	DIRECTV, LLC	Method and system for generating dynamic text responses for display after a search	16048918	07/30/2018	10878200	12/29/2020
670.	DIRECTV, LLC	Method and apparatus to present multiple audio content	16102026	08/13/2018	10812752	10/20/2020
671.	DIRECTV, LLC	Mediation and settlement for mobile media	16103242	08/14/2018	10459977	10/29/2019
672.	DIRECTV, LLC	Method and apparatus for recording advertised media content	16106884	08/21/2018	10812860	10/20/2020
673.	DIRECTV, LLC	Automated content tag processing for mobile media	16109232	08/22/2018	10409862	09/10/2019
674.	DIRECTV, LLC	Method and system for performing diagnostics in a gateway device based on monitoring parameters	16140958	09/25/2018	10554561	02/04/2020
675.	DIRECTV, LLC	Determining ambient noise in a device under test electromagnetic compatibility test environment	16149986	10/02/2018	10425178	09/24/2019
676.	DIRECTV, LLC	Methods and systems for rendering binaural audio content	16159122	09/17/2019	10419865	10/12/2018
677.	DIRECTV, LLC	Method and system for obtaining content data in an in-vehicle infotainment system from a set top box	16180150	11/05/2018	10743056	08/11/2020
678.	DIRECTV, LLC	Facilitating mixed service use of bonded satellite transponders	16238180	01/02/2019	10750247	08/18/2020

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679.	DIRECTV, LLC	Enhanced streaming source change	16238870	01/03/2019	10728601	07/28/2020
680.	DIRECTV, LLC	Method and system for detecting unauthorized use of a set top box using satellite signal identification	16239619	01/04/2019	10820028	10/27/2020
681.	DIRECTV, LLC	Method and system for controlling a low power mode for external devices	16240940	01/07/2019	10819939	10/27/2020
682.	DIRECTV, LLC	Mobile media pause and resume	16242254	01/08/2019	11182427	11/23/2021
683.	DIRECTV, LLC	Method and system for using saved search results in menu structure searching for obtaining fast search results	16253464	01/22/2019	10956491	03/23/2021
684.	DIRECTV, LLC	Systems and methods for provisioning multi-dimensional rule based entitlement offers	16260835	01/29/2019	10701422	06/30/2020
685.	DIRECTV, LLC	Systems and methods for controlling purchasing and/or reauthorization to access content using quick response codes and text messages	16275935	02/14/2019	10743048	08/11/2020
686.	DIRECTV, LLC	Determining recommended media programming from sparse consumption data	16292063	03/04/2019	11100157	08/24/2021
687.	DIRECTV, LLC	Systems and methods for personalized feature setup and parental guidance sensing	16294072	03/06/2019	11178443	11/16/2021
688.	DIRECTV, LLC	Method and system for recording recommended content within a user device	16296370	03/08/2019	10708665	07/07/2020

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689.	DIRECTV, LLC	Method and system for determining a location of a mobile device and utilizing the location in content services	16296914	03/08/2019	10575147	02/25/2020
690.	DIRECTV, LLC	Data distribution amongst transponder carriers	16376844	04/05/2019	10785516	09/22/2020
691.	DIRECTV, LLC	Methods for determining localized outages and distributed signal verification of set-top boxes	16379494	04/09/2019	10630972	04/21/2020
692.	DIRECTV, LLC	Broadband live streaming hub for a media processor	16418335	05/21/2019	10812836	10/20/2020
693.	DIRECTV, LLC	Systems and methods for spotted advertising and control of corresponding user interfaces and transactions via user receiving devices and mobile devices	16430855	06/04/2019	10820059	10/27/2020
694.	DIRECTV, LLC	Method And System For Personalizing The Display Of Recordings Stored In A User Receiving Device	16437341	06/11/2019	10715873	07/14/2020
695.	DIRECTV, LLC	Method and system for displaying a position of a vehicle at a remotely located device	16518156	07/22/2019	10685562	06/16/2020
696.	DIRECTV, LLC	Automated content tag processing for mobile media	16531442	08/05/2019	11113333	09/07/2021
697.	DIRECTV, LLC	Methods and systems for provisioning a user profile on a media processor	16532931	08/06/2019	11134128	09/28/2021
698.	DIRECTV, LLC	Method and system for viewing sports content within a virtual reality environment	16556712	08/30/2019	11115701	09/07/2021

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699.	DIRECTV, LLC	Smart channel device	16579913	09/24/2019	11259095	02/22/2022
700.	DIRECTV, LLC	Method and apparatus for controlling access to custom browser functionality	16664874	10/27/2019	11038890	06/15/2021
701.	DIRECTV, LLC	Devices for presenting video program segments in accordance with definition documents	16672622	11/04/2019	11134284	09/28/2021
702.	DIRECTV, LLC	Method of controlling a content displayed in an in-vehicle system	16735515	01/06/2020	10996911	05/04/2021
703.	DIRECTV, LLC	Method and system for providing audio signals to an in-vehicle infotainment system	16773128	01/27/2020	10951942	03/16/2021
704.	DIRECTV, LLC	Method and system for performing diagnostics in a gateway device based on monitoring parameters	16774811	01/28/2020	11134017	09/28/2021
705.	DIRECTV, LLC	Customized recommendations of multimedia content streams	16796389	02/20/2020	11070880	07/20/2021
706.	DIRECTV, LLC	Edge cache segment prefetching	16827093	03/23/2020	11025740	06/01/2021
707.	DIRECTV, LLC	Method and system for generating dynamic text responses for display after a search	16952702	11/19/2020	11741314	08/29/2023
708.	DIRECTV, LLC	Media transcoding based on priority of media	17008550	08/31/2020	11349954	05/31/2022
709.	DIRECTV, LLC	Method and apparatus for recording advertised media content	17015989	09/09/2020	11115714	09/07/2021

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710.	DIRECTV, LLC	Method and system for detecting unauthorized use of a set top box using satellite signal identification	17026813	09/21/2020	11259062	02/22/2022
711.	DIRECTV, LLC	Method and system for controlling a low power mode for external devices	17027264	09/21/2020	11330224	05/10/2022
712.	DIRECTV, LLC	Systems and methods for controlling advertising, upselling, cross-selling, and purchasing of products and services via user receiving devices and mobile devices	17060444	10/01/2020	N/A	N/A
713.	DIRECTV, LLC	Coordination of connected home devices to provide immersive entertainment experiences	17063693	10/05/2020	11418837	08/16/2022
714.	DIRECTV, LLC	Automated end-to-end application deployment in a data center	17092962	11/09/2020	11297128	04/05/2022
715.	DIRECTV, LLC	Method to insert program boundaries in linear video for adaptive bitrate streaming	17143537	01/07/2021	11451605	09/20/2022
716.	DIRECTV, LLC	Method and system for providing audio signals to an in-vehicle infotainment system	17175721	02/15/2021	11399204	07/26/2022
717.	DIRECTV, LLC	Method of controlling a content displayed in an in-vehicle system	17218289	03/31/2021	11435971	09/06/2022
718.	DIRECTV, LLC	Secure content transfer systems and methods to operate the same	17301722	04/12/2021	N/A	N/A
719.	DIRECTV, LLC	Circular video player controls	17326119	05/20/2021	11402987	08/02/2022

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720.	DIRECTV, LLC	Method and system for synchronizing playback of independent audio and video streams through a network	17326532	05/21/2021	11528389	12/13/2022
721.	DIRECTV, LLC	Edge cache segment prefetching	17334411	05/28/2021	11356529	06/07/2022
722.	DIRECTV, LLC	Method and apparatus for controlling access to custom browser functionality	17347424	06/14/2021	11683314	06/20/2023
723.	DIRECTV, LLC	Customized recommendations of multimedia content streams	17350348	06/17/2021	11689771	06/27/2023
724.	DIRECTV, LLC	Methods and systems for provisioning a user profile on a media processor	17395986	08/06/2021	11425210	08/23/2022
725.	DIRECTV, LLC	Method and apparatus for recording advertised media content	17398170	08/10/2021	11457278	09/27/2022
726.	DIRECTV, LLC	Method and system for viewing sports content within a virtual reality environment	17398421	08/10/2021	11418829	08/16/2022
727.	DIRECTV, LLC	Method and system for performing diagnostics in a gateway device based on monitoring parameters	17461441	08/30/2021	11706147	07/18/2023
728.	DIRECTV, LLC	Devices for presenting video program segments in accordance with definition documents	17482352	09/22/2021	11706466	07/18/2023
729.	DIRECTV, LLC	Mobile media pause and resume	17486387	09/27/2021	11675836	06/13/2023
730.	DIRECTV, LLC	Smart channel device	17574343	01/12/2022	N/A	N/A
731.	DIRECTV, LLC	Media transcoding based on priority of media	17734825	09/05/2023	11750722	05/02/2022

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732.	DIRECTV, LLC	Edge cache segment prefetching	17736001	05/03/2022	11792296	10/17/2023
733.	DIRECTV, LLC	Method to insert program boundaries in linear video for adaptive bitrate streaming	17890098	08/17/2022	11637883	04/25/2023
734.	DIRECTV, LLC	Method to insert program boundaries in linear video for adaptive bitrate streaming	18188335	03/22/2023	N/A	N/A
735.	DIRECTV, LLC	Edge cache segment prefetching	18463254	09/07/2023	N/A	N/A
736.	DIRECTV, LLC	Bracket for holding a user receiving device	29497990	07/30/2014	D753638	04/12/2016
737.	DIRECTV, LLC	Bracket with upper extension for holding a user receiving device	29497996	07/30/2014	D763062	08/09/2016
738.	DIRECTV, LLC	Cover for user receiving device	29497998	07/30/2014	D743359	11/17/2015
739.	DIRECTV, LLC	Housing for holding television distribution components	29502633	09/18/2014	D743920	11/24/2015
740.	DIRECTV, LLC	Method And System For Kitting Smart Cards With A Shrink Wrap License	12005217	12/26/2007	7591432	09/22/2009
741.	DIRECTV, LLC	Method And Apparatus For Rapid And Scalable Testing Of Antennas	14102431	01/10/2003	10082530	09/25/2018
742.	DIRECTV, LLC	Method And System For Communicating Content Having Modified Packet Headers Through A Satellite	11828530	07/26/2007	8964734	02/24/2015
743.	DIRECTV, LLC	Method And Apparatus For Generating An Overlay Code For A Set Top Box From An External Device	11841531	08/20/2007	9749712	08/29/2017

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744.	DIRECTV, LLC	METHODS AND APPARATUS TO MODIFY REQUESTS FOR MEDIA	18309653	4/28/2023	N/A	N/A
745.	DIRECTV, LLC	METHODS AND APPARATUS FOR ASYNCHRONOUS MEDIA REQUESTS	18309658	4/28/2023	N/A	N/A
746.	DIRECTV, LLC	DISPLAY SCREEN OR PORTION THEREOF WITH GRAPHICAL USER INTERFACE	29857484	10/21/2022	N/A	N/A
747.	DIRECTV, LLC	DISPLAY SCREEN OR PORTION THEREOF WITH GRAPHICAL USER INTERFACE	29857485	10/21/2022	N/A	N/A
748.	DIRECTV, LLC	Automatically Create Customized Prompts Using Customer Database for Large Language Model (LLM) to Generate Personalized 1-1 Marketing Communication	63583131	9/15/2023	N/A	N/A
749.	DIRECTV, LLC	METHODS AND APPARATUS FOR SYNCHRONOUS HTTP MEDIA PLAYBACK	18309537	4/28/2023	N/A	N/A
750.	DIRECTV, LLC	Your TV Super Carousel	29922384	12/21/2023	N/A	N/A
751.	DIRECTV, LLC	Your TV Super Carousel	18393493	12/21/2023	N/A	N/A
752.	DIRECTV, LLC	Method And System For Viewing Sports Content Within A Virtual Reality Environment	18/375,403	9/29/2023	N/A	N/A
753.	DIRECTV, LLC	Method and system for sponsoring data on a network	15/697,990	09/07/2017	10567819	02/18/2000

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