

TRADEMARK ASSIGNMENT

Electronic Version v1.1
 Stylesheet Version v1.1

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	Assignment and Assumption Agreement of Reel/Frame Nos. 3134/0170 and 3380/0152

CONVEYING PARTY DATA

Name	Formerly	Execution Date	Entity Type
BEAR STEARNS CORPORATE LENDING INC.		03/16/2010	CORPORATION: DELAWARE

RECEIVING PARTY DATA

Name:	JPMorgan Chase Bank, as Administrative Agent
Street Address:	270 Park Avenue
City:	New York
State/Country:	NEW YORK
Postal Code:	10017
Entity Type:	National Association: UNITED STATES

PROPERTY NUMBERS Total: 17

Property Type	Number	Word Mark
Registration Number:	2658179	AIREACH
Registration Number:	2634379	AIREACH
Registration Number:	2302346	AIREACH
Registration Number:	2735541	BROADBAND THAT'S OUT OF THIS WORLD
Registration Number:	1288713	HUGHES
Registration Number:	3006113	HUGHES
Registration Number:	2995459	HUGHES
Registration Number:	2886884	HUGHES
Registration Number:	3066229	HUGHES
Registration Number:	2886885	HUGHES
Registration Number:	2854495	HUGHES BROADBAND ALLIANCE
Registration Number:	2818028	HUGHES BROADBAND ALLIANCE
Registration Number:	2702089	HUGHES BROADBAND ALLIANCE

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**TRADEMARK
 REEL: 004183 FRAME: 0508**

Registration Number:	2774975	HUGHES NETWORK SYSTEMS
Registration Number:	0516350	HUGHESNEWS
Registration Number:	3541804	SPACEWAY
Registration Number:	3541805	SPACEWAY

CORRESPONDENCE DATA

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ATTORNEY DOCKET NUMBER:	045494-0034
NAME OF SUBMITTER:	Kristin J. Azcona
Signature:	/kja/
Date:	04/09/2010

Total Attachments: 35

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ASSIGNMENT AND ASSUMPTION AGREEMENT

Reference is made to (i) the Grant of Security Interest in U.S. Trademark Rights dated as of June 27, 2005 (the "Trademark Grant") and (ii) the Grant of Security Interest in U.S. Patent Rights dated as of June 27, 2005 (the "Patent Grant", and together with the Trademark Grant, collectively, the "Intellectual Property Security Agreements"), by and among Hughes Network Systems, LLC and JPMorgan Chase Bank, N.A., as administrative agent, and (i) the Assignment of Security Interest in U.S. Trademark Rights dated August 28, 2006 (the "Assignment of Trademark Rights"), and (ii) the Assignment of Security Interest in U.S. Patent Rights dated August 28, 2006 (the "Assignment of Patent Rights", and together with the Assignment of Trademark Rights, collectively, the "Assignment of Security Interest"), by and between JPMorgan Chase Bank, N.A. and Bear Stearns Corporate Lending Inc.

Capitalized terms not otherwise defined herein have the respective meanings ascribed to them in the Intellectual Property Security Agreements or the Assignment of Security Interest, as applicable.

WHEREAS, pursuant to the Trademark Grant which was recorded with the U.S. Patent and Trademark Office on July 14, 2005 at Reel/Frame No. 3134/0170, the Borrower granted JPMorgan Chase Bank, N.A. a lien on and security interest in and to all of its right, title and interest in, to and under all of the Trademarks listed on Schedule I hereto, and all goodwill associated with such Trademarks and all proceeds of any and all of the foregoing;

WHEREAS, pursuant to the Patent Grant which was recorded with the U.S. Patent and Trademark Office on July 11, 2005 at Reel/Frame No. 016345/0401, Borrowers granted JPMorgan Chase Bank, N.A. a lien on and security interest in and to all of its right, title and interest in, to and under all of the Patents listed on Schedule II hereto, and all proceeds of any and all of the foregoing;

WHEREAS, pursuant to the Assignment of Trademark Rights which was recorded with the U.S. Patent and Trademark Office on August 29, 2006 at Reel/Frame No. 3380/152, JPMorgan Chase Bank, N.A. assigned its lien on and security interest in and to all of its right, title and interest in, to and under all of the Trademarks listed on Schedule III hereto, and all goodwill associated with such Trademarks and all proceeds of any and all of the foregoing to Bear Stearns Corporate Lending Inc.;

WHEREAS, pursuant to the Assignment of Patent Rights which was recorded with the U.S. Patent and Trademark Office on August 29, 2006 at Reel/Frame No. 0181840/0196, JPMorgan Chase Bank, N.A. assigned its lien on and security interest in and to all of its right, title and interest in, to and under all of the Patents listed on Schedule IV hereto, and all proceeds of any and all of the foregoing to Bear Stearns Corporate Lending Inc.;

NOW, THEREFORE, in consideration of the foregoing and for other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, the Resigning Agent and the Successor Agent hereby agree as follows:

Bear Stearns Corporate Lending Inc. (the "Resigning Agent") hereby irrevocably assigns to JPMorgan Chase Bank, N.A. (the "Successor Agent") without recourse, and the Successor Agent hereby assumes from the Resigning Agent, the interest in and to the Resigning Agent's rights and obligations under the Intellectual Property Security Agreements (the "Assigned Interest"), as of the Effective Date (as defined below).

The effective date of this Assignment and Assumption Agreement shall be the date of execution by all parties (the "Effective Date"). Following the execution of this Assignment and Assumption Agreement, it will be delivered to the Successor Agent for recording by the Successor Agent pursuant to the Intellectual Property Security Agreements and the Assignment of Security Interest to the United States Patent and Trademark Office.

From and after the Effective Date, (a) the Successor Agent shall be a party to the Intellectual Property Security Agreements and shall have the rights and obligations of the Agent thereunder and under the other Loan Documents (as defined in the Credit Agreement) and shall be bound by the provisions thereof, and (b) the Resigning Agent shall relinquish its rights and be released from its obligations under the Intellectual Property Security Agreements and the Assignment of Security Interest.

This Assignment and Assumption Agreement shall be governed by and construed in accordance with the laws of the state of New York.

[Signature page follows]

IN WITNESS WHEREOF, the parties hereto have caused this Assignment and Assumption to be executed by their respective duly authorized officers.

JPMorgan Chase Bank, N.A.
as Successor Agent

By:  _____

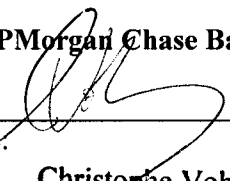
Name:

Title: **Christophe Vohmann**
Executive Director

Accepted:

BEAR STEARNS CORPORATE LENDING INC.


By: JPMorgan Chase Bank, N.A., authorized signatory

By:  _____
Name:

Title: **Christophe Vohmann**
Executive Director

Accepted:

HUGHES NETWORK SYSTEMS, LLC

By: 
Name: Grant Barber
Title: Executive Vice President and Chief Financial Officer

[IP Assignment Signature Page]

TRADEMARK
REEL: 004183 FRAME: 0515

SCHEDULE I
to
ASSIGNMENT AND ASSUMPTION AGREEMENT

Reel/Frame: 3134/0170

Trademark	App. No. App. Date	Reg. No. Reg. Date	Status
AIREACH	76215344 23-FEB-2001	2658179 10-DEC-2002	Registered
AIREACH	76215345 23-FEB-2001	2634379 15-OCT-2002	Registered
AIREACH	74723800 01-SEP-1995	2302346 21-DEC-1999	Registered
BROADBAND THAT'S OUT OF THIS WORLD	76975261 10-DEC-2001	2735541 08-JUL-2003	Registered
HUGHES	73351504 22-FEB-1982	1288713 07-AUG-1984	Registered Section 2(F)
HUGHES HUGHES	76140742 04-OCT-2000	3006113 11-OCT-2005	Registered Section 2(F)
HUGHES HUGHES	76140743 04-OCT-2000	2995459 13-SEP-2005	Registered Section 2(F)
HUGHES HUGHES	76140745 04-OCT-2000	2886884 21-SEP-2004	Registered Section 2(F)
HUGHES HUGHES	76140746 04-OCT-2000	3066229 07-MAR-2006	Registered Section 2(F)
HUGHES HUGHES	76140747 04-OCT-2000	2886885 21-SEP-2004	Registered Section 2(F)
HUGHES BROADBAND ALLIANCE HUGHES <small>BROADBAND ALLIANCE</small>	76396622 18-APR-2002	2854495 15-JUN-2004	Registered
HUGHES BROADBAND ALLIANCE	76362367 24-JAN-2002	2818028 24-FEB-2004	Registered
HUGHES BROADBAND ALLIANCE	76362368 24-JAN-2002	2702089 01-APR-2003	Registered
HUGHES NETWORK SYSTEMS	76444299 26-AUG-2002	2774975 21-OCT-2003	Registered Section 2(F)
HUGHESNEWS <i>HUGHESNEWS</i>	71511154 19-OCT-1946	0516350 18-OCT-1949	Registered. Section 2(F)
SPACEWAY	78589324 17-MAR-2005	3541804 02-DEC-2008	Registered
SPACEWAY	78589331 17-MAR-2005	3541805 02-DEC-2008	Registered

SCHEDULE II
to
ASSIGNMENT AND ASSUMPTION AGREEMENT

Reel/Frame: 016345/0401

No.	Title	App. No. Filing Date	Patent No. Issue Date
1.	Earth station antenna system	07637567 1/7/1991	5657031 8/12/1997
2.	Communication satellite system having an increased power output	07674746 3/26/1991	5208829 5/4/1993
3.	TDMA synchronization using visibility designation	07770206 10/3/1991	5315589 5/24/1994
4.	TDMA system with a virtual reference	07799809 11/29/1991	5309439 5/3/1994
5.	Address filter for a transparent bridge interconnecting local area Network	07880857 5/11/1992	5343471 8/30/1994
6.	Comfort noise generation for digital communication systems	07890747 5/28/1992	5537509 7/16/1996
7.	Communication system and method for linking data terminals and their host computers through a satellite or other wide area network	07904733 6/26/1992	5280625 1/18/1994
8.	High quality low bit rate celp-based speech codec	07905992 6/25/1992	5495555 2/27/1996
9.	Frequency tuning for satellite ground stations	07986845 12/4/1992	5471657 11/28/1995
10.	Real-time implementation of a 8KBPS CELP coder on a DSP pair	08037193 3/26/1993	5491771 2/13/1996
11.	Noise suppression in digital voice communications systems	08037946 3/26/1993	5533133 7/2/1996
12.	Voice activity detector for speech signals in variable background noise	08038734 3/26/1993	5459814 10/17/1995
13.	Apparatus and method for controlling forward error correction encoding in a very small aperture terminal	08067765 5/26/1993	5511079 4/23/1996
14.	Method and apparatus for confirming delivery of files in a file broadcast system with rebroadcast timing at the receiver	08138940 10/19/1993	5619689 4/8/1997
15.	Multimedia frame relay codec	08192463 1/26/1994	5519640 5/21/1996

No.	Title	App. No. Filing Date	Patent No. Issue Date
16.	Voiced, unvoiced or noise modes in a CELP vocoder	08229271 4/18/1994	5734789 3/31/1998
17.	Method for processing speech signals as block floating point numbers in a celp-based coder using a fixed point processor	08257831 6/9/1994	5570454 10/29/1996
18.	Apparatus for and method of broadcast satellite network return-link signal transmission	08308003 9/16/1994	5625640 04/29/1997
19.	Robust pitch estimation method and device for telephone speech	08337595 11/10/1994	5704000 12/30/1997
20.	Secure satellite receive-only local area network with address filter	08340348 11/14/1994	5659615 8/19/1997
21.	Symbol timing recovery using fir data interpolators	08341891 11/15/1994	5524126 6/4/1996
22.	Low rate multi-mode CELP codec that encodes line spectral frequencies utilizing an offset	08359116 12/19/1994	5751903 5/12/1998
23.	Apparatus for positioning an antenna in a remote ground terminal	08384060 2/6/1995	5589837 12/31/1996
24.	Method and apparatus for adjusting the postamble false detection probability threshold for a burst transmission	08394120 2/24/1995	5577056 11/19/1996
25.	Satellite terminal with sleep mode	08398842 3/6/1995	5678228 10/14/1997
26.	Aloha optimization	08404707 3/15/1995	5625628 4/29/1997
27.	Enhanced transaction reservation	08404850 3/15/1995	5638374 6/10/1997
28.	Transmit/receive isolation assembly for a very small aperture satellite terminal	08405689 3/17/1995	5578972 11/26/1996
29.	Method and apparatus of coupling a transmitter to a waveguide in a remote ground terminal	08406228 3/17/1995	5678210 10/14/1997
30.	Adaptive pitch pulse enhancer and method for use in a codebook excited linear prediction (CELP) search loop	08434096 5/3/1995	5528727 6/18/1996
31.	Method of transporting speech information in a wireless cellular system	08483426 6/7/1995	5758256 5/26/1998
32.	Robust vector quantization of line spectral frequencies	08495148 6/27/1995	5651026 7/22/1997
33.	Power control for tdma mobile satellite communication system	08496633 6/29/1995	5710982 1/20/1998

No.	Title	App. No. Filing Date	Patent No. Issue Date
34.	Method and system of frame timing synchronization in tdma based mobile satellite communication system	08496737 6/29/1995	5790939 8/4/1998
35.	Method and system of frequency stabilization in a mobile satellite communication system	08497333 6/30/1995	6356740 3/12/2002
36.	Device and method for communicating in a mobile satellite system	08497582 6/30/1995	5781540 7/14/1998
37.	Signal classifier and echo suppressor for facsimile calls in a satellite network	08499421 7/7/1995	5793755 8/11/1998
38.	Operation of low-cost, fixed output power radio in fixed gain mode	08502029 7/13/1995	5659892 8/19/1997
39.	Method and system for mobile alerting in a communication system	08507176 7/26/1995	5974092 10/26/1999
40.	Method of detecting narrow-band signals in an echo canceller	08528762 9/15/1995	5689556 11/18/1997
41.	Method of detecting double talk in an echo canceller	08528967 9/15/1995	5809463 9/15/1998
42.	Method for synthesizing an echo path in an echo canceller	08529042 9/15/1995	5649012 7/15/1997
43.	Comfort noise generator for echo cancelers	08529232 9/15/1995	5949888 9/7/1999
44.	Voice activity detector for speech signals in variable background noise	08536507 9/29/1995	5649055 7/15/1997
45.	A mode-specific method and apparatus for encoding signals containing speech	08540637 10/11/1995	5596676 1/21/1997
46.	Combined clock recovery/frequency stabilization loop	08546028 10/20/1995	5577074 11/19/1996
47.	Method and apparatus for an adapter card providing conditional access in a communication system	08557398 11/13/1995	5652795 7/29/1997
48.	High performance error coding in channel encoders and decoders	08591127 1/25/1996	5666370 9/9/1997
49.	Comfort noise generation for digital communication systems	08614777 3/7/1996	5630016 5/13/1997
50.	Low voltage indication for non-intelligent ODU equipment	08721921 9/27/1996	6763222 7/13/2004

No.	Title	App. No. Filing Date	Patent No. Issue Date
51.	Removal of swirl artifacts from CELP-based speech coders	08734210 10/21/1996	5633982 5/27/1997
52.	Method and apparatus for selectively retrieving information from a source computer using a terrestrial or satellite interface	08797505 2/7/1997	5852721 12/22/1998
53.	An electronic mail notification system and method within a hybrid network that transmits notifications via a continuous, high-speed channel	08797506 2/7/1997	6067561 5/23/2000
54.	Symbol timing recovery and tracking method for burst-mode digital communications	08820021 3/19/1997	5870443 2/9/1999
55.	Method and apparatus for an adapter card providing conditional access in a communication system	08862346 5/23/1997	6125184 9/26/2000
56.	Low insertion loss connection of an antenna to a mobile radio	08872583 6/10/1997	5901367 5/4/1999
57.	Block phase estimator for the coherent detection of non-differentially phase modulated data bursts on rician fading channels	08886637 7/1/1997	6072841 6/6/2000
58.	Minimization of acoustic echo effects in a microphone boot	08889168 7/7/1997	6038328 3/14/2000
59.	Power control for tdma mobile satellite communication system	08896337 7/18/1997	5790940 8/4/1998
60.	Speech mode based multi-stage vector quantizer	08958143 10/28/1997	5966688 10/12/1999
61.	Method and apparatus for quadrature multi-pulse modulation of data for spectrally efficient communication	09005469 1/12/1998	6608874 8/19/2003
62.	System and method for multicasting multimedia content	09049334 3/27/1998	6351467 2/26/2002
63.	Rotating and locking clip for portable electronic device	09062631 4/17/1998	5906031 5/25/1999
64.	TDMA system timer for maintaining timing to multiple satellite simultaneously	09069339 4/29/1998	6298048 10/2/2001
65.	Leased line optimization and voice quality improvement in bandwidth constrained communication systems	09075568 5/11/1998	6226304 5/1/2001

No.	Title	App. No. Filing Date	Patent No. Issue Date
66.	Method and apparatus for selectively retrieving information from a source computer using a terrestrial or satellite interface	09082626 5/21/1998	5968129 10/19/1999
67.	Low insertion loss connection of an antenna to a mobile radio with retractable swiveling antenna feature	09097803 6/16/1998	6043781 3/28/2000
68.	Method and apparatus for joint timing synchronization and frequency offset estimation	09109798 7/2/1998	6363131 3/26/2002
69.	Burst format and associated signal processing to improve frequency and timing estimation for random access channels	09110035 7/2/1998	6373858 4/16/2002
70.	Immediate channel assignment in a wireless system	09115095 7/13/1998	6438386 8/20/2002
71.	Spot beam selection in a mobile satellite communication system	09115096 7/13/1998	6233451 5/15/2001
72.	Error and flow control in a satellite communications system	09115099 7/13/1998	6289482 9/11/2001
73.	Paging reception assurance in a multiply registered wireless transceiver	09115101 7/13/1998	6282178 8/28/2001
74.	Signaling maintenance for discontinuous information communications	09115102 7/13/1998	6385447 5/7/2002
75.	Broadcast delivery of information to a personal computer for local storage and access	09157896 9/21/1998	6546488 4/8/2003
76.	Method and apparatus for controlling access to confidential data by analyzing property inherent in data	09160846 9/25/1998	6438666 8/20/2002
77.	An apparatus for providing a secure processing environment	09161150 9/25/1998	6385727 5/7/2002
78.	System and method of soft decision decoding	09181905 10/29/1998	6347124 2/12/2002
79.	Channel estimation in a fading channel	09198774 11/24/1998	6182251 1/30/2001
80.	Method for improving spectral sampling using sub-burst discreet fourier transforms	09205592 12/4/1998	6349120 2/19/2002

No.	Title	App. No. Filing Date	Patent No. Issue Date
81.	Method and system of determining user terminal position using a measured signal propagation delay and doppler shift of a communications link	09212528 12/16/1998	6307503 10/23/2001
82.	Method and apparatus for predicting spot beam and satellite handover in a mobile satellite communication network	09213027 12/16/1998	6246874 6/21/2001
83.	Method and apparatus for selectively allocating and enforcing bandwidth usage requirements on network users	09233343 1/19/1999	6473793 10/29/2002
84.	Apparatus and method for grouping carriers to minimize the occurrence of call blocking in a satellite-based communications network	09244970 2/10/1999	6332069 12/18/2001
85.	Method for implementing a terminal-to-terminal call with an optimal use of radio resources in a mobile satellite system	09247845 2/11/1999	6353738 3/5/2002
86.	Facsimile call success rates in long delay environments	09247846 2/11/1999	6411689 6/25/2002
87.	Mobile satellite system and method for implementing a single-hop terminal-to-terminal call	09247847 2/11/1999	6314290 11/6/2001
88.	Method for implementing ciphered communication for single-hop terminal-to-terminal calls in a mobile satellite system	09247848 2/11/1999	6516065 2/4/2003
89.	Apparatus and method for delivering key information of a channel request message from a user terminal to a network	09247849 2/11/1999	6249677 6/19/2001
90.	Parallel/pipeline VLSI architecture for a low-delay CELP coder/decoder	09270918 3/16/1999	6314393 11/6/2001
91.	Method and apparatus for an adapter card providing conditional access in a communication system	09288986 4/9/1999	6131160 10/10/2000
92.	Earth tiling system for providing regional based service in a mobile satellite communication network	09290487 4/12/1999	6389289 5/14/2002
93.	Compensation of dynamic doppler frequency of large range in satellite communication systems	09310477 5/12/1999	6058306 5/2/2000
94.	System and method for detecting interference present in mobile satellite communication links based on noise floor power levels of satellite communication	09323319 6/1/1999	6374096 4/16/2002

No.	Title	App. No. Filing Date	Patent No. Issue Date
	links		
95.	Slidable connection for a retractable antenna to a mobile radio	09330603 6/11/1999	6269240 7/31/2001
96.	Extension interface units in a communication system	09359832 7/23/1999	6650649 11/18/2003
97.	Multi-modulation radio communications	09360209 7/23/1999	6836515 12/28/2004
98.	Method of noise reduction for speech codecs	09361015 7/23/1999	6453289 9/17/2002
99.	Method and system for interference cancellation for high spectral efficiency satellite communications	09401694 9/23/1999	7526051 4/28/2009
100.	Apparatus and method for positioning single-offset zones in a spot beam coverage area to maximize call duration in a satellite-based communications network	09417592 10/14/1999	6553225 4/22/2003
101.	Combined interference cancellation with FEC decoding for high efficiency satellite communications	09436670 11/10/1999	6671338 12/30/2003
102.	Facsimile call success rates in long delay and impaired channel environments without collision detection	09440744 11/16/1999	6603577 8/5/2003
103.	Acquisition mechanism for a mobile satellite system	09447684 11/23/1999	7245930 7/17/2007
104.	Synchronization in mobile satellite systems using dual-chirp waveform	09447685 11/23/1999	6418158 7/9/2002
105.	In-call dtmf transport for geostationary mobile satellite communication system	09447696 11/23/1999	6650895 11/18/2003
106.	System and method for using inhibit sense multiple access (ISMA) protocol and a capture message to optimize random access control and data packet communication between access terminals and a base station over a wireless reverse common channel	09478452 1/6/2000	6738366 5/18/2004
107.	Satellite multicast performance enhancing multicast http proxy system and method	09498936 2/4/2000	6658463 12/02/2003
108.	Method and system of determining user terminal position using multiple satellites	09510921 2/22/2000	6317077 11/13/2001
109.	Method and apparatus for selectively retrieving information from a source	09512269 2/24/2000	6321268 11/20/2001

No.	Title	App. No. Filing Date	Patent No. Issue Date
	computer using a terrestrial or satellite interface		
110.	System for providing satellite bandwidth on demand employing uplink frame formatting for smoothing and mitigating jitter and dynamically changing numbers of contention and data channels	09518452 3/3/2000	6842437 1/11/2005
111.	Adapter for connecting computer to satellite antenna	09541249 4/3/2000	6215873 4/10/2001
112.	Voicing measure as an estimate of signal periodicity for a frequency domain interpolative speech codec system	09542390 4/4/2000	6691092 2/10/2004
113.	Frequency domain interpolative speech codec system	09542792 4/4/2000	6418408 7/9/2002
114.	Spectral magnitude modeling and quantization in a frequency domain interpolative speech codec system	09542793 4/4/2000	6493664 12/10/2002
115.	Method and apparatus for an adapter card providing conditional access in a communication system	09562487 5/1/2000	6307937 10/23/2001
116.	Congestion avoidance approach for a switching communication system with transmission constraints	09625289 7/25/2000	6738350 5/18/2004
117.	Method and system for providing satellite bandwidth on demand using multi-level queuing	09631269 8/2/2000	6985455 1/10/2006
118.	Fading communications channel estimation and compensation	09634018 8/8/2000	6680987 1/20/2004
119.	System method and computer program product for improved narrow band signal detection for echo cancellation	09634092 8/8/2000	6765971 7/20/2004
120.	Power saving method for multiple channels per carrier (MCPC) satellite transmission	09639457 8/15/2000	6839540 1/4/2005
121.	Synchronization apparatus and method for a return link power control for satellite systems	09642283 8/18/2000	6771615 8/3/2004
122.	System and method for restoring performance to a weathered satellite terminal	09664162 9/18/2000	6292155 9/18/2001
123.	Selective spoofer and method of	09664165	6973497

No.	Title	App. No. Filing Date	Patent No. Issue Date
	performing selective spoofing	9/18/2000	12/6/2005
124.	In-band transmission of tty/ttd signals for systems employing low bit-rate voice compression	09669283 9/26/2000	6961320 11/1/2005
125.	Time-offset distribution to ensure constant satellite power	09678681 10/5/2000	6721538 4/13/2004
126.	Physical layer header for packet data	09707362 11/7/2000	6859466 2/22/2005
127.	System and method of reading ahead of objects for delivery to an http proxy server	09708134 11/8/2000	6795848 9/21/2004
128.	Mac layer protocol for a satellite based packet switched services	09714788 11/16/2000	6778509 8/17/2004
129.	Available bandwidth control mechanism	09716924 11/20/2000	6947445 9/20/2005
130.	Apparatus and method for hybrid network access	09722464 11/28/2000	6519651 2/11/2003
131.	Apparatus And Method For Efficient TDMA Bandwidth Allocation For TCP/IP Satellite-Based Network	09722930 11/27/2000	6834039
132.	Method and apparatus for deriving uplink timing from asynchronous traffic across multiple transport streams	09733156 12/8/2000	6993009 1/31/2006
133.	Robust carrier identifying method and apparatus for bandwidth-on-demand (BOD) system	09735675 12/13/2000	6711710 3/23/2004
134.	Method and apparatus for acquiring a synchronization signal	09768726 1/24/2001	7042854 5/9/2006
135.	Method and apparatus for tracking a synchronization signal	09768728 1/24/2001	7012937 3/14/2006
136.	Apportioning bandwidth capacity in communication switching systems	09783849 2/15/2001	6937580 8/30/2005
137.	System and method for providing a two-way satellite system	09785755 2/16/2001	7164661 1/16/2007
138.	System and method for managing bandwidth in a two-way satellite system	09789076 2/20/2001	6987741 1/17/2006
139.	System and method for scaling a two-way satellite system	09789079 2/20/2001	7463582 12/9/2008
140.	Method and system of directing an antenna in a two-way satellite system	09789081 2/20/2001	6441782 8/27/2002

No.	Title	App. No. Filing Date	Patent No. Issue Date
141.	Method and system for providing efficient data transmission based upon a contention protocol	09789969 2/22/2001	7468972 12/23/2008
142.	Transceiver in a two-way satellite system	09790379 2/22/2001	6965581 11/15/2005
143.	Microwave waveguide assembly and method for making same	09825624 4/4/2001	6560850 5/13/2003
144.	High volume uplink in a broadband satellite communications syst	09825635 4/4/2001	6804492 10/12/2004
145.	Capacity management in a broadband satellite communications system	09832512 4/11/2001	6904265 6/7/2005
146.	Hydrogen getter package assembly	09837912 4/19/2001	6428612 8/6/2002
147.	Antenna aperture cover for antenna pointing and improved antenna pointing method using aperture cover	09852459 5/10/2001	6388614 5/14/2002
148.	Uplink power control system for satellite communication system employing on-board satellite processing and fade estimation	09875607 6/6/2001	7043199 5/9/2006
149.	Method and device for selective transport level spoofing based on information in transport level packet	09879020 6/12/2001	7082467 7/25/2006
150.	Linearized offset QPSK modulation utilizing a sigma-delta based frequency modulator	09883539 6/18/2001	6975687 12/13/2005
151.	Method and system for providing buffer management in a performance enhancing proxy architecture	09903755 7/12/2001	7213077 5/1/2007
152.	Method and system for improving network performance by utilizing path selection, path activation, and profiles	09903779 1/31/2006	6993584 7/12/2001
153.	Method and system for improving network performance using a performance enhancing proxy	09903832 7/12/2001	7219158 5/15/2007
154.	Method and system for providing connection handling	09905215 7/13/2001	7596802 9/29/2009
155.	Method and system for using a backbone protocol to improve network performance	09905502 7/13/2001	7006480 2/28/2006

No.	Title	App. No. Filing Date	Patent No. Issue Date
156.	Method and apparatus for allocating data communications resources in a satellite communications network	09918961 7/31/2001	7450914 11/11/2008
157.	Method, apparatus, and system for identifying and efficiently treating classes of traffic	09925177 8/9/2001	7027414 4/11/2006
158.	Low latency handling of transmission control protocol messages in a broadband satellite communications system	09925178 8/9/2001	6961539 11/1/2005
159.	Dynamic queue depth management in a satellite terminal for bandwidth allocations in a broadband satellite communications system	09925180 8/9/2001	6865388 3/8/2005
160.	Scheduling and queue servicing in a satellite terminal for bandwidth allocations in a broadband satellite communications system	09925181 8/9/2001	7085247 8/1/2006
161.	Method and system for performing decoding using a reduced-memory implementation	09957749 9/21/2001	6763493 7/13/2004
162.	System and method for pointing the bore-sight of a terminal antenna towards the center of a satellite station-keeping box in the geo-stationary orbit	09962369 9/25/2001	6473035 10/29/2002
163.	Post-installation monitoring method for a satellite terminal antenna	09962836 9/25/2001	6476764 11/5/2002
164.	Method and system for improvement of network performance over asymmetric links	09963225 9/26/2001	7133361 11/7/2006
165.	Feed forward sigma delta interpolator for use in a fractional-n synthesizer	09963350 9/26/2001	6941330 9/6/2005
166.	Antenna alignment system and method	09976230 10/12/2001	6580391 6/17/2003
167.	System and method for reading ahead of content	09996445 11/28/2001	
168.	Method, system and computer program product for digitally generating a function	10005926 11/8/2001	6807554 10/19/2004
169.	Method and apparatus for selectively allocating and enforcing bandwidth usage requirements on network users	10010521 12/7/2001	7562130 7/14/2009
170.	Inroute training in a two-way satellite system	10016845 12/14/2001	7656813

No.	Title	App. No. Filing Date	Patent No. Issue Date
171.	Method and system for automatic gain control in a satellite communications system	10043668 1/10/2002	6904273 6/7/2005
172.	Method and system for adaptive equalization for receivers in a wide-band satellite communications system	10043775 1/10/2002	6985523 1/10/2006
173.	Method and apparatus for selectively retrieving information from a source computer using a terrestrial or satellite interface	10054681 11/13/2001	6931512 8/16/2005
174.	Prototype waveform magnitude quantization for a frequency domain interpolative speech codec system	10073128 2/13/2002	6996523 2/7/2006
175.	Voicing measure for a speech codec system	10073406 2/13/2002	7013269 3/14/2006
176.	Prototype waveform phase modeling for a frequency domain interpolative speech codec system	10073423 2/13/2002	6931373 8/16/2005
177.	Method and system for providing a semi-data aided frequency estimator for OQPSK	10074500 2/11/2002	7027546 4/11/2006
178.	System and method for providing contention channel organization for broadband satellite access in a communications network	10074759 2/12/2002	6980800 12/27/2005
179.	Filter loop structure for synchronization in a mobile communication terminal and a method of using the same	10106940 3/26/2002	7016444 3/21/2006
180.	Method and system for providing differentiated quality of service diversity aloha	10138135 5/2/2002	7336679 2/26/2008
181.	Method and system of directing an antenna in a two-way satellite system	10139706 5/6/2002	6501423 12/31/2002
182.	System and method for efficiently using channel unit hardware to provide multiple narrowband channels overlaid on a single wideband channel in a satellite communications network	10141109 5/8/2002	7170889 1/30/2007
183.	Method and system for centrally exchanging terminal information over a meshed network	10142594 5/9/2002	
184.	Method and system for providing two-way communication using an overlay of signals	10158278 5/30/2002	

No.	Title	App. No. Filing Date	Patent No. Issue Date
	over a non-linear communications channel		
185.	Mobility management-radio resource layer interface system and method for handling dark beam scenarios	10185256 6/28/2002	6996372 2/7/2006
186.	Mobility management state transition system and method for handling dark beam scenarios	10185277 6/28/2002	7058403 6/6/2006
187.	System and method for providing real-time and non-real-time services over a communications system	10245196 9/17/2002	7580424 8/25/2009
188.	Method and system for providing load sensitive throttling	10319117 12/13/2002	
189.	Method and system for communicating over a segmented virtual private network (VPN)	10352992 1/28/2003	
190.	Method and system for integrating performance enhancing functions in a virtual private network (VPN)	10353183 1/28/2003	7398552 7/8/2008
191.	Method and system for adaptively applying performance enhancing functions	10353247 1/28/2003	7389533
192.	Compensating for non-linearity in an overlaid communication system	10371425 2/21/2003	7016644 3/21/2006
193.	Method and apparatus for estimating beacon power variations	10430868 5/7/2003	7116936 10/3/2006
194.	Method and system for providing load-sensitive bandwidth allocation	10613876 7/3/2003	7336967 2/26/2008
195.	System and method for pre-fetching content in a proxy architecture	10659481 9/10/2003	7389330 6/17/2008
196.	Method and system for providing enhanced performance of web browsing	10659486 9/10/2003	
197.	Method and system for multicast in a broadband satellite system	10684914 10/14/2003	7471645 12/30/2008
198.	Fallback mode ingress/egress mechanism for satellite communication system	10705314 11/10/2003	7386310 6/10/2008
199.	System and method for routing among private addressing domains	10715178 11/17/2003	7388869 6/17/2008
200.	Network system with TCP/IP protocol spoofing	10750356 12/31/2003	7337233 2/26/2008

No.	Title	App. No. Filing Date	Patent No. Issue Date
201.	Proxy architecture for providing quality of service (QOS) reservations	10754828 1/8/2004	7353279 4/1/2008
202.	Stitching of video for continuous presence multipoint video conferencing	10836672 4/30/2004	
203.	Network layer tunnel apparatus having transport layer/network layer stack and network layer tunnel and method using network layer tunnel	10935984 9/8/2004	
204.	Apparatus and method for efficient TDMA bandwidth allocation for TCP/IP satellite-based Network	10940211 9/14/2004	7619968
205.	Pre-fetching secure content using proxy architecture	10963194 10/13/2004	7584500
206.	Method and system for load balancing over a set of communication channels	11085954 3/22/2005	
207.	Method and apparatus for providing open loop bandwidth allocation	11085972 3/22/2005	
208.	Method and apparatus for assessing traffic load of a communication network	11085994 3/22/2005	
209.	Method and apparatus for providing quality of service guarantees using stateful monitoring of network load	11086001 3/22/2005	7620006
210.	Method and apparatus for secure access to dedicated network resources	11087054 3/23/2005	7581098
211.	Electronic equipment housing	29034165 1/27/1995	D376350 12/10/1996
212.	Housing for electronic apparatus	29094881 10/13/1998	D418822 1/11/2000
213.	Telephone handset	29130429 10/2/2000	D440953 4/24/2001
214.	Ornamental design of an equipment stand	29135724 1/18/2001	D460054 7/9/2002

SCHEDULE III
to
ASSIGNMENT AND ASSUMPTION AGREEMENT

Reel/Frame: 3380/0152

Trademark	App. No. App. Date	Reg. No. Reg. Date	Status
AIREACH	76215344 23-FEB-2001	2658179 10-DEC-2002	Registered
AIREACH	76215345 23-FEB-2001	2634379 15-OCT-2002	Registered
AIREACH	74723800 01-SEP-1995	2302346 21-DEC-1999	Registered
BROADBAND THAT'S OUT OF THIS WORLD	76975261 10-DEC-2001	2735541 08-JUL-2003	Registered
HUGHES	73351504 22-FEB-1982	1288713 07-AUG-1984	Registered Section 2(F)
HUGHES HUGHES	76140742 04-OCT-2000	3006113 11-OCT-2005	Registered Section 2(F)
HUGHES HUGHES	76140743 04-OCT-2000	2995459 13-SEP-2005	Registered Section 2(F)
HUGHES HUGHES	76140745 04-OCT-2000	2886884 21-SEP-2004	Registered Section 2(F)
HUGHES HUGHES	76140746 04-OCT-2000	3066229 07-MAR-2006	Registered Section 2(F)
HUGHES HUGHES	76140747 04-OCT-2000	2886885 21-SEP-2004	Registered Section 2(F)
HUGHES BROADBAND ALLIANCE HUGHES <small>BROADBAND ALLIANCE</small>	76396622 18-APR-2002	2854495 15-JUN-2004	Registered
HUGHES BROADBAND ALLIANCE	76362367 24-JAN-2002	2818028 24-FEB-2004	Registered
HUGHES BROADBAND ALLIANCE	76362368 24-JAN-2002	2702089 01-APR-2003	Registered
HUGHES NETWORK SYSTEMS	76444299 26-AUG-2002	2774975 21-OCT-2003	Registered Section 2(F)
HUGHESNEWS <i>HUGHESNEWS</i>	71511154 19-OCT-1946	0516350 18-OCT-1949	Registered. Section 2(F)
SPACEWAY	78589324 17-MAR-2005	3541804 02-DEC-2008	Registered
SPACEWAY	78589331 17-MAR-2005	3541805 02-DEC-2008	Registered

SCHEDULE IV
to
ASSIGNMENT AND ASSUMPTION AGREEMENT

Reel/Frame: 018184/0196

No.	Title	App. No. Filing Date	Patent No. Issue Date
215.	Earth station antenna system	07637567 1/7/1991	5657031 8/12/1997
216.	Communication satellite system having an increased power output	07674746 3/26/1991	5208829 5/4/1993
217.	TDMA synchronization using visibility designation	07770206 10/3/1991	5315589 5/24/1994
218.	TDMA system with a virtual reference	07799809 11/29/1991	5309439 5/3/1994
219.	Address filter for a transparent bridge interconnecting local area Network	07880857 5/11/1992	5343471 8/30/1994
220.	Comfort noise generation for digital communication systems	07890747 5/28/1992	5537509 7/16/1996
221.	Communication system and method for linking data terminals and their host computers through a satellite or other wide area network	07904733 6/26/1992	5280625 1/18/1994
222.	High quality low bit rate celp-based speech codec	07905992 6/25/1992	5495555 2/27/1996
223.	Frequency tuning for satellite ground stations	07986845 12/4/1992	5471657 11/28/1995
224.	Real-time implementation of a 8KBPS CELP coder on a DSP pair	08037193 3/26/1993	5491771 2/13/1996
225.	Noise suppression in digital voice communications systems	08037946 3/26/1993	5533133 7/2/1996
226.	Voice activity detector for speech signals in variable background noise	08038734 3/26/1993	5459814 10/17/1995
227.	Apparatus and method for controlling forward error correction encoding in a very small aperture terminal	08067765 5/26/1993	5511079 4/23/1996
228.	Method and apparatus for confirming delivery of files in a file broadcast system with rebroadcast timing at the receiver	08138940 10/19/1993	5619689 4/8/1997
229.	Multimedia frame relay codec	08192463 1/26/1994	5519640 5/21/1996

No.	Title	App. No. Filing Date	Patent No. Issue Date
230.	Voiced, unvoiced or noise modes in a CELP vocoder	08229271 4/18/1994	5734789 3/31/1998
231.	Method for processing speech signals as block floating point numbers in a celp-based coder using a fixed point processor	08257831 6/9/1994	5570454 10/29/1996
232.	Apparatus for and method of broadcast satellite network return-link signal transmission	08308003 9/16/1994	5625640 04/29/1997
233.	Robust pitch estimation method and device for telephone speech	08337595 11/10/1994	5704000 12/30/1997
234.	Secure satellite receive-only local area network with address filter	08340348 11/14/1994	5659615 8/19/1997
235.	Symbol timing recovery using fir data interpolators	08341891 11/15/1994	5524126 6/4/1996
236.	Low rate multi-mode CELP codec that encodes line spectral frequencies utilizing an offset	08359116 12/19/1994	5751903 5/12/1998
237.	Apparatus for positioning an antenna in a remote ground terminal	08384060 2/6/1995	5589837 12/31/1996
238.	Method and apparatus for adjusting the postamble false detection probability threshold for a burst transmission	08394120 2/24/1995	5577056 11/19/1996
239.	Satellite terminal with sleep mode	08398842 3/6/1995	5678228 10/14/1997
240.	Aloha optimization	08404707 3/15/1995	5625628 4/29/1997
241.	Enhanced transaction reservation	08404850 3/15/1995	5638374 6/10/1997
242.	Transmit/receive isolation assembly for a very small aperture satellite terminal	08405689 3/17/1995	5578972 11/26/1996
243.	Method and apparatus of coupling a transmitter to a waveguide in a remote ground terminal	08406228 3/17/1995	5678210 10/14/1997
244.	Adaptive pitch pulse enhancer and method for use in a codebook excited linear prediction (CELP) search loop	08434096 5/3/1995	5528727 6/18/1996
245.	Method of transporting speech information in a wireless cellular system	08483426 6/7/1995	5758256 5/26/1998
246.	Robust vector quantization of line spectral frequencies	08495148 6/27/1995	5651026 7/22/1997
247.	Power control for tdma mobile satellite communication system	08496633 6/29/1995	5710982 1/20/1998

No.	Title	App. No. Filing Date	Patent No. Issue Date
248.	Method and system of frame timing synchronization in tdma based mobile satellite communication system	08496737 6/29/1995	5790939 8/4/1998
249.	Method and system of frequency stabilization in a mobile satellite communication system	08497333 6/30/1995	6356740 3/12/2002
250.	Device and method for communicating in a mobile satellite system	08497582 6/30/1995	5781540 7/14/1998
251.	Signal classifier and echo suppressor for facsimile calls in a satellite network	08499421 7/7/1995	5793755 8/11/1998
252.	Operation of low-cost, fixed output power radio in fixed gain mode	08502029 7/13/1995	5659892 8/19/1997
253.	Method and system for mobile alerting in a communication system	08507176 7/26/1995	5974092 10/26/1999
254.	Method of detecting narrow-band signals in an echo canceller	08528762 9/15/1995	5689556 11/18/1997
255.	Method of detecting double talk in an echo canceller	08528967 9/15/1995	5809463 9/15/1998
256.	Method for synthesizing an echo path in an echo canceller	08529042 9/15/1995	5649012 7/15/1997
257.	Comfort noise generator for echo cancelers	08529232 9/15/1995	5949888 9/7/1999
258.	Voice activity detector for speech signals in variable background noise	08536507 9/29/1995	5649055 7/15/1997
259.	A mode-specific method and apparatus for encoding signals containing speech	08540637 10/11/1995	5596676 1/21/1997
260.	Combined clock recovery/frequency stabilization loop	08546028 10/20/1995	5577074 11/19/1996
261.	Method and apparatus for an adapter card providing conditional access in a communication system	08557398 11/13/1995	5652795 7/29/1997
262.	High performance error coding in channel encoders and decoders	08591127 1/25/1996	5666370 9/9/1997
263.	Comfort noise generation for digital communication systems	08614777 3/7/1996	5630016 5/13/1997
264.	Low voltage indication for non-intelligent ODU equipment	08721921 9/27/1996	6763222 7/13/2004

No.	Title	App. No. Filing Date	Patent No. Issue Date
265.	Removal of swirl artifacts from CELP-based speech coders	08734210 10/21/1996	5633982 5/27/1997
266.	Method and apparatus for selectively retrieving information from a source computer using a terrestrial or satellite interface	08797505 2/7/1997	5852721 12/22/1998
267.	An electronic mail notification system and method within a hybrid network that transmits notifications via a continuous, high-speed channel	08797506 2/7/1997	6067561 5/23/2000
268.	Symbol timing recovery and tracking method for burst-mode digital communications	08820021 3/19/1997	5870443 2/9/1999
269.	Method and apparatus for an adapter card providing conditional access in a communication system	08862346 5/23/1997	6125184 9/26/2000
270.	Low insertion loss connection of an antenna to a mobile radio	08872583 6/10/1997	5901367 5/4/1999
271.	Block phase estimator for the coherent detection of non-differentially phase modulated data bursts on rician fading channels	08886637 7/1/1997	6072841 6/6/2000
272.	Minimization of acoustic echo effects in a microphone boot	08889168 7/7/1997	6038328 3/14/2000
273.	Power control for tdma mobile satellite communication system	08896337 7/18/1997	5790940 8/4/1998
274.	Speech mode based multi-stage vector quantizer	08958143 10/28/1997	5966688 10/12/1999
275.	Method and apparatus for quadrature multi-pulse modulation of data for spectrally efficient communication	09005469 1/12/1998	6608874 8/19/2003
276.	System and method for multicasting multimedia content	09049334 3/27/1998	6351467 2/26/2002
277.	Rotating and locking clip for portable electronic device	09062631 4/17/1998	5906031 5/25/1999
278.	TDMA system timer for maintaining timing to multiple satellite simultaneously	09069339 4/29/1998	6298048 10/2/2001
279.	Leased line optimization and voice quality improvement in bandwidth constrained communication systems	09075568 5/11/1998	6226304 5/1/2001

No.	Title	App. No. Filing Date	Patent No. Issue Date
280.	Method and apparatus for selectively retrieving information from a source computer using a terrestrial or satellite interface	09082626 5/21/1998	5968129 10/19/1999
281.	Low insertion loss connection of an antenna to a mobile radio with retractable swiveling antenna feature	09097803 6/16/1998	6043781 3/28/2000
282.	Method and apparatus for joint timing synchronization and frequency offset estimation	09109798 7/2/1998	6363131 3/26/2002
283.	Burst format and associated signal processing to improve frequency and timing estimation for random access channels	09110035 7/2/1998	6373858 4/16/2002
284.	Immediate channel assignment in a wireless system	09115095 7/13/1998	6438386 8/20/2002
285.	Spot beam selection in a mobile satellite communication system	09115096 7/13/1998	6233451 5/15/2001
286.	Error and flow control in a satellite communications system	09115099 7/13/1998	6289482 9/11/2001
287.	Paging reception assurance in a multiply registered wireless transceiver	09115101 7/13/1998	6282178 8/28/2001
288.	Signaling maintenance for discontinuous information communications	09115102 7/13/1998	6385447 5/7/2002
289.	Broadcast delivery of information to a personal computer for local storage and access	09157896 9/21/1998	6546488 4/8/2003
290.	Method and apparatus for controlling access to confidential data by analyzing property inherent in data	09160846 9/25/1998	6438666 8/20/2002
291.	An apparatus for providing a secure processing environment	09161150 9/25/1998	6385727 5/7/2002
292.	System and method of soft decision decoding	09181905 10/29/1998	6347124 2/12/2002
293.	Channel estimation in a fading channel	09198774 11/24/1998	6182251 1/30/2001
294.	Method for improving spectral sampling using sub-burst discreet fourier transforms	09205592 12/4/1998	6349120 2/19/2002

No.	Title	App. No. Filing Date	Patent No. Issue Date
295.	Method and system of determining user terminal position using a measured signal propagation delay and doppler shift of a communications link	09212528 12/16/1998	6307503 10/23/2001
296.	Method and apparatus for predicting spot beam and satellite handover in a mobile satellite communication network	09213027 12/16/1998	6246874 6/21/2001
297.	Method and apparatus for selectively allocating and enforcing bandwidth usage requirements on network users	09233343 1/19/1999	6473793 10/29/2002
298.	Apparatus and method for grouping carriers to minimize the occurrence of call blocking in a satellite-based communications network	09244970 2/10/1999	6332069 12/18/2001
299.	Method for implementing a terminal-to-terminal call with an optimal use of radio resources in a mobile satellite system	09247845 2/11/1999	6353738 3/5/2002
300.	Facsimile call success rates in long delay environments	09247846 2/11/1999	6411689 6/25/2002
301.	Mobile satellite system and method for implementing a single-hop terminal-to-terminal call	09247847 2/11/1999	6314290 11/6/2001
302.	Method for implementing ciphered communication for single-hop terminal-to-terminal calls in a mobile satellite system	09247848 2/11/1999	6516065 2/4/2003
303.	Apparatus and method for delivering key information of a channel request message from a user terminal to a network	09247849 2/11/1999	6249677 6/19/2001
304.	Parallel/pipeline VLSI architecture for a low-delay CELP coder/decoder	09270918 3/16/1999	6314393 11/6/2001
305.	Method and apparatus for an adapter card providing conditional access in a communication system	09288986 4/9/1999	6131160 10/10/2000
306.	Earth tiling system for providing regional based service in a mobile satellite communication network	09290487 4/12/1999	6389289 5/14/2002
307.	Compensation of dynamic doppler frequency of large range in satellite communication systems	09310477 5/12/1999	6058306 5/2/2000
308.	System and method for detecting interference present in mobile satellite communication links based on noise floor power levels of satellite communication	09323319 6/1/1999	6374096 4/16/2002

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	links		
309.	Slidable connection for a retractable antenna to a mobile radio	09330603 6/11/1999	6269240 7/31/2001
310.	Extension interface units in a communication system	09359832 7/23/1999	6650649 11/18/2003
311.	Multi-modulation radio communications	09360209 7/23/1999	6836515 12/28/2004
312.	Method of noise reduction for speech codecs	09361015 7/23/1999	6453289 9/17/2002
313.	Method and system for interference cancellation for high spectral efficiency satellite communications	09401694 9/23/1999	7526051 4/28/2009
314.	Apparatus and method for positioning single-offset zones in a spot beam coverage area to maximize call duration in a satellite-based communications network	09417592 10/14/1999	6553225 4/22/2003
315.	Combined interference cancellation with FEC decoding for high efficiency satellite communications	09436670 11/10/1999	6671338 12/30/2003
316.	Facsimile call success rates in long delay and impaired channel environments without collision detection	09440744 11/16/1999	6603577 8/5/2003
317.	Acquisition mechanism for a mobile satellite system	09447684 11/23/1999	7245930 7/17/2007
318.	Synchronization in mobile satellite systems using dual-chirp waveform	09447685 11/23/1999	6418158 7/9/2002
319.	In-call dtmf transport for geostationary mobile satellite communication system	09447696 11/23/1999	6650895 11/18/2003
320.	System and method for using inhibit sense multiple access (ISMA) protocol and a capture message to optimize random access control and data packet communication between access terminals and a base station over a wireless reverse common channel	09478452 1/6/2000	6738366 5/18/2004
321.	Satellite multicast performance enhancing multicast http proxy system and method	09498936 2/4/2000	6658463 12/02/2003
322.	Method and system of determining user terminal position using multiple satellites	09510921 2/22/2000	6317077 11/13/2001
323.	Method and apparatus for selectively retrieving information from a source	09512269 2/24/2000	6321268 11/20/2001

No.	Title	App. No. Filing Date	Patent No. Issue Date
	computer using a terrestrial or satellite interface		
324.	System for providing satellite bandwidth on demand employing uplink frame formatting for smoothing and mitigating jitter and dynamically changing numbers of contention and data channels	09518452 3/3/2000	6842437 1/11/2005
325.	Adapter for connecting computer to satellite antenna	09541249 4/3/2000	6215873 4/10/2001
326.	Voicing measure as an estimate of signal periodicity for a frequency domain interpolative speech codec system	09542390 4/4/2000	6691092 2/10/2004
327.	Frequency domain interpolative speech codec system	09542792 4/4/2000	6418408 7/9/2002
328.	Spectral magnitude modeling and quantization in a frequency domain interpolative speech codec system	09542793 4/4/2000	6493664 12/10/2002
329.	Method and apparatus for an adapter card providing conditional access in a communication system	09562487 5/1/2000	6307937 10/23/2001
330.	Congestion avoidance approach for a switching communication system with transmission constraints	09625289 7/25/2000	6738350 5/18/2004
331.	Method and system for providing satellite bandwidth on demand using multi-level queuing	09631269 8/2/2000	6985455 1/10/2006
332.	Fading communications channel estimation and compensation	09634018 8/8/2000	6680987 1/20/2004
333.	System method and computer program product for improved narrow band signal detection for echo cancellation	09634092 8/8/2000	6765971 7/20/2004
334.	Power saving method for multiple channels per carrier (MCPC) satellite transmission	09639457 8/15/2000	6839540 1/4/2005
335.	Synchronization apparatus and method for a return link power control for satellite systems	09642283 8/18/2000	6771615 8/3/2004
336.	System and method for restoring performance to a weathered satellite terminal	09664162 9/18/2000	6292155 9/18/2001
337.	Selective spoofer and method of	09664165	6973497

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338.	In-band transmission of tty/ttd signals for systems employing low bit-rate voice compression	09669283 9/26/2000	6961320 11/1/2005
339.	Time-offset distribution to ensure constant satellite power	09678681 10/5/2000	6721538 4/13/2004
340.	Physical layer header for packet data	09707362 11/7/2000	6859466 2/22/2005
341.	System and method of reading ahead of objects for delivery to an http proxy server	09708134 11/8/2000	6795848 9/21/2004
342.	Mac layer protocol for a satellite based packet switched services	09714788 11/16/2000	6778509 8/17/2004
343.	Available bandwidth control mechanism	09716924 11/20/2000	6947445 9/20/2005
344.	Apparatus and method for hybrid network access	09722464 11/28/2000	6519651 2/11/2003
345.	Apparatus And Method For Efficient TDMA Bandwidth Allocation For TCP/IP Satellite-Based Network	09722930 11/27/2000	6834039
346.	Method and apparatus for deriving uplink timing from asynchronous traffic across multiple transport streams	09733156 12/8/2000	6993009 1/31/2006
347.	Robust carrier identifying method and apparatus for bandwidth-on-demand (BOD) system	09735675 12/13/2000	6711710 3/23/2004
348.	Method and apparatus for acquiring a synchronization signal	09768726 1/24/2001	7042854 5/9/2006
349.	Method and apparatus for tracking a synchronization signal	09768728 1/24/2001	7012937 3/14/2006
350.	Apportioning bandwidth capacity in communication switching systems	09783849 2/15/2001	6937580 8/30/2005
351.	System and method for providing a two-way satellite system	09785755 2/16/2001	7164661 1/16/2007
352.	System and method for managing bandwidth in a two-way satellite system	09789076 2/20/2001	6987741 1/17/2006
353.	System and method for scaling a two-way satellite system	09789079 2/20/2001	7463582 12/9/2008
354.	Method and system of directing an antenna in a two-way satellite system	09789081 2/20/2001	6441782 8/27/2002

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355.	Method and system for providing efficient data transmission based upon a contention protocol	09789969 2/22/2001	7468972 12/23/2008
356.	Transceiver in a two-way satellite system	09790379 2/22/2001	6965581 11/15/2005
357.	Microwave waveguide assembly and method for making same	09825624 4/4/2001	6560850 5/13/2003
358.	High volume uplink in a broadband satellite communications syst	09825635 4/4/2001	6804492 10/12/2004
359.	Capacity management in a broadband satellite communications system	09832512 4/11/2001	6904265 6/7/2005
360.	Hydrogen getter package assembly	09837912 4/19/2001	6428612 8/6/2002
361.	Antenna aperture cover for antenna pointing and improved antenna pointing method using aperture cover	09852459 5/10/2001	6388614 5/14/2002
362.	Uplink power control system for satellite communication system employing on-board satellite processing and fade estimation	09875607 6/6/2001	7043199 5/9/2006
363.	Method and device for selective transport level spoofing based on information in transport level packet	09879020 6/12/2001	7082467 7/25/2006
364.	Linearized offset QPSK modulation utilizing a sigma-delta based frequency modulator	09883539 6/18/2001	6975687 12/13/2005
365.	Method and system for providing buffer management in a performance enhancing proxy architecture	09903755 7/12/2001	7213077 5/1/2007
366.	Method and system for improving network performance by utilizing path selection, path activation, and profiles	09903779 1/31/2006	6993584 7/12/2001
367.	Method and system for improving network performance using a performance enhancing proxy	09903832 7/12/2001	7219158 5/15/2007
368.	Method and system for providing connection handling	09905215 7/13/2001	7596802 9/29/2009
369.	Method and system for using a backbone protocol to improve network performance	09905502 7/13/2001	7006480 2/28/2006

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370.	Method and apparatus for allocating data communications resources in a satellite communications network	09918961 7/31/2001	7450914 11/11/2008
371.	Method, apparatus, and system for identifying and efficiently treating classes of traffic	09925177 8/9/2001	7027414 4/11/2006
372.	Low latency handling of transmission control protocol messages in a broadband satellite communications system	09925178 8/9/2001	6961539 11/1/2005
373.	Dynamic queue depth management in a satellite terminal for bandwidth allocations in a broadband satellite communications system	09925180 8/9/2001	6865388 3/8/2005
374.	Scheduling and queue servicing in a satellite terminal for bandwidth allocations in a broadband satellite communications system	09925181 8/9/2001	7085247 8/1/2006
375.	Method and system for performing decoding using a reduced-memory implementation	09957749 9/21/2001	6763493 7/13/2004
376.	System and method for pointing the bore-sight of a terminal antenna towards the center of a satellite station-keeping box in the geo-stationary orbit	09962369 9/25/2001	6473035 10/29/2002
377.	Post-installation monitoring method for a satellite terminal antenna	09962836 9/25/2001	6476764 11/5/2002
378.	Method and system for improvement of network performance over asymmetric links	09963225 9/26/2001	7133361 11/7/2006
379.	Feed forward sigma delta interpolator for use in a fractional-n synthesizer	09963350 9/26/2001	6941330 9/6/2005
380.	Antenna alignment system and method	09976230 10/12/2001	6580391 6/17/2003
381.	System and method for reading ahead of content	09996445 11/28/2001	
382.	Method, system and computer program product for digitally generating a function	10005926 11/8/2001	6807554 10/19/2004
383.	Method and apparatus for selectively allocating and enforcing bandwidth usage requirements on network users	10010521 12/7/2001	7562130 7/14/2009
384.	Inroute training in a two-way satellite system	10016845 12/14/2001	7656813

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386.	Method and system for adaptive equalization for receivers in a wide-band satellite communications system	10043775 1/10/2002	6985523 1/10/2006
387.	Method and apparatus for selectively retrieving information from a source computer using a terrestrial or satellite interface	10054681 11/13/2001	6931512 8/16/2005
388.	Prototype waveform magnitude quantization for a frequency domain interpolative speech codec system	10073128 2/13/2002	6996523 2/7/2006
389.	Voicing measure for a speech codec system	10073406 2/13/2002	7013269 3/14/2006
390.	Prototype waveform phase modeling for a frequency domain interpolative speech codec system	10073423 2/13/2002	6931373 8/16/2005
391.	Method and system for providing a semi-data aided frequency estimator for OQPSK	10074500 2/11/2002	7027546 4/11/2006
392.	System and method for providing contention channel organization for broadband satellite access in a communications network	10074759 2/12/2002	6980800 12/27/2005
393.	Filter loop structure for synchronization in a mobile communication terminal and a method of using the same	10106940 3/26/2002	7016444 3/21/2006
394.	Method and system for providing differentiated quality of service diversity aloha	10138135 5/2/2002	7336679 2/26/2008
395.	Method and system of directing an antenna in a two-way satellite system	10139706 5/6/2002	6501423 12/31/2002
396.	System and method for efficiently using channel unit hardware to provide multiple narrowband channels overlaid on a single wideband channel in a satellite communications network	10141109 5/8/2002	7170889 1/30/2007
397.	Method and system for centrally exchanging terminal information over a meshed network	10142594 5/9/2002	
398.	Method and system for providing two-way communication using an overlay of signals	10158278 5/30/2002	

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	over a non-linear communications channel		
399.	Mobility management-radio resource layer interface system and method for handling dark beam scenarios	10185256 6/28/2002	6996372 2/7/2006
400.	Mobility management state transition system and method for handling dark beam scenarios	10185277 6/28/2002	7058403 6/6/2006
401.	System and method for providing real-time and non-real-time services over a communications system	10245196 9/17/2002	7580424 8/25/2009
402.	Method and system for providing load sensitive throttling	10319117 12/13/2002	
403.	Method and system for communicating over a segmented virtual private network (VPN)	10352992 1/28/2003	
404.	Method and system for integrating performance enhancing functions in a virtual private network (VPN)	10353183 1/28/2003	7398552 7/8/2008
405.	Method and system for adaptively applying performance enhancing functions	10353247 1/28/2003	7389533
406.	Compensating for non-linearity in an overlaid communication system	10371425 2/21/2003	7016644 3/21/2006
407.	Method and apparatus for estimating beacon power variations	10430868 5/7/2003	7116936 10/3/2006
408.	Method and system for providing load-sensitive bandwidth allocation	10613876 7/3/2003	7336967 2/26/2008
409.	System and method for pre-fetching content in a proxy architecture	10659481 9/10/2003	7389330 6/17/2008
410.	Method and system for providing enhanced performance of web browsing	10659486 9/10/2003	
411.	Method and system for multicast in a broadband satellite system	10684914 10/14/2003	7471645 12/30/2008
412.	Fallback mode ingress/egress mechanism for satellite communication system	10705314 11/10/2003	7386310 6/10/2008
413.	System and method for routing among private addressing domains	10715178 11/17/2003	7388869 6/17/2008
414.	Network system with TCP/IP protocol spoofing	10750356 12/31/2003	7337233 2/26/2008

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416.	Stitching of video for continuous presence multipoint video conferencing	10836672 4/30/2004	
417.	Network layer tunnel apparatus having transport layer/network layer stack and network layer tunnel and method using network layer tunnel	10935984 9/8/2004	
418.	Apparatus and method for efficient TDMA bandwidth allocation for TCP/IP satellite-based Network	10940211 9/14/2004	7619968
419.	Pre-fetching secure content using proxy architecture	10963194 10/13/2004	7584500
420.	Method and system for load balancing over a set of communication channels	11085954 3/22/2005	
421.	Method and apparatus for providing open loop bandwidth allocation	11085972 3/22/2005	
422.	Method and apparatus for assessing traffic load of a communication network	11085994 3/22/2005	
423.	Method and apparatus for providing quality of service guarantees using stateful monitoring of network load	11086001 3/22/2005	7620006
424.	Method and apparatus for secure access to dedicated network resources	11087054 3/23/2005	7581098
425.	Electronic equipment housing	29034165 1/27/1995	D376350 12/10/1996
426.	Housing for electronic apparatus	29094881 10/13/1998	D418822 1/11/2000
427.	Telephone handset	29130429 10/2/2000	D440953 4/24/2001
428.	Ornamental design of an equipment stand	29135724 1/18/2001	D460054 7/9/2002