PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1
Stylesheet Version v1.2

EPAS ID: PAT7272401

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
ALCATEL LUCENT	03/31/2014
ALCATEL-LUCENT USA INC.	03/31/2014

RECEIVING PARTY DATA

Name:	LGS INNOVATIONS LLC
Street Address:	13665 DULLES TECHNOLOGY DRIVE
City:	HERNDON
State/Country:	VIRGINIA
Postal Code:	20171

PROPERTY NUMBERS Total: 36

Property Type	Number
Patent Number:	8414833
Patent Number:	7945165
Patent Number:	7847364
Patent Number:	7788566
Patent Number:	7777685
Patent Number:	7764882
Patent Number:	7746779
Patent Number:	7715861
Patent Number:	7714320
Patent Number:	7695550
Patent Number:	7667648
Patent Number:	7639668
Patent Number:	7610015
Patent Number:	7602480
Patent Number:	7515808
Patent Number:	7515780
Patent Number:	7409128
Patent Number:	7392055
Patent Number:	7375628

Property Type	Number
Patent Number:	7369396
Patent Number:	7366518
Patent Number:	7359466
Patent Number:	7359446
Patent Number:	7323033
Patent Number:	7283550
Patent Number:	7272398
Patent Number:	7215860
Patent Number:	7212695
Patent Number:	7206509
Patent Number:	7072661
Patent Number:	7009565
Patent Number:	6952172
Patent Number:	6868519
Patent Number:	6757270
Patent Number:	6748129
Application Number:	13595093

CORRESPONDENCE DATA

Fax Number: (202)861-1783

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: 2028611500
Email: mmonroe@bakerlaw.com
Correspondent Name: BAKER & HOSTETLER LLP
Address Line 1: WASHINGTON SQUARE, SUITE 1100
Address Line 2: 1050 CONNECTICUT AVENUE, N.W.
Address Line 4: WASHINGTON, D.C. 20036-5304

ATTORNEY DOCKET NUMBER:	046850.555555
NAME OF SUBMITTER:	TAYAN B. PATEL
SIGNATURE:	/Tayan B. Patel/
DATE SIGNED:	04/11/2022

Total Attachments: 40
source=Assignment-pat-32743-584#page1.tif
source=Assignment-pat-32743-584#page2.tif
source=Assignment-pat-32743-584#page3.tif
source=Assignment-pat-32743-584#page4.tif
source=Assignment-pat-32743-584#page5.tif
source=Assignment-pat-32743-584#page6.tif
source=Assignment-pat-32743-584#page7.tif
source=Assignment-pat-32743-584#page8.tif

source=Assignment-pat-32743-584#page9.tif
source=Assignment-pat-32743-584#page10.tif
source=Assignment-pat-32743-584#page11.tif
source=Assignment-pat-32743-584#page12.tif
source=Assignment-pat-32743-584#page13.tif
source=Assignment-pat-32743-584#page14.tif
source=Assignment-pat-32743-584#page15.tif
source=Assignment-pat-32743-584#page16.tif
source=Assignment-pat-32743-584#page17.tif
source=Assignment-pat-32743-584#page18.tif
source=Assignment-pat-32743-584#page19.tif
source=Assignment-pat-32743-584#page20.tif
source=Assignment-pat-32743-584#page21.tif
source=Assignment-pat-32743-584#page22.tif
source=Assignment-pat-32743-584#page23.tif
source=Assignment-pat-32743-584#page24.tif
source=Assignment-pat-32743-584#page25.tif
source=Assignment-pat-32743-584#page26.tif
source=Assignment-pat-32743-584#page27.tif
source=Assignment-pat-32743-584#page28.tif
source=Assignment-pat-32743-584#page29.tif
source=Assignment-pat-32743-584#page30.tif
source=Assignment-pat-32743-584#page31.tif
source=Assignment-pat-32743-584#page32.tif
source=Assignment-pat-32743-584#page33.tif
source=Assignment-pat-32743-584#page34.tif
source=Assignment-pat-32743-584#page35.tif
source=Assignment-pat-32743-584#page36.tif
source=Assignment-pat-32743-584#page37.tif
source=Assignment-pat-32743-584#page38.tif
source=Assignment-pat-32743-584#page39.tif
source=Assignment-pat-32743-584#page40.tif

ASSIGNMENT OF PATENTS AND PATENT APPLICATIONS

WHEREAS, Alcatel Lucent, a société anonyme organized under the laws of France, having a principal business address at 3 avenue Octave Gréard, 75007 ("**ALU France**"), Paris, France, and Alcatel-Lucent USA Inc., a Delaware corporation, having an office at 600-700 Mountain Avenue, Murray Hill, New Jersey 07974-0636, United States of America ("**ALU USA**"), and together with ALU France and ALU USA ("**Assignor**"), prior to the EFFECTIVE DATE of this Assignment are the owners of record of the Assigned Patents as follows:

ASSIGNED PATENTS

	Alcatel Lucent Ref. No.	Patent No.	CTRY	Issue Date	Expiry / Abandonment Date	Application No.	Application Date	Title	Current Owner
1.	805043-US-NP	US8320039	US	27-Nov-2012	17-May-2031	12/761538	16-Apr-2010	Cladding-Pumped Optical Amplifier Having Reduced Susceptibility To Spurious Lasing	LGS Innovations LLC
2.	805865-US-NP		US		12-Nov-2030	12/945342	12-Nov-2010	Enhanced Free-Space Optical Communication In Fog Via Field Segmentation And Adaptive Equalization	LGS Innovations LLC
3.	806802-US-NP	US8610625	US	17-Dec-2013	06-Jul-2031	12/975485	22-Dec-2010	Method And Apparatus For Transmitting And Receiving Phase-Controlled Radio Frequency Signals	LGS Innovations LLC
4.	806827-US-NP	US8440299	US	14-May-2013	26-Jun-2031	12/712373	25-Feb-2010	Composite Dielectric Material For High-Energy-Density Capacitors	LGS Innovations LLC
5.	806874-EP-EPT		EP		28-Feb-2032	12717927.3	28-Feb-2012	Optical Transmission And Reception With High Sensitivity Using M-PPM Combined With Additional Modulation Formats	Alcatel Lucent
6.	806874-JP-PCT		JP		28-Feb-2032	PCT/US2012/026922	28-Feb-2012	Optical Transmission And Reception With High Sensitivity Using M-PPM Combined With Additional Modulation Formats	Alcatel Lucent

	Alcatel Lucent Ref. No.	Patent No.	CTRY	Issue Date	Expiry / Abandonment Date	Application No.	Application Date	Title	Current Owner
7.	806874-KR-PCT		KR		28-Feb-2032	201370262 44	28-Feb-2012	Optical Transmission And Reception With High Sensitivity Using M-PPM Combined With Additional Modulation Formats	Alcatel Lucent
8.	806874-CN-PCT		CN		28-Feb-2032	201280011 817.8	28-Feb-2012	Optical Transmission And Reception With High Sensitivity Using M-PPM Combined With Additional Modulation Formats	Alcatel Lucent
9.	806874-US-NP		US		05-Mar-2031	13/ 041384	5-Mar-2011	System, Method, And Apparatus For High-Sensitivity Optical Detection	LGS Innovations LLC
10.	807123-US-NP		US		06-Jan-2031	12/ 985564	6-Jan-2011	Frequency Dependent I/ Q Imbalance Compensation	LGS Innovations LLC
11.	807729-US-NP		US		04-Jan-2031	12/ 984020	4-Jan-2011	Tracking And Alerting Populations Using Wireless, Wireline And Internet Mechanisms	LGS Innovations LLC
12.	807921-SG-PCT		SG		30-Jun-2031	201300061-7	30-Jun-2011	WDM MIMO Coherent Free-Space Optical Link	LGS Innovations LLC and Alcatel Lucent
13.	807921-US-NP		US		29-Oct-2030	12/ 915506	29-Oct-2010	WDM MIMO Coherent Free-Space Optical Link	LGS Innovations LLC and Alcatel Lucent
14.	807921-KR-PCT		KR		30-Jun-2031	201370029 48	30-Jun-2011	WDM MIMO Coherent Free-Space Optical Link	LGS Innovations LLC and Alcatel Lucent
15.	807921-CN-PCT		CN		30-Jun-2031	201180033 252.9	30-Jun-2011	WDM MIMO Coherent Free-Space Optical Link	LGS Innovations LLC and Alcatel Lucent
16.	807921-EP-EPT		EP		30-Jun-2031	11729876.0	30-Jun-2011	WDM MIMO Coherent Free-Space Optical Link	LGS Innovations LLC and Alcatel Lucent

Exhibit-D-2

	Alcatel Lucent Ref. No.	Patent No.	CTRY	Issue Date	Expiry / Abandonment Date	Application No.	Application Date	Title	Current Owner
17.	807921-JP-PCT		JP		30-Jun-2031	2013518698	30-Jun-2011	WDM MIMO Coherent Free-Space Optical Link	LGS Innovations LLC and Alcatel Lucent
18.	807921-MY-PCT		MY		30-Jun-2031	PI 2013000008	30-Jun-2011	WDM MIMO Coherent Free-Space Optical Link	LGS Innovations LLC and Alcatel Lucent
19.	808025-US-NP	US8611708	US	17-Dec-2013	13-Feb-2032	12/949091	18-Nov-2010	Optical Apparatus Having Improved Resistance To Thermal Damage	LGS Innovations LLC
20.	809324-US-NP		US		05-Mar-2031	13/041386	5-Mar-2011	System, Method, and Apparatus For High-Sensitivity Optical Detection	LGS Innovations LLC
21.	809724-US-NP		US		01-Aug-2031	13/195244	1-Aug-2011	Low-Aspect Antenna Having A Vertical Electric Dipole Field Pattern	LGS Innovations LLC
22.	810328-US-NP		US		21-Oct-2031	13/278344	21-Oct-2011	Method Of Making Graphene Layers, And Articles Made Thereby	LGS Innovations LLC
23.	810723-US-NP		US		07-Dec-2032	13/708028	7-Dec-2012	Improved Gas Dispersion Disc Assembly	Unpublished
24.	811908-US-NP		US		17-Oct-2032	13/653630	17-Oct-2012	Method And Apparatus For Graphene-Based Chemical Detection	Unpublished
25.	812407-US-NP		US		28-Sep-2032	13/630311	28-Sep-2012	Cooling Technique	Unpublished
26.	812407-WO-PCT		WO		19-Sep-2033	PCT/US2013/060550	19-Sep-2013	Cooling Technique	unpublished
27.	812407-TW-NP		TW		27-Sep-2033	102135179	27-Sep-2013	Electronic Component Cooling Apparatus And Method Statement Of Government Interest In The Invention	
28.	813931-US-NP		US		13-Sep-2033	14/026953	13-Sep-2013	Apparatus And Method To Deposit Doped Films	Unpublished
29.	814282-US-NP		US		28-Jun-2033	13/930641	28-Jun-2013	Method And Apparatus For Enabling Queries In An Information-Centric Network	Unpublished

	Alcatel Lucent Ref. No.	Patent No.	CTRY	Issue Date	Expiry / Abandonment Date	Application No.	Application Date	Title	Current Owner
30.	Bishop 59-21-18-23-26-25 (DJ)-US-DIV		US		19-Jan-2012	11/784783 Abandoned 7/13/2012	09-Apr-2007	Micro-Channel Chemical Concentrator	unavailable
31.	811311-US-DIV	US8414833	US	09-Apr-2013	25-Feb-2024	13/361207	30-Jan-2012	Micro-Channel Chemical Concentrator Apparatus	Alcatel Lucent
32.	Bishop 57-17-4-19-14-18 (DJ)-US-NP	US7220388	US	22-May-2007	14-Feb-2025	10/786199	25-Feb-2004	Micro-Channel Chemical Concentrator	Alcatel-Lucent USA Inc.
33.	Pardo 22-15-26-9 (F)-US-NP	US8018316	US	13-Sep-2011	01-Mar-2029	11/747555	11-May-2007	Electroless Plating Production Of Nickel And Cobalt Structures	Alcatel Lucent
34.	809772-US-DIV		US		11-May-2027	13/105460	11-May-2011	Electroless Plating Production Of Nickel And Cobalt Structures	Alcatel-Lucent USA Inc.
35.	Abate 2-6-12-76-1-2 (JA)-US-NP	US6411414	US	25-Jun-2002	19-Nov-2018	09/195553	19-Nov-1998	Wavelength Division Multiplexing Wireless Optical Link	Alcatel-Lucent USA Inc.
36.	Adams 2-17-7-6-12 (LE)-JP-NP	JP3533095	JP	12-Mar-2004	20-Oct-2018	297952/1998	20-Oct-1998	Sub-Carrier Multiplexing In Broadband Optical Networks	Alcatel-Lucent USA Inc.
37.	Adams 2-17-7-6-12 (LE)-DE-EPA	EP0910138	DE	15-Jan-2003	13-Oct-2018	98308347.8	13-Oct-1998	Sub-Carrier Multiplexing In Broadband Optical Networks	Alcatel-Lucent USA Inc.
38.	Adams 2-17-7-6-12 (LE)-US-NP	US6081361	US	27-Jun-2000	17-Oct-2017	08/954575	17-Oct-1997	Sub-Carrier Multiplexing In Broadband Optical Networks	Alcatel-Lucent USA Inc.
39.	Adams 2-17-7-6-12 (LE)-GB-EPA	EP0910138	GB	15-Jan-2003	13-Oct-2018	98308347.8	13-Oct-1998	Sub-Carrier Multiplexing In Broadband Optical Networks	Alcatel-Lucent USA Inc.
40.	Adams 2-17-7-6-12 (LE)-FR-EPA	EP0910138	FR	15-Jan-2003	13-Oct-2018	98308347.8	13-Oct-1998	Sub-Carrier Multiplexing In Broadband Optical Networks	Alcatel-Lucent USA Inc.
41.	Ahmed 18-1-2 (W)-US-NP	US7181668	US	20-Feb-2007	04-May-2023	10/108559	29-Mar-2002	Method And System Of Decoding An Encoded Data Block	Alcatel-Lucent USA Inc.
42.	Balachandran 10-15-33-4-5-2 (K)-BR-NP		BR		12-Apr-2002	PI9916553-8	14-May-1999	System And Method For Link And Media Access Control Layer Transaction Initiation Procedures	Alcatel-Lucent USA Inc.
43.	Balachandran 5-11-26-1-1-1 (K)-BR-NP		BR		19-Jul-2013	PI9912983-3	12-May-1999	System And Method For Medium Access Control In A Wireless Data	Alcatel-Lucent USA Inc.

Exhibit-D-4

	Alcatel Lucent Ref. No.	Patent No.	CTRY	Issue Date	Expiry / Abandonment Date	Application No.	Application Date	Title	Current Owner
								Communication System	
44.	Balachandran 5-11-26-1-1-1 (K)-GB-EPA	EP0959589	GB	05-Mar-2003	12-May-2019	99303690.4	12-May-1999	System And Method For Medium Access Control In A Wireless Data Communication System	Alcatel-Lucent USA Inc.
45.	Balachandran 10-15-33-4-5-2 (K)-KR-NP	KR342121	KR	14-Jun-2002	17-May-2019	19990017612	17-May-1999	System And Method For Link And Media Access Control Layer Transaction Initiation Procedures	Alcatel-Lucent USA Inc.
46.	Balachandran 5-11-26-1-1-1 (K)-IN-NP	IN206790	IN	11-May-2007	12-May-2019	549/MAS/99	12-May-1999	System And Method For Medium Access Control In A Wireless Data Communication System	Alcatel-Lucent USA Inc.
47.	Balachandran 5-11-26-1-1-1 (K)-US-PSP		US		05-Apr-1999	60/085752	17-May-1998	System And Method For Medium Access Control In A Wireless Data Communication System	Alcatel-Lucent USA Inc.
48.	Balachandran 10-15-33-4-5-2 (K)-SE-EPA	EP0964548	SE	27-Nov-2002	12-May-2019	99303686.2	12-May-1999	System And Method For Link And Media Access Control Layer Transaction Initiation Procedures	Alcatel-Lucent USA Inc.
49.	Balachandran 5-11-26-1-1-1 (K)-AU-NP		AU		30-Aug-2001	29077/99	17-May-1999	System And Method For Medium Access Control In A Wireless Data Communication System	Alcatel-Lucent USA Inc.
50.	Balachandran 5-11-26-1-1-1 (K)-CA-NP		CA		14-Oct-2002	2272185	17-May-1999	System And Method For Medium Access Control In A Wireless Data Communication System	Alcatel-Lucent USA Inc.
51.	Balachandran 5-11-26-1-1-1 (K)-CN-NP	ZL99106492.5	CN	12-Dec-2007	17-May-2019	99106492.5	17-May-1999	System And Method For Medium Access Control In A Wireless Data Communication System	Alcatel-Lucent USA Inc.

	Alcatel Lucent Ref. No.	Patent No.	CTRY	Issue Date	Expiry / Abandonment Date	Application No.	Application Date	Title	Current Owner
52.	Balachandran 10-15-33-4-5-2 (K)-CN-NP	ZL99106491.7	CN	30-Apr-2008	17-May-2019	99106491.7	17-May-1999	System And Method For Link And Media Access Control Layer Transaction Initiation Procedures	Alcatel-Lucent USA Inc.
53.	Balachandran 10-15-33-4-5-2 (K)-DE-EPA	EP0964548	DE	27-Nov-2002	12-May-2019	99303686.2	12-May-1999	System And Method For Link And Media Access Control Layer Transaction Initiation Procedures	Alcatel-Lucent USA Inc.
54.	Balachandran 10-15-33-4-5-2 (K)-US-NP	US6625133	US	23-Sep-2003	31-Mar-2019	09/283312	31-Mar-1999	System And Method For Link And Media Access Control Layer Transaction Initiation Procedures	Alcatel-Lucent USA Inc.
55.	Balachandran 5-11-26-1-1-1 (K)-US-NP	US6611515	US	26-Aug-2003	05-Apr-2019	09/286273	5-Apr-1999	System And Method For Medium Access Control In A Wireless Data Communication System	Alcatel-Lucent USA Inc.
56.	Balachandran 10-15-33-4-5-2 (K)-AU-NP		AU		30-Jul-2001	29065/99	17-May-1999	System And Method For Link And Media Access Control Layer Transaction Initiation Procedures	Alcatel-Lucent USA Inc.
57.	Balachandran 10-15-33-4-5-2 (K)-CA-NP	CA2271419	CA	08-Jul-2003	10-May-2008	2271419	10-May-1999	System And Method For Link And Media Access Control Layer Transaction Initiation Procedures	Alcatel-Lucent USA Inc.
58.	Balachandran 10-15-33-4-5-2 (K)-GB-EPA	EP0964548	GB	27-Nov-2002	12-May-2019	99303686.2	12-May-1999	System And Method For Link And Media Access Control Layer Transaction Initiation Procedures	Alcatel-Lucent USA Inc.
59.	Balachandran 5-11-26-1-1-1 (K)-FR-EPA	EP0959589	FR	05-Mar-2003	12-May-2019	99303690.4	12-May-1999	System And Method For Medium Access Control In A Wireless Data Communication System	Alcatel-Lucent USA Inc.
60.	Balachandran 10-15-33-4-5-2 (K)-JP-NP	JP3908409	JP	26-Jan-2007	17-May-2019	135914/1999	17-May-1999	System And Method For Link And Media Access Control Layer Transaction Initiation	Alcatel-Lucent USA Inc.

	Alcatel Lucent Ref. No.	Patent No.	CTRY	Issue Date	Expiry / Abandonment Date	Application No.	Application Date	Title	Current Owner
								Procedures	
61.	Balachandran 5-11-26-1-1-1 (K)-DE-EPA	EP0959589	DE	05-Mar-2003	12-May-2019	99303690.4	12-May-1999	System And Method For Medium Access Control In A Wireless Data Communication System	Alcatel-Lucent USA Inc.
62.	Balachandran 5-11-26-1-1-1 (K)-JP-NP	JP3490635	JP	07-Nov-2003	17-May-2019	136348/1999	17-May-1999	System And Method For Medium Access Control In A Wireless Data Communication System	Alcatel-Lucent USA Inc.
63.	Balachandran 10-15-33-4-5-2 (K)-FR-EPA	EP0964548	FR	27-Nov-2002	12-May-2019	99303686.2	12-May-1999	System And Method For Link And Media Access Control Layer Transaction Initiation Procedures	Alcatel-Lucent USA Inc.
64.	Balachandran 10-15-33-4-5-2 (K)-IN-NP	IN210247	IN	25-Sep-2007	12-May-2019	550/MAS/99	12-May-1999	System And Method For Link And Media Access Control Layer Transaction Initiation Procedures	Alcatel-Lucent USA Inc.
65.	Balachandran 5-11-26-1-1-1 (K)-KR-NP	KR342122	KR	14-Jun-2002	17-May-2019	19990017608	17-May-1999	System And Method For Medium Access Control In A Wireless Data Communication System	Alcatel-Lucent USA Inc.
66.	Balachandran 9-45-14-31-3-4 (K)-US-NP	US6975611	US	13-Dec-2005	03-Mar-2020	09/517907	3-Mar-2000	Method And Device For MAC Layer Feedback In A Packet Communication System	Alcatel-Lucent USA Inc.
67.	Balachandran 9-45-14-31-3-4 (K)-US-PSP		US		03-Mar-2000	60/123291	04-Mar-1999	A System And Method For Implicit MAC Layer Addressing For Cellular Packet Communication Systems	Alcatel-Lucent USA Inc.
68.	Balogh 3-3-16-12-12 (DA)-US-NP	US6842441	US	11-Jan-2005	19-Dec-2020	09/740124	19-Dec-2000	Data Transmission In A Wireless Communication System	Alcatel-Lucent USA Inc.
69.	Balogh 4-4-4-18 (DA)-BR-NP		BR		22-Nov-2021	PI0105397-3	22-Nov-2001	Supplemental Channel Sharing Algorithm	Alcatel-Lucent USA Inc.

	Alcatel Lucent Ref. No.	Patent No.	CTRY	Issue Date	Expiry / Abandonment Date	Application No.	Application Date	Title	Current Owner
70.	Balogh 4-4-4-18 (DA)-FR-EPA	EP1213942	FR	30-Mar-2005	11-Jun-2021	01305079.4	11-Jun-2001	Supplemental Channel Sharing Algorithm	Alcatel-Lucent USA Inc.
71.	Balogh 4-4-4-18 (DA)-IN-NP		IN		21-Feb-2002	965/MAS/2001	28-Nov-2001	Supplemental Channel Sharing Algorithm	Alcatel-Lucent USA Inc.
72.	Balogh 4-4-4-18 (DA)-JP-NP	JP3844682	JP	25-Aug-2006	30-Nov-2021	2001366200	30-Nov-2001	Supplemental Channel Sharing Algorithm	Alcatel-Lucent USA Inc.
73.	Balogh 4-4-4-18 (DA)-CA-NP		CA		24-Jan-2006	2361934	13-Nov-2001	Supplemental Channel Sharing Algorithm	Alcatel-Lucent USA Inc.
74.	Balogh 4-4-4-18 (DA)-KR-NP		KR		14-Jul-2006	2001-0073635	24-Nov-2001	Supplemental Channel Sharing Algorithm	Alcatel-Lucent USA Inc.
75.	Balogh 4-4-4-18 (DA)-AU-NP		AU		08-Feb-2002	93419/01	23-Nov-2001	Supplemental Channel Sharing Algorithm	Alcatel-Lucent USA Inc.
76.	Balogh 4-4-4-18 (DA)-GB-EPA	EP1213942	GB	30-Mar-2005	11-Jun-2021	01305079.4	11-Jun-2001	Supplemental Channel Sharing Algorithm	Alcatel-Lucent USA Inc.
77.	Balogh 4-4-4-18 (DA)-CN-NP	ZL01142548.2	CN	29-Nov-2006	30-Nov-2021	01142548.2	30-Nov-2001	Supplemental Channel Sharing Algorithm	Alcatel-Lucent USA Inc.
78.	Balogh 4-4-4-18 (DA)-DE-EPA	EP1213942	DE	30-Mar-2005	11-Jun-2021	01305079.4	11-Jun-2001	Supplemental Channel Sharing Algorithm	Alcatel-Lucent USA Inc.
79.	Balogh 4-4-4-18 (DA)-US-NP	US7366518	US	29-Apr-2008	22-Mar-2022	09/728043	1-Dec-2000	Supplemental Channel Sharing Algorithm	Alcatel-Lucent USA Inc.
80.	Basavanhally 43-22-30-26-55-5-39-7-27 (NR)-US-NP	US7832462	US	16-Nov-2010	23-Oct-2028	12/080408	31-Mar-2008	Thermal Energy Transfer Device	Alcatel-Lucent USA Inc.
81.	Bass 1-1-1-1-3 (EW)-US-NP	US7487227	US	03-Feb-2009	01-Mar-2027	10/860235	3-Jun-2004	Scripting Engine For Network Communication Software	Alcatel-Lucent USA Inc.
82.	Beacken 5-4-2-17 (MJ)-JP-NP	JP4108359	JP	11-Apr-2008	22-Apr-2022	2002119003	22-Apr-2002	Reducing Scintillation Effects For Optical Free-Space Transmission	Alcatel-Lucent USA Inc.
83.	Beacken 5-4-2-17 (MJ)-US-NP	US6868519	US	15-Mar-2005	23-Apr-2021	09/839486	23-Apr-2001	Reducing Scintillation Effects For Optical Free-Space Transmission	Alcatel-Lucent USA Inc.
84.	Beacken 5-4-2-17 (MJ)-FR-EPA	EP1253729	FR	13-Jul-2005	22-Mar-2022	02252093.6	22-Mar-2002	Reducing Scintillation Effects For Optical Free-	Alcatel-Lucent USA Inc.

	Alcatel Lucent Ref. No.	Patent No.	CTRY	Issue Date	Expiry / Abandonment Date	Application No.	Application Date	Title	Current Owner
								Space Transmission	
85.	Beacken 5-4-2-17 (MJ)-DE-EPA	EP1253729	DE	13-Jul-2005	22-Mar-2022	02252093.6	22-Mar-2002	Reducing Scintillation Effects For Optical Free-Space Transmission	Alcatel-Lucent USA Inc.
86.	Beacken 5-4-2-17 (MJ)-GB-EPA	EP1253729	GB	13-Jul-2005	22-Mar-2022	02252093.6	22-Mar-2002	Reducing Scintillation Effects For Optical Free-Space Transmission	Alcatel-Lucent USA Inc.
87.	Beacken 6 (MJ)-US-NP	US7764882	US	27-Jul-2010	04-Dec-2028	10/306935	29-Nov-2002	Optical Packet Tray Router	Alcatel-Lucent USA Inc.
88.	Beacken 7 (MJ)-US-NP	US7206509	US	17-Apr-2007	29-Jun-2024	10/306934	29-Nov-2002	Method And Apparatus For Temporally Shifting One Or More Packets Using Wavelength Selective Delays	Alcatel-Lucent USA Inc.
89.	Beacken 9-4 (MJ)-US-NP	US8086103	US	27-Dec-2011	29-Feb-2028	10/835086	29-Apr-2004	Methods And Apparatus For Communicating Dynamic Optical Wavebands (DOWBs)	Alcatel Lucent
90.	Berlinsky 1 (AM)-FR-EPA	EP0851695	FR	21-Aug-2013	11-Dec-2017	97310009.2	11-Dec-1997	Remote Wireless Communication Device	Alcatel-Lucent USA Inc.
91.	Berlinsky 1 (AM)-DE-EPA	EP0851695	DE	21-Aug-2013	11-Dec-2017	97310009.2	11-Dec-1997	Remote Wireless Communication Device	Alcatel-Lucent USA Inc.
92.	Berlinsky 1 (AM)-US-NP	US6633743	US	14-Oct-2003	24-Dec-2016	08/777986	24-Dec-1996	Remote Wireless Communication Device	Alcatel-Lucent USA Inc.
93.	Berlinsky 1 (AM)-GB-EPA	EP0851695	GB	21-Aug-2013	11-Dec-2017	97310009.2	11-Dec-1997	Remote Wireless Communication Device	Alcatel-Lucent USA Inc.
94.	Berlinsky 1 (AM)-CA-NP		CA		26-Sep-2002	2221855	20-Nov-1997	Remote Wireless Communication Device	Alcatel-Lucent USA Inc.
95.	Berlinsky 1 (AM)-JP-NP	JP3321581	JP	28-Jun-2002	24-Dec-2017	09354393	24-Dec-1997	Remote Wireless Communication Device	Alcatel-Lucent USA Inc.
96.	Berlinsky 1 (AM)-EP-EPA	EP0851695	EP	21-Aug-2013	11-Dec-2017	97310009.2	11-Dec-1997	Remote Wireless Communication Device	Alcatel-Lucent USA Inc.
97.	Berlinsky 4-2-1-2 (AM)-FR-EPT	EP1982207	FR	30-Nov-2011	04-Oct-2026	06825403.6	4-Oct-2006	Internet Based Assisted Global Positioning System	Alcatel-Lucent USA Inc.

	Alcatel Lucent Ref. No.	Patent No.	CTRY	Issue Date	Expiry / Abandonment Date	Application No.	Application Date	Title	Current Owner
98.	Berlinsky 4-2-1-2 (AM)-KR-PCT	KR101296017	KR	06-Aug-2013	04-Oct-2026	20087019479	4-Oct-2006	Internet Based Assisted Global Positioning System	Alcatel-Lucent USA Inc.
99.	Berlinsky 4-2-1-2 (AM)-US-NP		US		02-Feb-2009	11/350511 Abandoned 5/27/2009	09-Feb-2006	Internet Based Assisted Global Positioning System	Alcatel-Lucent USA Inc.
100.	Berlinsky 4-2-1-2 (AM)-DE-EPT	EP1982207	DE	30-Nov-2011	04-Oct-2026	06825403.6	4-Oct-2006	Internet Based Assisted Global Positioning System	Alcatel-Lucent USA Inc.
101.	Berlinsky 4-2-1-2 (AM)-CN-PCT	ZL80052465.5	CN	21-Sep-2011	04-Oct-2026	200680052465.5	4-Oct-2006	Internet Based Assisted Global Positioning System	Alcatel-Lucent USA Inc.
102.	Berlinsky 4-2-1-2 (AM)-IN-PCT		IN		04-Oct-2026	4040/CHENP/2008	4-Oct-2006	Internet Based Assisted Global Positioning System	Alcatel-Lucent USA Inc.
103.	Berlinsky 4-2-1-2 (AM)-GB-EPT	EP1982207	GB	30-Nov-2011	04-Oct-2026	06825403.6	4-Oct-2006	Internet Based Assisted Global Positioning System	Alcatel-Lucent USA Inc.
104.	Berlinsky 4-2-1-2 (AM)-JP-PCT	JP5356037	JP	06-Sep-2013	04-Oct-2026	2008554223	4-Oct-2006	Internet Based Assisted Global Positioning System	Alcatel-Lucent USA Inc.
105.	Bernasconi 11-19 (PA)-US-NP	US8073333	US	06-Dec-2011	26-Jun-2030	11/941191	16-Nov-2007	Multiplex Delay Unit	Alcatel-Lucent
106.	Bernasconi 12-20 (PA)-US-NP	US7945165	US	17-May-2011	26-Nov-2029	11/941201	16-Nov-2007	Optical Signal Synchronizer	Alcatel-Lucent USA Inc.
107.	Bhardwaj 1-3 (A)-US-NP	US6952172	US	04-Oct-2005	19-Mar-2024	10/804321	19-Mar-2004	All-Optical Linear Feedback Shift Register	Alcatel-Lucent USA Inc.
108.	Bi 24-1-15-3-23 (Q)-US-NP	US7596089	US	29-Sep-2009	18-Aug-2026	10/160125	4-Jun-2002	Scheduler Method And Apparatus For Communication Systems	Alcatel-Lucent USA Inc.
109.	Bi 27-2-17-5-27 (Q)-US-CIP	US7746779	US	29-Jun-2010	08-Jan-2026	10/300891	21-Nov-2002	Method and Apparatus for Scheduling Users to Allocate Data Transmissions in Communication Systems	Alcatel-Lucent USA Inc.
110.	Bi 24-1-15-3-23 (Q)-FR-EPA	EP1370035	FR	20-Jul-2005	22-May-2023	03253194.9	22-May-2003	Scheduler Method And Apparatus For Communication Systems	Alcatel-Lucent USA Inc.
111.	Bi 24-1-15-3-23 (Q)-KR-NP	KR101008190	KR	07-Jan-2011	31-May-2023	20030035074	31-May-2003	Scheduler Method And Apparatus For Communication Systems	Alcatel-Lucent USA Inc.
112.	Bi 24-1-15-3-23 (Q)-JP-NP	JP4313093	JP	22-May-2009	02-Jun-2023	2003157402	2-Jun-2003	Scheduler Method And Apparatus For Communication Systems	Alcatel-Lucent USA Inc.

	Alcatel Lucent Ref. No.	Patent No.	CTRY	Issue Date	Expiry / Abandonment Date	Application No.	Application Date	Title	Current Owner
113.	Bi 24-1-15-3-23 (Q)-DE-EPA	EP1370035	DE	20-Jul-2005	22-May-2023	03253194.9	22-May-2003	Scheduler Method And Apparatus For Communication Systems	Alcatel-Lucent USA Inc.
114.	Bi 24-1-15-3-23 (Q)-GB-EPA	EP1370035	GB	20-Jul-2005	22-May-2023	03253194.9	22-May-2003	Scheduler Method And Apparatus For Communication Systems	Alcatel-Lucent USA Inc.
115.	Bi 25-4-25-3-4 (Q)-US-NP	US7558196	US	07-Jul-2009	23-Apr-2027	10/117102	8-Apr-2002	Method And Apparatus For System Resource Management In A Communications System	Alcatel-Lucent USA Inc.
116.	Bi 41-21-31-17 (Q)-US-NP	US7587206	US	08-Sep-2009	24-Sep-2025	11/213322	26-Aug-2005	Providing Overload Control In Relatively High-Speed Wireless Data Networks	Alcatel-Lucent USA Inc.
117.	Bi 45-35-21 (Q)-US-NP	US7542448	US	02-Jun-2009	16-Jan-2027	11/241822	30-Sep-2005	Providing Handoff In A Spread Spectrum Wireless Communications System For High Rate Packet Data	Alcatel-Lucent USA Inc.
118.	Bi 46-4-3-36-22 (Q)-US-NP	US7636582	US	22-Dec-2009	22-Oct-2028	11/241897	30-Sep-2005	Providing Power Control In A Reverse Link Of A Wireless Spread-Spectrum Data Network For Bursty Traffic	Alcatel-Lucent USA Inc.
119.	Bolle 27-23 (CA)-US-NP	US7645952	US	12-Jan-2010	11-Mar-2027	11/518693	11-Sep-2006	Mechanical Switch With Melting Bridge	Alcatel-Lucent USA Inc.
120.	Braun 1-18-15 (LM)-US-PSP		US		01-Feb-2001	60/251748	06-Dec-2000	Variable Optical Delay Lines And Methods For Making Same	Alcatel-Lucent USA Inc.
121.	Braun 1-18-15 (LM)-US-NP	US6934431	US	23-Aug-2005	01-Feb-2021	09/773844	1-Feb-2001	Variable Optical Delay Lines And Methods For Making Same	Alcatel-Lucent USA Inc.
122.	Braun 2-16-2 (LM)-US-NP	US6748129	US	08-Jun-2004	22-Feb-2022	10/081350	22-Feb-2002	Method And Apparatus For Monitoring Optical Power Level In Waveguiding Structures	Alcatel-Lucent USA Inc.
123.	Chandrashekhar 2-1-1-3-1-1-6-1-1 (U)-US-NP	US8256002	US	28-Aug-2012	26-May-2029	10/348742	21-Jan-2003	Tool, Method and Apparatus for Assessing Network Security	Alcatel Lucent
124.	Chandrashekhar 2-1-1-3-1-1-6-1-1 (U)-US-PSP		US		21-Jan-2003	60/349947 Expired 9/1/2003	18-Jan-2002	Network Element Security Method	

Exhibit-D-11

	Alcatel Lucent Ref. No.	Patent No.	CTRY	Issue Date	Expiry / Abandonment Date	Application No.	Application Date	Title	Current Owner
125.	Chandrashekhar 2-1-1-3-1-1-6-1-1 (U)-US-CNT		US		21-Jan-2023	13/595093	27-Aug-2012	Tool, Method and Apparatus for Assessing Network Security	Alcatel Lucent
126.	Chang 1-18 (KW)-US-NP	US7515780	US	07-Apr-2009	25-Nov-2026	11/586093	25-Oct-2006	System And Method For Fabricating An Optical Isolator	Alcatel-Lucent USA Inc.
127.	Chen 8-6-5-8-4 (G)-KR-PCT		KR		01-Jul-2028	20097027491	1-Jul-2008	Flexible Photo-Detectors	Alcatel-Lucent USA Inc.
128.	Chen 8-6-5-8-4 (G)-JP-PCT		JP		01-Jul-2028	2010514857	1-Jul-2008	Flexible Photo-Detectors	Alcatel-Lucent USA Inc.
129.	Chen 8-6-5-8-4 (G)-US-NP	US7847364	US	07-Dec-2010	20-Mar-2029	11/824667	2-Jul-2007	Flexible Photo-Detectors	Alcatel-Lucent USA Inc.
130.	Chen 8-6-5-8-4 (G)-EP-EPT		EP		01-Jul-2028	08826051.8	1-Jul-2008	Flexible Photo-Detectors	Alcatel-Lucent USA Inc.
131.	Chen 8-6-5-8-4 (G)-CN-PCT	ZL200880023154.5	CN	27-Jun-2012	01-Jul-2028	200880023154.5	1-Jul-2008	Flexible Photo-Detectors	Alcatel-Lucent USA Inc.
132.	Chen 8-6-5-8-4 (G)-IN-PCT		IN		01-Jul-2028	8527/DELNP/2009	1-Jul-2008	Flexible Photo-Detectors	Alcatel-Lucent USA Inc.
133.	Cheng 18-13-16 (TS)-US-NP	US6925057	US	02-Aug-2005	06-Dec-2020	09/731213	6-Dec-2000	Method Of Scheduling A Quality Of Service Level In A High Data Rate System	Alcatel-Lucent USA Inc.
134.	Cheng 18-13-16 (TS)-EP-EPA		EP		03-Dec-2002	01305270.9	18-Jun-2001	Method Of Scheduling A Quality Of Service Level In A High Data Rate System	Alcatel-Lucent USA Inc.
135.	Cheng 19-14-17 (TS)-FR-EPD[2]	EP1638235	FR	19-Nov-2008	07-Dec-2020	05027280.6	14-Dec-2005	Dynamic Reverse Link Rate Limit Algorithm For High Data Rate System	Alcatel-Lucent USA Inc.
136.	Cheng 19-14-17 (TS)-GB-EPA	EP1213869	GB	07-Jun-2006	18-Jun-2021	01305280.8	18-Jun-2001	Dynamic Reverse Link Rate Limit Algorithm For High Data Rate System	Alcatel-Lucent USA Inc.
137.	Cheng 19-14-17 (TS)-GB-EPD[2]	EP1638235	GB	19-Nov-2008	07-Dec-2020	05027280.6	14-Dec-2005	Dynamic Reverse Link Rate Limit Algorithm For High Data Rate System	Alcatel-Lucent USA Inc.

	Alcatel Lucent Ref. No.	Patent No.	CTRY	Issue Date	Expiry / Abandonment Date	Application No.	Application Date	Title	Current Owner
138.	Cheng 19-14-17 (TS)-IT-EPD[2]	EP1638235	IT	19-Nov-2008	07-Dec-2020	05027280.6	14-Dec-2005	Dynamic Reverse Link Rate Limit Algorithm For High Data Rate System	Alcatel-Lucent USA Inc.
139.	Cheng 19-14-17 (TS)-US-NP	US6999425	US	14-Feb-2006	18-Jan-2023	09/732454	7-Dec-2000	Dynamic Reverse Link Rate Limit Algorithm For High Data Rate System	Alcatel-Lucent USA Inc.
140.	Cheng 19-14-17 (TS)-FR-EPA	EP1213869	FR	07-Jun-2006	18-Jun-2021	01305280.8	18-Jun-2001	Dynamic Reverse Link Rate Limit Algorithm For High Data Rate System	Alcatel-Lucent USA Inc.
141.	Cheng 19-14-17 (TS)-DE-EPD[2]	EP1638235	DE	19-Nov-2008	07-Dec-2020	05027280.6	14-Dec-2005	Dynamic Reverse Link Rate Limit Algorithm For High Data Rate System	Alcatel-Lucent USA Inc.
142.	Cheng 19-14-17 (TS)-DE-EPA	EP1213869	DE	07-Jun-2006	18-Jun-2021	01305280.8	18-Jun-2001	Dynamic Reverse Link Rate Limit Algorithm For High Data Rate System	Alcatel-Lucent USA Inc.
143.	Cupo 22-4-7-10 (RL)-US-NP	US6661771	US	09-Dec-2003	17-Sep-2019	09/398501	17-Sep-1999	Method And Apparatus For Interleaver Synchronization In An Orthogonal Frequency Division Multiplexing (OFDM) Communication System	Alcatel-Lucent USA Inc.
144.	Cupo 24-5-9-21 (RL)-US-DIV	US7505396	US	17-Mar-2009	02-Apr-2022	10/661300	12-Sep-2003	Method And Apparatus For Establishing Interleaver Synchronization In An Orthogonal Frequency Division Multiplexing (OFDM) Communication System	Alcatel-Lucent USA Inc.
145.	Cupo 23-12-1-5-33-2 (RL)-US-NP	US7359446	US	15-Apr-2008	28-Jun-2025	10/639524	13-Aug-2003	Methods And Devices For Decoding Signals Containing Noise And Distortion	Alcatel-Lucent USA Inc.
146.	de Barros 1-2-4 (MR)-JP-NP	JP3448182	JP	04-Jul-2003	11-Apr-2017	9093375	11-Apr-1997	Optical Fiber Transmission System With A Passive Optical Router	Alcatel-Lucent USA Inc.
147.	de Barros 1-2-4 (MR)-US-NP	US5774606	US	30-Jun-1998	17-May-2016	08/649091	17-May-1996	Optical Fiber Transmission System With A Passive Optical	Alcatel-Lucent USA Inc.

	Alcatel Lucent Ref. No.	Patent No.	CTRY	Issue Date	Expiry / Abandonment Date	Application No.	Application Date	Title	Current Owner
								Router	
148.	de Barros 2-3-1-5-8-18 (MR)-FR-EPA	EP0814629	FR	08-Sep-2010	09-Jun-2017	97303988.6	9-Jun-1997	Optical Fiber Cross Connect With Active Routing For Wavelength Multiplexing And Demultiplexing	Alcatel-Lucent USA Inc.
149.	de Barros 2-3-1-5-8-18 (MR)-GB-EPA	EP0814629	GB	08-Sep-2010	09-Jun-2017	97303988.6	9-Jun-1997	Optical Fiber Cross Connect With Active Routing For Wavelength Multiplexing And Demultiplexing	Alcatel-Lucent USA Inc.
150.	de Barros 2-3-1-5-8-18 (MR)-US-NP	US5721796	US	24-Feb-1998	21-Jun-2016	08/668196	21-Jun-1996	Optical Fiber Cross Connect With Active Routing For Wavelength Multiplexing And Demultiplexing	Alcatel-Lucent USA Inc.
151.	de Barros 2-3-1-5-8-18 (MR)-JP-DIV	JP3798339	JP	28-Apr-2006	10-Jun-2017	2002141618	10-Jun-1997	Optical Fiber Cross Connect With Active Routing For Wavelength Multiplexing And Demultiplexing	Alcatel-Lucent USA Inc.
152.	de Barros 2-3-1-5-8-18 (MR)-DE-EPA	EP0814629	DE	08-Sep-2010	09-Jun-2017	97303988.6	9-Jun-1997	Optical Fiber Cross Connect With Active Routing For Wavelength Multiplexing And Demultiplexing	Alcatel-Lucent USA Inc.
153.	de Barros 2-3-1-5-8-18 (MR)-JP-NP	JP3655432	JP	11-Mar-2005	10-Jun-2017	9152066	10-Jun-1997	Optical Fiber Cross Connect With Active Routing For Wavelength Multiplexing And Demultiplexing	Alcatel-Lucent USA Inc.
154.	DiGiovanni 48-12 (DJ)-EP-EPA		EP		08-Oct-2003	00303399.0	20-Apr-2000	Optical Waveguide Lasers And Amplifiers With Pump Power Monitors	Alcatel-Lucent USA Inc.
155.	DiGiovanni 48-12 (DJ)-US-NP	US6389186	US	14-May-2002	30-Apr-2019	09/303383	30-Apr-1999	Optical Waveguide Lasers And Amplifiers With Pump Power Monitors	Alcatel-Lucent USA Inc.
156.	DiGiovanni 48-12 (DJ)-JP-NP	JP3808689	JP	26-May-2006	28-Apr-2020	2000130598	28-Apr-2000	Optical Waveguide Lasers And Amplifiers With Pump Power Monitors	Alcatel-Lucent USA Inc.

	Alcatel Lucent Ref. No.	Patent No.	CTRY	Issue Date	Expiry / Abandonment Date	Application No.	Application Date	Title	Current Owner
157.	Doerr 144-10 (CR)-US-DIV	US8216637	US	10-Jul-2012	23-May-2029	12/371889	16-Feb-2009	Thermally Stabilized Waveguides	Alcatel Lucent
158.	Doerr 124-5 (CR)-US-NP	US7515808	US	07-Apr-2009	01-Jun-2027	11/757098	1-Jun-2007	Thermally Stabilized Waveguides	Alcatel-Lucent USA Inc.
159.	Dominique 31-14-4-17 (F)-KR-PCT		KR		28-Mar-2028	20087007519	28-Mar-2008	Receiver Techniques For Wireless Communication	Alcatel-Lucent USA Inc.
160.	Dominique 31-14-4-17 (F)-CN-PCT	ZL200680035278.6	CN	23-May-2012	21-Sep-2026	200680035278.6	21-Sep-2006	Receiver Techniques For Wireless Communication	Alcatel-Lucent USA Inc.
161.	Dominique 31-14-4-17 (F)-US-NP	US7894514	US	22-Feb-2011	04-Jan-2029	11/238847	29-Sep-2005	Receiver Techniques For Wireless Communication	Alcatel-Lucent USA Inc.
162.	Dominique 31-14-4-17 (F)-EP-EPT		EP		21-Sep-2026	06815106.7	21-Sep-2006	Receiver Techniques For Wireless Communication	Alcatel-Lucent USA Inc.
163.	Dominique 31-14-4-17 (F)-JP-PCT	JP5106401	JP	12-Oct-2012	21-Sep-2026	2008533453	21-Sep-2006	Receiver Techniques For Wireless Communication	Alcatel-Lucent USA Inc.
164.	Duncan 1-1-3-9-11 (V)-US-NP	US7283550	US	16-Oct-2007	28-Apr-2025	10/185025	28-Jun-2002	Voice And Data Call Admission Policies For A Wireless Communication System	Alcatel-Lucent USA Inc.
165.	Engelberth 13-2-15 (JW)-US-NP	US7215860	US	08-May-2007	05-May-2025	11/120212	2-May-2005	Optical Transmission Fiber With A Glass Guiding Cladding	Alcatel-Lucent USA Inc.
166.	Florkey 13-7-3 (C)-JP-NP	JP4549823	JP	16-Jul-2010	19-Nov-2024	2004335327	19-Nov-2004	Providing To Sender Of Message An Identifier Of Service Provider Associated With Recipient Of The Message	Alcatel-Lucent USA Inc.
167.	Florkey 13-7-3 (C)-US-NP	US7272398	US	18-Sep-2007	15-Dec-2024	10/719869	21-Nov-2003	Providing To Sender Of Message An Identifier Of Service Provider Associated With Recipient Of The Message	Alcatel-Lucent USA Inc.
168.	Florkey 13-7-3 (C)-KR-NP	KR101127866	KR	12-Mar-2012	12-Nov-2024	20040092301	12-Nov-2004	Providing To Sender Of Message An Identifier Of Service Provider Associated With Recipient Of The Message	Alcatel-Lucent USA Inc.

	Alcatel Lucent Ref. No.	Patent No.	CTRY	Issue Date	Expiry / Abandonment Date	Application No.	Application Date	Title	Current Owner
169.	Florkey 13-7-3 (C)-CN-NP	ZL200410094944.6	CN	12-May-2010	19-Nov-2024	200410094944.6	19-Nov-2004	Providing To Sender Of Message An Identifier Of Service Provider Associated With Recipient Of The Message	Alcatel-Lucent USA Inc.
170.	Florkey 13-7-3 (C)-DE-EPA	EP1533960	DE	18-Oct-2006	05-Nov-2024	04256863.4	5-Nov-2004	Providing To Sender Of Message An Identifier Of Service Provider Associated With Recipient Of The Message	Alcatel-Lucent USA Inc.
171.	Florkey 13-7-3 (C)-FR-EPA	EP1533960	FR	18-Oct-2006	05-Nov-2024	04256863.4	5-Nov-2004	Providing To Sender Of Message An Identifier Of Service Provider Associated With Recipient Of The Message	Alcatel-Lucent USA Inc.
172.	Florkey 34-32-13 (C)-US-DIV	US8005494	US	23-Aug-2011	16-Jan-2027	11/796641	27-Apr-2007	Providing To Sender Of Message An Identifier Of Service Provider Associated With Recipient Of The Message	Alcatel-Lucent USA Inc.
173.	Florkey 13-7-3 (C)-GB-EPA	EP1533960	GB	18-Oct-2006	05-Nov-2024	04256863.4	5-Nov-2004	Providing To Sender Of Message An Identifier Of Service Provider Associated With Recipient Of The Message	Alcatel-Lucent USA Inc.
174.	Florkey 13-7-3 (C)-IN-NP		IN		13-Nov-2008	1227/CHE/2004	19-Nov-2004	Providing To Sender Of Message An Identifier Of Service Provider Associated With Recipient Of The Message	Alcatel-Lucent USA Inc.
175.	Florkey 29-27-9 (C)-US-NP	US8125990	US	28-Feb-2012	29-Dec-2030	11/372591	10-Mar-2006	Silent Probe For Network Delay Reporting	Alcatel Lucent
176.	Florkey 30-28-10 (C)-US-NP	US7542768	US	02-Jun-2009	16-Feb-2027	11/277248	23-Mar-2006	Dynamic Ring Start Delay Based On Multiple Factors	Alcatel-Lucent USA Inc.
177.	Flynn 1-1 (LA)-US-NP	US8046834	US	25-Oct-2011	22-Feb-2029	11/093303	30-Mar-2005	Method Of Polymorphic Detection	Alcatel Lucent
178.	Frahm 11-13-24 (RE)-CN-PCT	ZL20005514.9	CN	18-May-2011	19-Feb-2028	200880005514.9	19-Feb-2008	Wide-Bandgap Semiconductor Devices	Alcatel-Lucent USA Inc.
179.	Frahm 11-13-24 (RE)-JP-PCT		JP		19-Feb-2028	2009550894	19-Feb-2008	Wide-Bandgap Semiconductor Devices	Alcatel-Lucent USA Inc.

	Alcatel Lucent Ref. No.	Patent No.	CTRY	Issue Date	Expiry / Abandonment Date	Application No.	Application Date	Title	Current Owner
180.	Frahm 11-13-24 (RE)-EP-EPT		EP		19-Feb-2028	08725743.2	19-Feb-2008	Wide-Bandgap Semiconductor Devices	Alcatel-Lucent USA Inc.
181.	Frahm 11-13-24 (RE)-IN-PCT		IN		19-Feb-2028	5200/DELNP/2009	19-Feb-2008	Wide-Bandgap Semiconductor Devices	Alcatel-Lucent USA Inc.
182.	Frahm 11-13-24 (RE)-US-NP	US7692198	US	06-Apr-2010	27-Nov-2027	11/676329	19-Feb-2007	Wide-Bandgap Semiconductor Devices	Alcatel-Lucent USA Inc.
183.	Frahm 11-13-24 (RE)-KR-PCT	KR101293333	KR	30-Jul-2013	19-Feb-2028	20097017227	19-Feb-2008	Wide-Bandgap Semiconductor Devices	Alcatel-Lucent USA Inc.
184.	Frahm 11-13-24 (RE)-US-DIV		US		19-Feb-2027	12/635436	10-Dec-2009	Wide-Bandgap Semiconductor Devices	Alcatel-Lucent USA Inc.
185.	Gandhi 10-16-15-24 (AD)-US-NP	US7565152	US	21-Jul-2009	18-Mar-2026	10/632065	31-Jul-2003	A Method Of Controlling Overload Over The Reverse Link	Alcatel-Lucent USA Inc.
186.	Gandhi 3-1-2-2-7 (AD)-BR-NP		BR		10-Oct-2002	PI0005605-7	29-Sep-2000	Method And Apparatus For Controlling Reverse Link Interference Rise And Power Control Instability In A Wireless System	Alcatel-Lucent USA Inc.
187.	Gandhi 3-1-2-2-7 (AD)-AU-NP		AU		19-Jul-2002	62465/00	04-Oct-2000	Method And Apparatus For Controlling Reverse Link Interference Rise And Power Control Instability In A Wireless System	Alcatel-Lucent USA Inc.
188.	Gandhi 3-1-2-2-7 (AD)-JP-NP	JP4737810	JP	13-May-2011	06-Oct-2020	2000307043	6-Oct-2000	Method And Apparatus For Controlling Reverse Link Interference Rise And Power Control Instability In A Wireless System	Alcatel-Lucent USA Inc.
189.	Gandhi 3-1-2-2-7 (AD)-CA-NP		CA		17-Oct-2002	2322236	03-Oct-2000	Method And Apparatus For Controlling Reverse Link Interference Rise And Power Control Instability In A Wireless System	Alcatel-Lucent USA Inc.
190.	Gandhi 3-1-2-2-7 (AD)-US-NP	US6968201	US	22-Nov-2005	06-Oct-2019	09/413036	6-Oct-1999	Method And Apparatus For Controlling Reverse Link Interference Rise And Power Control	Alcatel-Lucent USA Inc.

	Alcatel Lucent Ref. No.	Patent No.	CTRY	Issue Date	Expiry / Abandonment Date	Application No.	Application Date	Title	Current Owner
								Instability In A Wireless System	
191.	Gandhi 3-1-2-2-7 (AD)-CN-NP		CN		03-Dec-2002	00137035.9	08-Oct-2000	Method And Apparatus For Controlling Reverse Link Interference Rise And Power Control Instability In A Wireless System	Alcatel-Lucent USA Inc.
192.	Gandhi 3-1-2-2-7 (AD)-IN-NP		IN		11-Oct-2002	839/MAS/2000	04-Oct-2000	Method And Apparatus For Controlling Reverse Link Interference Rise And Power Control Instability In A Wireless System	Alcatel-Lucent USA Inc.
193.	Gandhi 3-1-2-2-7 (AD)-KR-NP	KR747912	KR	02-Aug-2007	05-Oct-2020	20000058376	5-Oct-2000	Method And Apparatus For Controlling Reverse Link Interference Rise And Power Control Instability In A Wireless System	Alcatel-Lucent USA Inc.
194.	Gandhi 3-1-2-2-7 (AD)-DE-EPA	EP1091503	DE	05-May-2010	03-Oct-2020	00308692.3	3-Oct-2000	Method And Apparatus For Controlling Reverse Link Interference Rise And Power Control Instability In A Wireless System	Alcatel-Lucent USA Inc.
195.	Gandhi 3-1-2-2-7 (AD)-FR-EPA	EP1091503	FR	05-May-2010	03-Oct-2020	00308692.3	3-Oct-2000	Method And Apparatus For Controlling Reverse Link Interference Rise And Power Control Instability In A Wireless System	Alcatel-Lucent USA Inc.
196.	Gandhi 3-1-2-2-7 (AD)-GB-EPA	EP1091503	GB	05-May-2010	03-Oct-2020	00308692.3	3-Oct-2000	Method And Apparatus For Controlling Reverse Link Interference Rise And Power Control Instability In A Wireless System	Alcatel-Lucent USA Inc.
197.	Gandhi 4-9-2-3-4-9 (AD)-AU-NP		AU		19-Jul-2002	46220/01	23-May-2001	Method And System For Controlling Access Of A Subscriber Station To A Wireless System	Alcatel-Lucent USA Inc.

	Alcatel Lucent Ref. No.	Patent No.	CTRY	Issue Date	Expiry / Abandonment Date	Application No.	Application Date	Title	Current Owner
198.	Gandhi 4-9-2-3-4-9 (AD)-IN-NP		IN		22-Apr-2003	430/ MAS/ 2001	28-May-2001	Method And System For Controlling Access Of A Subscriber Station To A Wireless System	Alcatel-Lucent USA Inc.
199.	Gandhi 4-9-2-3-4-9 (AD)-US-NP	US6944449	US	13-Sep-2005	12-Sep-2022	09/ 580648	30-May-2000	Method And System For Controlling Access Of A Subscriber Station To A Wireless System	Alcatel-Lucent USA Inc.
200.	Gandhi 4-9-2-3-4-9 (AD)-CA-NP		CA		10-Mar-2004	2342730	02-Apr-2001	Method And System For Controlling Access Of A Subscriber Station To A Wireless System	Alcatel-Lucent USA Inc.
201.	Gandhi 4-9-2-3-4-9 (AD)-CN-NP		CN		28-Apr-2003	01120820.1	29-May-2001	Method And System For Controlling Access Of A Subscriber Station To A Wireless System	Alcatel-Lucent USA Inc.
202.	Gandhi 4-9-2-3-4-9 (AD)-JP-NP		JP		02-Apr-2007	2001-160189	29-May-2001	Method And System For Controlling Access Of A Subscriber Station To A Wireless System	Alcatel-Lucent USA Inc.
203.	Gandhi 4-9-2-3-4-9 (AD)-KR-NP		KR		05-Apr-2007	2001-0029954	30-May-2001	Method And System For Controlling Access Of A Subscriber Station To A Wireless System	Alcatel-Lucent USA Inc.
204.	Gandhi 4-9-2-3-4-9 (AD)-BR-NP		BR		14-Apr-2003	PI0102054-4	24-May-2001	Method And System For Controlling Access Of A Subscriber Station To A Wireless System	Alcatel-Lucent USA Inc.
205.	Gandhi 4-9-2-3-4-9 (AD)-EP-EPA		EP		27-Nov-2006	01304490.4	22-May-2001	Method And System For Controlling Access Of A Subscriber Station To A Wireless System	Alcatel-Lucent USA Inc.
206.	Gandhi 6-3-4-8-10 (AD)-EP-EPA		EP		14-Sep-2005	02251235.4	22-Feb-2002	Reverse-Link Power Control Overshoot Considering Mobile Station Transmission Limitations	Alcatel-Lucent USA Inc.
207.	Gandhi 6-3-4-8-10 (AD)-JP-NP	JP4037660	JP	09-Nov-2007	04-Mar-2022	2002057859	4-Mar-2002	Reverse-Link Power Control Overshoot Considering Mobile Station Transmission Limitations	Alcatel-Lucent USA Inc.

Exhibit-D-19

	Alcatel Lucent Ref. No.	Patent No.	CTRY	Issue Date	Expiry / Abandonment Date	Application No.	Application Date	Title	Current Owner
208.	Gandhi 6-3-4-8-10 (AD)-EP-EPD[2]		EP		05-Mar-2021	05012413.0	9-Jun-2005	Reverse-Link Power Control Overshoot Considering Mobile Station Transmission Limitations	Alcatel-Lucent USA Inc.
209.	Gandhi 6-3-4-8-10 (AD)-US-NP	US6829468	US	07-Dec-2004	05-Mar-2021	09/797708	5-Mar-2001	Reverse-Link Power Control Overshoot Considering Mobile Station Transmission Limitations	Alcatel-Lucent USA Inc.
210.	Gandhi 7-16-10-14-33 (AD)-EP-EPA		EP		26-Feb-2008	01302774.3	26-Mar-2001	Method Of Determining Transmission Rate From A Mobile Station To A Base Station In A Wireless Communication System	Alcatel-Lucent USA Inc.
211.	Gandhi 7-16-10-14-33 (AD)-US-NP	US7142867	US	28-Nov-2006	19-Jan-2022	09/663265	15-Sep-2000	Method Of Determining Transmission Rate From A Mobile Station To A Base Station In A Wireless Communication System	Alcatel-Lucent USA Inc.
212.	Gandhi 7-16-10-14-33 (AD)-JP-NP		JP		26-Feb-2008	2001-277361	13-Sep-2001	Method Of Determining Transmission Rate From A Mobile Station To A Base Station In A Wireless Communication System	Alcatel-Lucent USA Inc.
213.	Gandhi 8-17-1-6-11-15-34 (AD)-FR-EPA	EP1195920	FR	14-Apr-2004	28-Aug-2021	01307291.3	28-Aug-2001	Forward Rate Determination Of High Data Rate Channels In CDMA Air Interface	Alcatel-Lucent USA Inc.
214.	Gandhi 8-17-1-6-11-15-34 (AD)-JP-NP	JP4798914	JP	12-Aug-2011	28-Sep-2021	2001301134	28-Sep-2001	Forward Rate Determination Of High Data Rate Channels In CDMA Air Interface	Alcatel-Lucent USA Inc.
215.	Gandhi 8-17-1-6-11-15-34 (AD)-DE-EPA	EP1195920	DE	14-Apr-2004	28-Aug-2021	01307291.3	28-Aug-2001	Forward Rate Determination Of High Data Rate Channels In CDMA Air Interface	Alcatel-Lucent USA Inc.
216.	Gandhi 8-17-1-6-11-15-34 (AD)-US-NP	US6618598	US	09-Sep-2003	29-Sep-2020	09/676179	29-Sep-2000	Forward Rate Determination Of High Data Rate Channels In CDMA Air Interface	Alcatel-Lucent USA Inc.

	Alcatel Lucent Ref. No.	Patent No.	CTRY	Issue Date	Expiry / Abandonment Date	Application No.	Application Date	Title	Current Owner
217.	Gandhi 8-17-1-6-11-15-34 (AD)-GB-EPA	EP1195920	GB	14-Apr-2004	28-Aug-2021	01307291.3	28-Aug-2001	Forward Rate Determination Of High Data Rate Channels In CDMA Air Interface	Alcatel-Lucent USA Inc.
218.	Gayde 30-8-12 (RS)-US-NP	US8111818	US	07-Feb-2012	07-Dec-2030	11/614274	21-Dec-2006	Method And System For Processing Calls By Proxy	Alcatel Lucent
219.	Gopalakrishnan 3-2-5-2-14-1-7-13 (N)-DE-EPA	EP1187370	DE	14-Jan-2004	19-Mar-2021	01302473.2	19-Mar-2001	Integrating Power-Controlled And Rate-Controlled Transmission On A Same Frequency Carrier	Alcatel-Lucent USA Inc.
220.	Gopalakrishnan 3-2-5-2-14-1-7-13 (N)-DE-EPD[2]	EP60104322.7	DE	14-Jul-2004	19-Mar-2010	03005755.8	14-Mar-2003	Integrating Power-Controlled And Rate-Controlled Transmission On A Same Frequency Carrier	Alcatel-Lucent USA Inc.
221.	Gopalakrishnan 3-2-5-2-14-1-7-13 (N)-CN-NP		CN		28-Sep-2003	01132935.1	10-Sep-2001	Integrating Power-Controlled And Rate-Controlled Transmission On A Same Frequency Carrier	Alcatel-Lucent USA Inc.
222.	Gopalakrishnan 3-2-5-2-14-1-7-13 (N)-GB-EPA	EP1187370	GB	14-Jan-2004	19-Mar-2021	01302473.2	19-Mar-2001	Integrating Power-Controlled And Rate-Controlled Transmission On A Same Frequency Carrier	Alcatel-Lucent USA Inc.
223.	Gopalakrishnan 3-2-5-2-14-1-7-13 (N)-GB-EPD[2]	EP1322051	GB	14-Jul-2004	19-Mar-2021	03005755.8	14-Mar-2003	Integrating Power-Controlled And Rate-Controlled Transmission On A Same Frequency Carrier	Alcatel-Lucent USA Inc.
224.	Gopalakrishnan 3-2-5-2-14-1-7-13 (N)-FR-EPA	EP1187370	FR	14-Jan-2004	19-Mar-2021	01302473.2	19-Mar-2001	Integrating Power-Controlled And Rate-Controlled Transmission On A Same Frequency Carrier	Alcatel-Lucent USA Inc.
225.	Gopalakrishnan 3-2-5-2-14-1-7-13 (N)-FR-EPD[2]	EP1322051	FR	14-Jul-2004	19-Mar-2021	03005755.8	14-Mar-2003	Integrating Power-Controlled And Rate-Controlled Transmission On A Same Frequency Carrier	Alcatel-Lucent USA Inc.
226.	Gopalakrishnan 3-2-5-2-14-1-7-13 (N)-JP-NP		JP		14-Oct-2011	2001274702	11-Sep-2001	Integrating Power-Controlled And Rate-Controlled Transmission On A Same Frequency Carrier	Alcatel-Lucent USA Inc.

Exhibit-D-21

	Alcatel Lucent Ref. No.	Patent No.	CTRY	Issue Date	Expiry / Abandonment Date	Application No.	Application Date	Title	Current Owner
227.	Gopalakrishnan 3-2-5-2-14-1-7-13 (N)-CA-NP	CA2357092	CA	22-Mar-2005	30-Aug-2008	2357092	30-Aug-2001	Integrating Power-Controlled And Rate-Controlled Transmission On A Same Frequency Carrier	Alcatel-Lucent USA Inc.
228.	Gopalakrishnan 3-2-5-2-14-1-7-13 (N)-US-NP	US6859446	US	22-Feb-2005	11-Sep-2020	09/658084	11-Sep-2000	Integrating Power-Controlled And Rate-Controlled Transmission On A Same Frequency Carrier	Alcatel-Lucent USA Inc.
229.	Greenwald 1-1 (LG)-US-NP	US8352393	US	08-Jan-2013	09-Jan-2030	11/888925	3-Aug-2007	Method And System For Evaluating Tests Used In Operating System Fingerprinting	Alcatel Lucent
230.	Helms 4-3 (HD)-US-NP	US6236315	US	22-May-2001	19-Oct-2019	09/421867	19-Oct-1999	Method And Apparatus For Improving The Interrogation Range Of An RF-Tag	Alcatel-Lucent USA Inc.
231.	Helms 6-5 (HD)-US-CNT		US		01-Oct-2002	09/801519	08-Mar-2001	Method And Apparatus For Improving The Interrogation Range Of An RF-Tag	Alcatel-Lucent USA Inc.
232.	Helms 7 (HD)-US-CIP	US6590498	US	08-Jul-2003	19-Oct-2019	09/999390	31-Oct-2001	Method And Apparatus For Improving The Interrogation Range Of An RF-Tag	Alcatel-Lucent USA Inc.
233.	Helms 5-3-3-16-1-5 (HD)-US-NP	US6643466	US	04-Nov-2003	29-Sep-2020	09/675003	29-Sep-2000	Method And Apparatus For Controlling Signal Power Level In Free Space Communication	Alcatel-Lucent USA Inc.
234.	Holcomb 1-14-4-7 (DP)-DE-EPA	EP1160941	DE	21-Nov-2007	22-May-2021	01304477.1	22-May-2001	Waveguide Lasers And Optical Amplifiers Having Enhanced Thermal Stability	Alcatel-Lucent USA Inc.
235.	Holcomb 1-14-4-7 (DP)-FR-EPA	EP1160941	FR	21-Nov-2007	22-May-2021	01304477.1	22-May-2001	Waveguide Lasers And Optical Amplifiers Having Enhanced Thermal Stability	Alcatel-Lucent USA Inc.
236.	Holcomb 1-14-4-7 (DP)-GB-EPA	EP1160941	GB	21-Nov-2007	22-May-2021	01304477.1	22-May-2001	Waveguide Lasers And Optical Amplifiers Having Enhanced Thermal Stability	Alcatel-Lucent USA Inc.
237.	Holcomb 1-14-4-7 (DP)-US-NP	US6456637	US	24-Sep-2002	28-Nov-2020	09/580094	30-May-2000	Waveguide Lasers And Optical Amplifiers Having Enhanced Thermal Stability	Alcatel-Lucent USA Inc.

Exhibit-D-22

	Alcatel Lucent Ref. No.	Patent No.	CTRY	Issue Date	Expiry / Abandonment Date	Application No.	Application Date	Title	Current Owner
238.	Holcomb 1-14-4-7 (DP)-JP-NP		JP		21-Nov-2006	2001-161552	30-May-2001	Waveguide Lasers And Optical Amplifiers Having Enhanced Thermal Stability	Alcatel-Lucent USA Inc.
239.	Holcomb 3-22-2-16 (DP)-US-NP	US7409128	US	05-Aug-2008	29-Jun-2025	11/169338	29-Jun-2005	Pumping Arrangement For Fiber Amplifiers With Reduced Reflective Feedback	Alcatel-Lucent USA Inc.
240.	Huang 17-8-15-15 (HC)-EP-EPA		EP		19-Jun-2007	02252090.2	22-Mar-2002	Signal Detection By A Receiver In A Multiple Antenna Time-Dispersive System	Alcatel-Lucent USA Inc.
241.	Huang 17-8-15-15 (HC)-JP-NP		JP		22-Oct-2009	2002-242781	23-Aug-2002	Signal Detection By A Receiver In A Multiple Antenna Time-Dispersive System	Alcatel-Lucent USA Inc.
242.	Huang 17-8-15-15 (HC)-US-NP	US7359466	US	15-Apr-2008	13-Oct-2022	09/938453	24-Aug-2001	Signal Detection By A Receiver In A Multiple Antenna Time-Dispersive System	Alcatel-Lucent USA Inc.
243.	Imbesi 2-2-15-1-4-6 (DJ)-US-NP	US6734411	US	11-May-2004	29-Sep-2020	09/675007	29-Sep-2000	Method And Apparatus For Controlling Power Levels Of Optical Signals In Optical Fiber Interconnects	Alcatel-Lucent USA Inc.
244.	Jacobsen 1-16 (N)-US-NP	US7966548	US	21-Jun-2011	20-Apr-2030	11/824408	29-Jun-2007	Method And System For Encoding Data Using Rate-Compatible Irregular LDPC Codes Based On Edge Growth And Parity Splitting	Alcatel-Lucent USA Inc.
245.	Jacobsen 1-16 (N)-WO-PCT		WO		28-May-2009	PCT/US2008/008051	27-Jun-2008	Method And System For Encoding Data Using Rate-Compatible Irregular LDPC Codes Based On Edge Growth And Parity Splitting	Alcatel-Lucent USA Inc.
246.	Jaques 1-90 (JJ)-JP-NP	JP4689889	JP	25-Feb-2011	10-Jul-2021	2001209036	10-Jul-2001	Optical Boolean Logic Devices	Alcatel-Lucent USA Inc.
247.	Jaques 1-90 (JJ)-EP-EPA		EP		22-Apr-2004	01300517.8	22-Jan-2001	Optical Boolean Logic Devices	Alcatel-Lucent USA Inc.
248.	Jaques 1-90 (JJ)-US-NP	US6810407	US	26-Oct-2004	14-Jul-2020	09/616107	14-Jul-2000	Optical Boolean Logic Devices	Alcatel-Lucent USA Inc.

	Alcatel Lucent Ref. No.	Patent No.	CTRY	Issue Date	Expiry / Abandonment Date	Application No.	Application Date	Title	Current Owner
249.	Kamel 19-8-13-19 (RE)-US-NP	US6662019	US	09-Dec-2003	21-Dec-2020	09/742613	21-Dec-2000	Power Control And Transmission Rate Parameters Of A Secondary Channel In A Wireless Communication System	Alcatel-Lucent USA Inc.
250.	Kamel 19-8-13-19 (RE)-GB-EPA	EP1220471	GB	14-Apr-2004	14-Aug-2021	01306894.5	14-Aug-2001	Power Control And Transmission Rate Parameters Of A Secondary Channel In A Wireless Communication System	Alcatel-Lucent USA Inc.
251.	Kamel 19-8-13-19 (RE)-FR-EPA	EP1220471	FR	14-Apr-2004	14-Aug-2021	01306894.5	14-Aug-2001	Power Control And Transmission Rate Parameters Of A Secondary Channel In A Wireless Communication System	Alcatel-Lucent USA Inc.
252.	Kamel 19-8-13-19 (RE)-DE-EPA	EP1220471	DE	14-Apr-2004	14-Aug-2021	01306894.5	14-Aug-2001	Power Control And Transmission Rate Parameters Of A Secondary Channel In A Wireless Communication System	Alcatel-Lucent USA Inc.
253.	Kamel 21-8-29-2 (RE)-US-NP	US7583750	US	01-Sep-2009	01-May-2026	10/789086	27-Feb-2004	A METHOD OF DATA BURST TRANSMISSION	Alcatel-Lucent USA Inc.
254.	Kannell 3 (GK)-KR-PCT	KR101156390	KR	07-Jun-2012	16-Dec-2028	20107014065	16-Dec-2008	Method Of Controlling Wireless Communications	Alcatel Lucent
255.	Kannell 3 (GK)-US-NP	US8041307	US	18-Oct-2011	19-Nov-2029	11/966377	28-Dec-2007	Method Of Controlling Wireless Communications	Alcatel Lucent
256.	Kannell 3 (GK)-CN-PCT		CN		16-Dec-2028	200880122381.3	16-Dec-2008	Method Of Controlling Wireless Communications	Alcatel Lucent
257.	Kannell 3 (GK)-EP-EPT		EP		16-Dec-2028	08869107.6	16-Dec-2008	Method Of Controlling Wireless Communications	Alcatel Lucent
258.	Kannell 3 (GK)-IN-PCT		IN		16-Dec-2028	3683/CHENP/2010	16-Dec-2008	Method Of Controlling Wireless Communications	Alcatel Lucent
259.	Kannell 3 (GK)-JP-PCT		JP		16-Dec-2028	2010540641	16-Dec-2008	Method Of Controlling Wireless Communications	Alcatel Lucent

	Alcatel Lucent Ref. No.	Patent No.	CTRY	Issue Date	Expiry / Abandonment Date	Application No.	Application Date	Title	Current Owner
260.	Kannell 4 (GK)-US-NP	US7646262	US	12-Jan-2010	28-Dec-2027	11/966343	28-Dec-2007	High Speed Wideband Differential Signal Distribution	Alcatel-Lucent USA Inc.
261.	Kasper 1-17-26 (AL)-CN-NP		CN		11-May-2010	200410055839.1	04-Aug-2004	Variable Optical Delay Line With A Large Continuous Tuning Range	Alcatel-Lucent USA Inc.
262.	Kasper 1-17-26 (AL)-JP-NP	JP4546785	JP	09-Jul-2010	05-Aug-2024	2004228951	5-Aug-2004	Variable Optical Delay Line With A Large Continuous Tuning Range	Alcatel-Lucent USA Inc.
263.	Kasper 1-17-26 (AL)-US-NP	US7212695	US	01-May-2007	05-Aug-2023	10/634403	5-Aug-2003	Variable Optical Delay Line With A Large Continuous Tuning Range	Alcatel-Lucent USA Inc.
264.	Madsen 27 (CK)-US-NP	US6956991	US	18-Oct-2005	18-Apr-2009	10/634481	05-Aug-2003	Compact, Solid-State Variable Optical Delay Line With A Large Continuous Tuning Range	unavailable
265.	Klein 21-10-30 (TE)-US-NP	US7526291	US	28-Apr-2009	28-Feb-2027	11/133982	20-May-2005	Method And Apparatus For Managing Supplemental Channel Data Rates	Alcatel-Lucent USA Inc.
266.	Kolodner 16-28-25-18-18-20 (PR)-US-NP	US7678495	US	16-Mar-2010	20-Apr-2028	11/047136	31-Jan-2005	Graphitic Nanostructured Battery	Alcatel-Lucent USA Inc.
267.	Kroupenkine 22-23-6-13-19 (TN)-US-NP	US7618746	US	17-Nov-2009	06-Feb-2028	10/803576	18-Mar-2004	Nanostructured Battery Having End Of Life Cells	Alcatel-Lucent USA Inc. And MPhase Technologies, Inc.
268.	Kroupenkine 25-17-16 (TN)-KR-NP	KR101216979	KR	24-Dec-2012	22-Apr-2025	20050033475	22-Apr-2005	Nanostructured Surfaces Having Variable Permeability	Alcatel-Lucent USA Inc.
269.	Kroupenkine 25-17-16 (TN)-US-NP	US7323033	US	29-Jan-2008	19-Jan-2026	10/835639	30-Apr-2004	Nanostructured Surfaces Having Variable Permeability	Alcatel-Lucent USA Inc.
270.	Kroupenkine 25-17-16 (TN)-FI-EPA	EP1591415	FI	03-Jan-2007	15-Apr-2025	05252369.3	15-Apr-2005	Nanostructured Surfaces Having Variable Permeability	Alcatel-Lucent USA Inc.
271.	Kroupenkine 25-17-16 (TN)-JP-NP	JP5031199	JP	06-Jul-2012	27-Apr-2025	2005128793	27-Apr-2005	Nanostructured Surfaces Having Variable Permeability	Alcatel-Lucent USA Inc.
272.	Krupenkin 45-5-34-22 (TN)-US-CIP	US7695550	US	13-Apr-2010	15-Aug-2026	11/460901	28-Jul-2006	Structured Membrane With Controllable Permeability	Alcatel-Lucent USA Inc. and Mphase Technologies,

	Alcatel Lucent Ref. No.	Patent No.	CTRY	Issue Date	Expiry / Abandonment Date	Application No.	Application Date	Title	Current Owner
									Inc.
273.	Kroupenkine 25-17-16 (TN)-GB-EPA	EP1591415	GB	03-Jan-2007	15-Apr-2025	05252369.3	15-Apr-2005	Nanostructured Surfaces Having Variable Permeability	Alcatel-Lucent USA Inc.
274.	Kroupenkine 25-17-16 (TN)-DE-EPA	EP1591415	DE	03-Jan-2007	15-Apr-2025	05252369.3	15-Apr-2005	Nanostructured Surfaces Having Variable Permeability	Alcatel-Lucent USA Inc.
275.	Kroupenkine 25-17-16 (TN)-CA-NP		CA		24-Jan-2008	2499595	07-Mar-2005	Nanostructured Surfaces Having Variable Permeability	Alcatel-Lucent USA Inc.
276.	Kroupenkine 25-17-16 (TN)-CN-NP	ZL200510068433.1	CN	11-Jan-2012	29-Apr-2025	200510068433.1	29-Apr-2005	Nanostructured Surfaces Having Variable Permeability	Alcatel-Lucent USA Inc.
277.	Kroupenkine 25-17-16 (TN)-FR-EPA	EP1591415	FR	03-Jan-2007	15-Apr-2025	05252369.3	15-Apr-2005	Nanostructured Surfaces Having Variable Permeability	Alcatel-Lucent USA Inc.
278.	Kroupenkine 25-17-16 (TN)-NL-EPA	EP1591415	NL	03-Jan-2007	15-Apr-2025	05252369.3	15-Apr-2005	Nanostructured Surfaces Having Variable Permeability	Alcatel-Lucent USA Inc.
279.	Kumar 11-36-24-6 (S)-CN-NP		CN		23-Jul-2002	00118142.4	09-Jun-2000	Low Back Haul Reactivation Delay For High-Speed Packet Data Services In CDMA Systems	Alcatel-Lucent USA Inc.
280.	Kumar 11-36-24-6 (S)-DE-EPA	EP1063863	DE	05-Nov-2003	06-Jun-2020	00304768.5	6-Jun-2000	Low Back Haul Reactivation Delay For High-Speed Packet Data Services In CDMA Systems	Alcatel-Lucent USA Inc.
281.	Kumar 11-36-24-6 (S)-SE-EPA	EP1063863	SE	05-Nov-2003	06-Jun-2020	00304768.5	6-Jun-2000	Low Back Haul Reactivation Delay For High-Speed Packet Data Services In CDMA Systems	Alcatel-Lucent USA Inc.
282.	Kumar 11-36-24-6 (S)-US-NP	US6757270	US	29-Jun-2004	11-Jun-2019	09/330582	11-Jun-1999	Low Back Haul Reactivation Delay For High-Speed Packet Data Services In CDMA Systems	Alcatel-Lucent USA Inc.
283.	Kumar 11-36-24-6 (S)-BR-NP		BR		02-Jan-2003	PI0003310-3	06-Jun-2000	Low Back Haul Reactivation Delay For High-Speed Packet Data Services In CDMA Systems	Alcatel-Lucent USA Inc.
284.	Kumar 11-36-24-6 (S)-FR-EPA	EP1063863	FR	05-Nov-2003	06-Jun-2020	00304768.5	6-Jun-2000	Low Back Haul Reactivation Delay For High-Speed Packet Data	Alcatel-Lucent USA Inc.

	Alcatel Lucent Ref. No.	Patent No.	CTRY	Issue Date	Expiry / Abandonment Date	Application No.	Application Date	Title	Current Owner
								Services In CDMA Systems	
285.	Kumar 11-36-24-6 (S)-GB-EPA	EP1063863	GB	05-Nov-2003	06-Jun-2020	00304768.5	6-Jun-2000	Low Back Haul Reactivation Delay For High-Speed Packet Data Services In CDMA Systems	Alcatel-Lucent USA Inc.
286.	Kumar 11-36-24-6 (S)-IN-NP		IN		02-Jan-2003	422/MAS/2000	02-Jun-2000	Low Back Haul Reactivation Delay For High-Speed Packet Data Services In CDMA Systems	Alcatel-Lucent USA Inc.
287.	Kumar 11-36-24-6 (S)-KR-NP	KR704131	KR	30-Mar-2007	10-Jun-2020	20000031954	10-Jun-2000	Low Back Haul Reactivation Delay For High-Speed Packet Data Services In CDMA Systems	Alcatel-Lucent USA Inc.
288.	Kumar 11-36-24-6 (S)-FI-EPA	EP1063863	FI	05-Nov-2003	06-Jun-2020	00304768.5	6-Jun-2000	Low Back Haul Reactivation Delay For High-Speed Packet Data Services In CDMA Systems	Alcatel-Lucent USA Inc.
289.	Kumar 11-36-24-6 (S)-KR-DIV	KR686912	KR	20-Feb-2007	11-Jun-2019	20060079457	22-Aug-2006	Low Back Haul Reactivation Delay For High-Speed Packet Data Services In CDMA Systems	Alcatel-Lucent USA Inc.
290.	Kumar 11-36-24-6 (S)-AU-NP		AU		07-Jan-2003	39441/00	13-Jun-2000	Low Back Haul Reactivation Delay For High-Speed Packet Data Services In CDMA Systems	Alcatel-Lucent USA Inc.
291.	Kumar 11-36-24-6 (S)-CA-NP		CA		08-May-2003	2311270	09-Jun-2000	Low Back Haul Reactivation Delay For High-Speed Packet Data Services In CDMA Systems	Alcatel-Lucent USA Inc.
292.	Kumar 11-36-24-6 (S)-JP-NP	JP4758536	JP	10-Jun-2011	12-Jun-2020	2000174769	12-Jun-2000	Low Back Haul Reactivation Delay For High-Speed Packet Data Services In CDMA Systems	Alcatel-Lucent USA Inc.
293.	Kumar 13-37-25-8 (S)-BR-NP		BR		02-Jan-2003	PI0003572-6	07-Jun-2000	Primary Transfer For Simplex Mode Forward-Link High-Speed Packet Data Services In CDMA Systems	Alcatel-Lucent USA Inc.

	Alcatel Lucent Ref. No.	Patent No.	CTRY	Issue Date	Expiry / Abandonment Date	Application No.	Application Date	Title	Current Owner
294.	Kumar 13-37-25-8 (S)-CN-NP		CN		22-Jul-2002	00118126.2	09-Jun-2000	Primary Transfer For Simplex Mode Forward-Link High-Speed Packet Data Services In CDMA Systems	Alcatel-Lucent USA Inc.
295.	Kumar 13-37-25-8 (S)-KR-NP		KR		07-Jun-2006	20000031669	09-Jun-2000	Primary Transfer For Simplex Mode Forward-Link High-Speed Packet Data Services In CDMA Systems	unavailable
296.	Kumar 13-37-25-8 (S)-US-NP	US6507572	US	14-Jan-2003	11-Jun-2019	09/332274	11-Jun-1999	Primary Transfer For Simplex Mode Forward-Link High-Speed Packet Data Services In CDMA Systems	Alcatel-Lucent USA Inc.
297.	Kumar 13-37-25-8 (S)-AU-NP		AU		02-Jan-2003	39346/00	07-Jun-2000	Primary Transfer For Simplex Mode Forward-Link High-Speed Packet Data Services In CDMA Systems	Alcatel-Lucent USA Inc.
298.	Kumar 13-37-25-8 (S)-CA-NP	CA2310486	CA	10-Jan-2006	01-Jun-2008	2310486	01-Jun-2000	Primary Transfer For Simplex Mode Forward-Link High-Speed Packet Data Services In CDMA Systems	Alcatel-Lucent USA Inc.
299.	Kumar 13-37-25-8 (S)-IN-NP		IN		02-Jan-2003	423/MAS/2000	02-Jun-2000	Primary Transfer For Simplex Mode Forward-Link High-Speed Packet Data Services In CDMA Systems	Alcatel-Lucent USA Inc.
300.	Kumar 13-37-25-8 (S)-JP-NP		JP		22-May-2006	2000-174771	12-Jun-2000	Primary Transfer For Simplex Mode Forward-Link High-Speed Packet Data Services In CDMA Systems	Alcatel-Lucent USA Inc.
301.	Kumar 13-37-25-8 (S)-EP-EPA		EP		01-May-2003	00304769.3	06-Jun-2000	Primary Transfer For Simplex Mode Forward-Link High-Speed Packet Data Services In CDMA Systems	Alcatel-Lucent USA Inc.
302.	Kumar 8-27-2 (S)-FR-EPA	EP0975186	FR	03-May-2006	12-Jul-2019	99305506.0	12-Jul-1999	Burst-Level Resource Allocation In Cellular Systems	Alcatel-Lucent USA Inc.
303.	Kumar 8-27-2 (S)-IN-NP		IN		31-May-2002	615/MAS/99	02-Jun-1999	Burst-Level Resource Allocation In Cellular Systems	Alcatel-Lucent USA Inc.
304.	Kumar 8-27-2 (S)-AU-NP	AU748181	AU	12-Sep-2002	22-Jul-2004	41047/99	22-Jul-1999	Burst-Level Resource Allocation In Cellular Systems	Alcatel-Lucent USA Inc.

Exhibit-D-28

	Alcatel Lucent Ref. No.	Patent No.	CTRY	Issue Date	Expiry / Abandonment Date	Application No.	Application Date	Title	Current Owner
305.	Kumar 8-27-2 (S)-FI-EPA	EP0975186	FI	03-May-2006	12-Jul-2019	99305506.0	12-Jul-1999	Burst-Level Resource Allocation In Cellular Systems	Alcatel-Lucent USA Inc.
306.	Kumar 8-27-2 (S)-JP-NP	JP3506959	JP	26-Dec-2003	19-Jul-2019	11205183	19-Jul-1999	Burst-Level Resource Allocation In Cellular Systems	Alcatel-Lucent USA Inc.
307.	Kumar 8-27-2 (S)-US-NP	US6418148	US	09-Jul-2002	23-Jul-2018	09/121149	23-Jul-1998	Burst-Level Resource Allocation In Cellular Systems	Alcatel-Lucent USA Inc.
308.	Kumar 8-27-2 (S)-CN-NP		CN		22-Jul-2002	99110638.5	22-Jul-1999	Burst-Level Resource Allocation In Cellular Systems	Alcatel-Lucent USA Inc.
309.	Kumar 8-27-2 (S)-BR-NP		BR		23-May-2002	PI9902728-3	13-Jul-1999	Burst-Level Resource Allocation In Cellular Systems	Alcatel-Lucent USA Inc.
310.	Kumar 8-27-2 (S)-GB-EPA	EP0975186	GB	03-May-2006	12-Jul-2019	99305506.0	12-Jul-1999	Burst-Level Resource Allocation In Cellular Systems	Alcatel-Lucent USA Inc.
311.	Kumar 8-27-2 (S)-CA-NP		CA		19-Jun-2002	2273293	31-May-1999	Burst-Level Resource Allocation In Cellular Systems	Alcatel-Lucent USA Inc.
312.	Kumar 8-27-2 (S)-ID-NP		ID		31-May-2002	P-990639	01-Jul-1999	Burst-Level Resource Allocation In Cellular Systems	Alcatel-Lucent USA Inc.
313.	Kumar 8-27-2 (S)-KR-NP	KR485560	KR	18-Apr-2005	21-Jul-2019	19990029458	21-Jul-1999	Burst-Level Resource Allocation In Cellular Systems	Alcatel-Lucent USA Inc.
314.	Kumar 8-27-2 (S)-DE-EPA	EP0975186	DE	03-May-2006	12-Jul-2019	99305506.0	12-Jul-1999	Burst-Level Resource Allocation In Cellular Systems	Alcatel-Lucent USA Inc.
315.	LeGrange 10-9-66 (JD)-GB-EPA	EP0938172	GB	18-Apr-2001	16-Feb-2019	99301144.4	16-Feb-1999	Article Comprising An Improved Cascaded Optical Fiber Raman Device	Alcatel-Lucent USA Inc.
316.	LeGrange 10-9-66 (JD)-IT-EPA	EP0938172	IT	18-Apr-2001	16-Feb-2019	99301144.4	16-Feb-1999	Article Comprising An Improved Cascaded Optical Fiber Raman Device	Alcatel-Lucent USA Inc.
317.	LeGrange 10-9-66 (JD)-US-NP	US5966480	US	12-Oct-1999	23-Feb-2018	09/027630	23-Feb-1998	Article Comprising An Improved Cascaded Optical Fiber Raman Device	Alcatel-Lucent USA Inc.
318.	LeGrange 10-9-66 (JD)-DE-EPA	EP0938172	DE	18-Apr-2001	16-Feb-2019	99301144.4	16-Feb-1999	Article Comprising An Improved Cascaded Optical Fiber Raman Device	Alcatel-Lucent USA Inc.

	Alcatel Lucent Ref. No.	Patent No.	CTRY	Issue Date	Expiry / Abandonment Date	Application No.	Application Date	Title	Current Owner
319.	LeGrange 10-9-66 (JD)-JP-NP	JP3749392	JP	09-Dec-2005	23-Feb-2019	44111/1999	23-Feb-1999	Article Comprising An Improved Cascaded Optical Fiber Raman Device	Alcatel-Lucent USA Inc.
320.	LeGrange 10-9-66 (JD)-FR-EPA	EP0938172	FR	18-Apr-2001	16-Feb-2019	99301144.4	16-Feb-1999	Article Comprising An Improved Cascaded Optical Fiber Raman Device	Alcatel-Lucent USA Inc.
321.	LeGrange 9-60 (JD)-JP-NP	JP3433900	JP	30-May-2003	09-Jun-2018	160196/1998	9-Jun-1998	Optical Communication System Comprising A Cladding Pumped Fiber Laser	Alcatel-Lucent USA Inc.
322.	LeGrange 9-60 (JD)-DE-EPA	EP0884813	DE	30-Jun-1999	02-Jun-2018	98304329.0	2-Jun-1998	Optical Communication System Comprising A Cladding Pumped Fiber Laser	Alcatel-Lucent USA Inc.
323.	LeGrange 9-60 (JD)-US-NP	US5898715	US	27-Apr-1999	09-Jun-2017	08/871081	9-Jun-1997	Optical Communication System Comprising A Cladding Pumped Fiber Laser	Alcatel-Lucent USA Inc.
324.	LeGrange 9-60 (JD)-GB-EPA	EP0884813	GB	30-Jun-1999	02-Jun-2018	98304329.0	2-Jun-1998	Optical Communication System Comprising A Cladding Pumped Fiber Laser	Alcatel-Lucent USA Inc.
325.	Li 7-28 (P)-US-NP	US7392055	US	24-Jun-2008	03-Oct-2025	10/600714	23-Jun-2003	Methods For Allocating Resources In A Wireless Data System Based On System Loading	Alcatel-Lucent USA Inc.
326.	Mailaender 10-6-1 (LE)-US-NP	US7200631	US	03-Apr-2007	14-Nov-2024	10/340575	10-Jan-2003	Method And Apparatus For Determining An Inverse Square Root Of A Given Positive-Definite Hermitian Matrix	Alcatel-Lucent USA Inc.
327.	Mailaender 11-2-1 (LE)-US-NP	US7167507	US	23-Jan-2007	04-May-2024	10/185747	1-Jul-2002	Equalizer And Method For Performing Equalization In A Wireless Communications System	Alcatel-Lucent USA Inc.
328.	Mailaender 13 (LE)-CN-NP	ZL200510079064.6	CN	26-Dec-2012	22-Jun-2025	200510079064.6	22-Jun-2005	A Method Of Receiver Processing Of CDMA Signals In A CDMA System	Alcatel-Lucent USA Inc.

	Alcatel Lucent Ref. No.	Patent No.	CTRY	Issue Date	Expiry / Abandonment Date	Application No.	Application Date	Title	Current Owner
329.	Mailaender 13 (LE)-DE-EPA	EP1610513	DE	12-Mar-2008	15-Jun-2025	05253701.6	15-Jun-2005	A Method Of Receiver Processing Of CDMA Signals In A CDMA System	Alcatel-Lucent USA Inc.
330.	Mailaender 13 (LE)-JP-NP	JP4990510	JP	11-May-2012	22-Jun-2025	2005181605	22-Jun-2005	A Method Of Receiver Processing Of CDMA Signals In A CDMA System	Alcatel-Lucent USA Inc.
331.	Mailaender 13 (LE)-FR-EPA	EP1610513	FR	12-Mar-2008	15-Jun-2025	05253701.6	15-Jun-2005	A Method Of Receiver Processing Of CDMA Signals In A CDMA System	Alcatel-Lucent USA Inc.
332.	Mailaender 13 (LE)-GB-EPA	EP1610513	GB	12-Mar-2008	15-Jun-2025	05253701.6	15-Jun-2005	A Method Of Receiver Processing Of CDMA Signals In A CDMA System	Alcatel-Lucent USA Inc.
333.	Mailaender 13 (LE)-US-NP	US7660340	US	09-Feb-2010	13-Nov-2028	10/872359	22-Jun-2004	A Method Of Receiver Processing Of CDMA Signals In A CDMA System	Alcatel-Lucent USA Inc.
334.	Mailaender 13 (LE)-KR-NP	KR101073821	KR	10-Oct-2011	17-Jun-2025	2005005223 4	17-Jun-2005	A Method Of Receiver Processing Of CDMA Signals In A CDMA System	Alcatel-Lucent USA Inc.
335.	Mailaender 15 (LE)-US-NP	US8036257	US	11-Oct-2011	20-Jun-2028	11/418183	5-May-2006	A Method Of Determining At Least One Transmit Mode Parameter For A Multiple-Input Multiple-Output System	Alcatel Lucent
336.	Mailaender 16 (LE)-KR-PCT	KR101135019	KR	03-Apr-2012	09-Jun-2028	2009702534 6	9-Jun-2008	Facilitating Mobile Station Location Using A Ground-Based Cellular Network	Alcatel-Lucent USA Inc.
337.	Mailaender 16 (LE)-JP-PCT	JP5139521	JP	22-Nov-2012	09-Jun-2028	2010512161	9-Jun-2008	Facilitating Mobile Station Location Using A Ground-Based Cellular Network	Alcatel-Lucent USA Inc.
338.	Mailaender 16 (LE)-FR-EPT	EP2167987	FR	10-Aug-2011	09-Jun-2028	08768270.4	9-Jun-2008	Facilitating Mobile Station Location Using A Ground-Based Cellular Network	Alcatel-Lucent USA Inc.
339.	Mailaender 16 (LE)-GB-EPT	EP2167987	GB	10-Aug-2011	09-Jun-2028	08768270.4	9-Jun-2008	Facilitating Mobile Station Location Using A Ground-Based Cellular Network	Alcatel-Lucent USA Inc.
340.	Mailaender 16 (LE)-IN-PCT		IN		09-Jun-2028	7232/CHENP/2009	9-Jun-2008	Facilitating Mobile Station Location Using A Ground-	Alcatel-Lucent USA

	Alcatel Lucent Ref. No.	Patent No.	CTRY	Issue Date	Expiry / Abandonment Date	Application No.	Application Date	Title	Current Owner
								Based Cellular Network	Inc.
341.	Mailaender 16 (LE)-CN-PCT	ZL200880019880.X	CN	11-Jul-2012	09-Jun-2028	200880019880.X	9-Jun-2008	Facilitating Mobile Station Location Using A Ground-Based Cellular Network	Alcatel-Lucent USA Inc.
342.	Mailaender 16 (LE)-US-NP	US7667648	US	23-Feb-2010	12-Jun-2027	11/761513	12-Jun-2007	Facilitating Mobile Station Location Using A Ground-Based Cellular Network	Alcatel-Lucent USA Inc.
343.	Mailaender 16 (LE)-DE-EPT	EP2167987	DE	10-Aug-2011	09-Jun-2028	08768270.4	9-Jun-2008	Facilitating Mobile Station Location Using A Ground-Based Cellular Network	Alcatel-Lucent USA Inc.
344.	Maliakal 2 (AJ)-US-NP	US7369396	US	06-May-2008	07-Jul-2025	11/176722	7-Jul-2005	Composite Electroactive Material For Electromechanical Actuators	Alcatel-Lucent USA Inc.
345.	Maliakal 3-1 (AJ)-US-NP	US7714320	US	11-May-2010	01-May-2028	11/257902	25-Oct-2005	Branched Phenylene-Terminated Thiophene Oligomers	Alcatel-Lucent USA Inc.
346.	Maliakal 3-1 (AJ)-US-DIV	US8008116	US	30-Aug-2011	18-Nov-2025	12/700821	5-Feb-2010	Branched Phenylene-Terminated Thiophene Oligomers	Alcatel Lucent
347.	Maliakal 4 (AJ)-US-NP	US8012564	US	06-Sep-2011	09-Jun-2030	11/459584	24-Jul-2006	Nanoparticle Dispersions With Low Aggregation Levels	Alcatel Lucent
348.	810097-US-DIV		US		24-Jul-2026	13/191689	27-Jul-2011	Nanoparticle Dispersions With Low Aggregation Levels	Alcatel Lucent
349.	Maliakal 8 (AJ)-US-NP	US7928638	US	19-Apr-2011	18-Feb-2029	12/165626	30-Jun-2008	Electromechanical Actuators	Alcatel-Lucent USA Inc.
350.	Maliakal 8 (AJ)-CN-PCT	ZL200980125360.1	CN	17-Jul-2013	29-Jun-2029	200980125360.1	29-Jun-2009	Electromechanical Actuators	Alcatel-Lucent USA Inc.
351.	Maliakal 8 (AJ)-KR-PCT	KR101182996	KR	07-Sep-2012	29-Jun-2029	20117002370	29-Jun-2009	Electromechanical Actuators	Alcatel-Lucent USA Inc.
352.	Maliakal 8 (AJ)-EP-EPT		EP		29-Jun-2029	09794778.2	29-Jun-2009	Electromechanical Actuators	Alcatel-Lucent USA Inc.
353.	Maliakal 8 (AJ)-JP-PCT		JP		29-Jun-2029	2011516327	29-Jun-2009	Electromechanical Actuators	Alcatel-Lucent USA Inc.

	Alcatel Lucent Ref. No.	Patent No.	CTRY	Issue Date	Expiry / Abandonment Date	Application No.	Application Date	Title	Current Owner
354.	Merboth 3-15-34-8-21 (LJ)-US-NP	US7715861	US	11-May-2010	13-May-2028	11/230153	19-Sep-2005	Method And Apparatus For Reducing Packet Assistant Channel Power Usage	Alcatel-Lucent USA Inc.
355.	Mooney 4-22-38-27 (CF)-US-NP	US7885199	US	08-Feb-2011	10-Aug-2029	11/343771	31-Jan-2006	System And Method For Providing Group Calling In A Wireless Network	Alcatel-Lucent USA Inc.
356.	Moorman 1-1 (JR)-US-NP	US8027250	US	27-Sep-2011	12-Jul-2028	11/064711	24-Feb-2005	A Channel Information Detector, A Method Of Detecting Channel Information And A Commications Node Incorporating The Detector Or Method	Alcatel Lucent
357.	Nossen 1-2-18 (M)-US-NP	US8363690	US	29-Jan-2013	16-Jun-2030	10/229850	28-Aug-2002	Codeword Synthesizing System And A Correlation System, Methods Of Operation Thereof And A Spread Spectrum Communications Transceiver Employing The Same	Alcatel Lucent
358.	Nye 2 (RA)-US-NP	US7375628	US	20-May-2008	24-Jun-2025	10/852879	25-May-2004	Message Transmission In One Or More Languages Based On One Or More Personal Information Component Inputs	Alcatel-Lucent USA Inc.
359.	Nykolak 11-84-3 (G)-JP-DIV		JP		05-Jul-2011	2005163362	24-Mar-2000	Receiving System For Free-Space Optical Communications	Alcatel-Lucent USA Inc.
360.	Nykolak 11-84-3 (G)-CA-NP		CA		25-Feb-2003	2300353	10-Mar-2000	Receiving System For Free-Space Optical Communications	Alcatel-Lucent USA Inc.
361.	Nykolak 11-84-3 (G)-US-NP	US6348684	US	19-Feb-2002	25-Mar-2019	09/276168	25-Mar-1999	Receiving System For Free-Space Optical Communications	Alcatel-Lucent USA Inc.
362.	Nykolak 11-84-3 (G)-EP-EPA		EP		15-Nov-2007	00302052.6	14-Mar-2000	Receiving System For Free-Space Optical Communications	Alcatel-Lucent USA Inc.
363.	Nykolak 11-84-3 (G)-JP-NP		JP		07-Nov-2007	2000-83096	24-Mar-2000	Receiving System For Free-Space Optical Communications	Alcatel-Lucent USA Inc.

	Alcatel Lucent Ref. No.	Patent No.	CTRY	Issue Date	Expiry / Abandonment Date	Application No.	Application Date	Title	Current Owner
364.	Nykolak 17 (G)-US-NP	US8412050	US	02-Apr-2013	17-Jul-2031	12/289258	23-Oct-2008	Coaxial Free Space Optical Telescope And Systems Using The Same	Alcatel Lucent
365.	O'Rourke 1-1 (PF)-US-NP	US8413237	US	02-Apr-2013	15-Apr-2030	11/584598	23-Oct-2006	Methods Of Simulating Vulnerability	Alcatel Lucent
366.	Piccirilli 1-75 (AB)-JP-NP		JP		07-Feb-2005	2000-58296	03-Mar-2000	System And Method For Secure Multiple Wavelength Communication On Optical Fibers	Alcatel-Lucent USA Inc.
367.	Piccirilli 1-75 (AB)-CA-NP		CA		13-Jun-2006	2298323	10-Feb-2000	System And Method For Secure Multiple Wavelength Communication On Optical Fibers	Alcatel-Lucent USA Inc.
368.	Piccirilli 1-75 (AB)-US-NP	US7272319	US	18-Sep-2007	04-Mar-2019	09/262530	4-Mar-1999	System And Method For Secure Multiple Wavelength Communication On Optical Fibers	Alcatel-Lucent USA Inc.
369.	Piccirilli 1-75 (AB)-EP-EPA		EP		02-Jun-2006	00301382.8	22-Feb-2000	System And Method For Secure Multiple Wavelength Communication On Optical Fibers	Alcatel-Lucent USA Inc.
370.	Pidwerbetsky 1-8 (A)-CA-NP	CA2219381	CA	10-Dec-2002	27-Oct-2017	2219381	27-Oct-1997	Modulated Backscatter Sensor System	Alcatel-Lucent USA Inc.
371.	Pidwerbetsky 1-8 (A)-EP-EPA		EP		19-Jun-2003	97310201.5	16-Dec-1997	Modulated Backscatter Sensor System	Alcatel-Lucent USA Inc.
372.	Pidwerbetsky 1-8 (A)-US-NP	US6084530	US	04-Jul-2000	31-Dec-2016	08/777771	31-Dec-1996	Modulated Backscatter Sensor System	Alcatel-Lucent USA Inc.
373.	Pidwerbetsky 1-8 (A)-KR-NP		KR		31-Oct-2002	97-82710	30-Dec-1997	Modulated Backscatter Sensor System	Alcatel-Lucent USA Inc.
374.	Pidwerbetsky 1-8 (A)-JP-NP	JP3544295	JP	16-Apr-2004	05-Jan-2018	10010029	5-Jan-1998	Modulated Backscatter Sensor System	Alcatel-Lucent USA Inc.
375.	Pidwerbetsky 2-14 (A)-US-NP	US6046683	US	04-Apr-2000	31-Dec-2016	08/777643	31-Dec-1996	Modulated Backscatter Location System	Alcatel-Lucent USA Inc.
376.	Pidwerbetsky 2-14 (A)-JP-NP	JP3298820	JP	19-Apr-2002	05-Jan-2018	10010031	5-Jan-1998	Modulated Backscatter Location System	Alcatel-Lucent USA Inc.
377.	Pidwerbetsky 2-14 (A)-CA-NP	CA2219306	CA	08-May-2001	27-Oct-2017	2219306	27-Oct-1997	Modulated Backscatter Location System	Alcatel-Lucent USA Inc.

	Alcatel Lucent Ref. No.	Patent No.	CTRY	Issue Date	Expiry / Abandonment Date	Application No.	Application Date	Title	Current Owner
378.	Pidwerbetsky 6 (A)-US-NP	US7610015	US	27-Oct-2009	22-Mar-2027	10/955717	30-Sep-2004	System And Method For Coherent Communication In A Network	Alcatel-Lucent USA Inc.
379.	Pidwerbetsky 7-14 (A)-US-NP	US7009565	US	07-Mar-2006	30-Jul-2024	10/903993	30-Jul-2004	Miniaturized Antennas Based On Negative Permittivity Materials	Alcatel-Lucent USA Inc.
380.	Pidwerbetsky 9-20 (A)-US-NP	US8081131	US	20-Dec-2011	27-Dec-2029	12/236598	24-Sep-2008	Multi-Polarized Antenna Array	Alcatel Lucent
381.	Romain 3-2 (DM)-US-NP	US7602480	US	13-Oct-2009	23-Nov-2025	11/259501	26-Oct-2005	Method And System For Tracking A Moving Station Or Target In Free Space Communications	Alcatel-Lucent USA Inc.
382.	Stott 2 (DT)-US-NP	US7639668	US	29-Dec-2009	19-Aug-2028	11/141516	31-May-2005	Method For Securing RTS Communications Across Middleboxes	Alcatel-Lucent USA Inc.
383.	Stuart 17 (HR)-US-NP	US7777685	US	17-Aug-2010	08-May-2028	11/540442	29-Sep-2006	Small Spherical Antennas	Alcatel-Lucent USA Inc.
384.	Stuart 19 (HR)-JP-PCT	JP5189641	JP	01-Feb-2013	16-Apr-2028	2010506214	16-Apr-2008	Strip-Array Antenna	Alcatel Lucent
385.	Stuart 19 (HR)-US-NP	US8081114	US	20-Dec-2011	23-Sep-2030	11/938533	12-Nov-2007	Strip-Array Antenna	Alcatel Lucent
386.	Stuart 19 (HR)-US-PSP		US		12-Nov-2007	60/925813	23-Apr-2007	Periodic Surface Radiator	
387.	Stuart 19 (HR)-EP-EPT		EP		16-Apr-2028	08742965.0	16-Apr-2008	Strip-Array Antenna	Alcatel Lucent
388.	Thompson 2 (GR)-US-PSP		US		31-Jan-2008	60/936842	22-Jun-2007	Software Diversity Via Context-Free Grammar Transformations: A Language-Theoretic Approach	Alcatel-Lucent USA Inc.
389.	Thompson 2 (GR)-US-NP	US8281290	US	02-Oct-2012	12-Jul-2031	12/010925	31-Jan-2008	Software Diversity Using Context-Free Grammar Transformations	Alcatel Lucent
390.	Vitebsky 26 (S)-US-NP	US7072661	US	04-Jul-2006	07-Sep-2023	10/161182	3-Jun-2002	Wireless Communications System and Related Methods for Allocating Data Transmission	Alcatel-Lucent USA Inc.

	Alcatel Lucent Ref. No.	Patent No.	CTRY	Issue Date	Expiry / Abandonment Date	Application No.	Application Date	Title	Current Owner
391.	Vitebsky 33-20 (S)-US-NP	US7433703	US	07-Oct-2008	06-Apr-2027	11/153924	16-Jun-2005	Method For Allocating Resources In A Wireless Communication System	Alcatel-Lucent USA Inc.
392.	Vitebsky 39-28 (S)-US-NP	US7788566	US	31-Aug-2010	09-Sep-2028	11/334608	18-Jan-2006	System And Method For Dynamically Adjusting Hybrid ARQ Transmissions	Alcatel-Lucent USA Inc.
393.	Vitebsky 41-45 (S)-US-CNT	US8638662	US	28-Jan-2014	28-Nov-2027	13/179924	11-Jul-2011	Method Of Implementing Packet-Based Resource Allocation And Persistent Resource Allocation In A Wireless Communication System	Alcatel-Lucent USA Inc.
394.	Vitebsky 41-45 (S)-US-NP	US8004977	US	23-Aug-2011	26-Apr-2030	11/946205	28-Nov-2007	Method For Assigning Resources In Wireless Data Networks	Alcatel Lucent
395.	Madsen 27 (CK)-US-NP	US6956991	US	18-Oct-2005	18-Apr-2009	10/634481	05-Aug-2003	Compact, Solid-State Variable Optical Delay Line With A Large Continuous Tuning Range	unavailable
396.	814767							Improved Neutron Detector Device And Process For Fabrication	Not filed
397.	805046-US-NP	US8260142	US	04-Sep-2012	04-Aug-2029	12/459246	29-Jun-2009	Multi-Channel Optical Arrayed Time Buffer	Alcatel Lucent
398.	807018-US-NP		US		08-Mar-2031	13/042730	8-Mar-2011	System And Method For Enabling A Buffer Less Or Substantially Buffer Less Core Network	Alcatel-Lucent USA Inc.
399.	Gill 34 (DM)-CN-PCT		CN		18-Sep-2012	201080021807.3	17-May-2010	Compact Electrooptic Modulator	Alcatel Lucent
400.	Gill 34 (DM)-MY-PCT		MY		18-Sep-2012	PI20110052 30	17-May-2010	Compact Electrooptic Modulator	Alcatel Lucent
401.	Gill 34 (DM)-JP-PCT		JP		18-Sep-2012	2012511930	17-May-2010	Compact Electrooptic Modulator	Alcatel Lucent

	Alcatel Lucent Ref. No.	Patent No.	CTRY	Issue Date	Expiry / Abandonment Date	Application No.	Application Date	Title	Current Owner
402.	Gill 34 (DM)-KR-PCT		KR		18-Sep-2012	201170273 78	17-May-2010	Compact Electrooptic Modulator	Alcatel Lucent
403.	Gill 34 (DM)-SG-PCT		SG		18-Sep-2012	201108468-8	17-May-2010	Compact Electrooptic Modulator	Alcatel Lucent
404.	Gill 34 (DM)-EP-EPT		EP		18-Sep-2012	10778193.2	17-May-2010	Compact Electrooptic Modulator	Alcatel Lucent
405.	Gill 34 (DM)-US-NP	US8346025	US	01-Jan-2013	24-Oct-2030	12/ 467867	18-May-2009	Compact Electrooptic Modulator	Alcatel Lucent

WHEREAS, LGS Innovations LLC, a Delaware limited liability company, having a principal business address at 13665 Dulles Technology Drive, Suite 301, Herndon, Virginia 20171, United States of America ("**Assignee**"), is desirous of acquiring the entire interest in and to the Assigned Patents (as defined below);

WHEREAS, Assignor and Assignee have entered into a Patent Purchase and Sale Agreement for the Assigned Patents dated March 31, 2014, ("**PPS Agreement**") wherein Assignor has agreed to sell and Assignee has agreed to purchase the Assigned Patents;

WHEREAS, capitalized terms used but not defined herein shall have the meanings set forth in the PPS Agreement; and

WHEREAS, this assignment ("**Assignment**") is made by Assignor subject to and contingent upon Assignee taking the Assignment subject to all Permitted Encumbrances, as defined and set forth in Exhibit B to the PPS Agreement.

NOW, THEREFORE, to all whom it may concern, be it known that for good and valuable consideration to Assignor in hand paid, the receipt, adequacy, and sufficiency of which is hereby acknowledged by the Closing, Assignor has sold, assigned, transferred, and set over, and by these presents does sell, assign, transfer, and set over unto said Assignee, subject to all Permitted Encumbrances, its entire right, title and interest in and to all of the Assigned Patents, as fully and entirely as the same would have been held and enjoyed by Assignor if this Assignment and sale had not been made, for Assignee's own use and enjoyment, and for the use and enjoyment of Assignee's successors, designees, assigns, or other legal representatives. For clarity, the foregoing assignment does not include (i) any trademarks, trade dress, trade names, or other indicia of origin; (ii) except for inventions of the Assigned Patents, any inventions or discoveries, whether patentable or not, and registrations, invention disclosures, patents and applications therefor; (iii) any trade secrets, confidential information or know-how; (iv) any works of authorship, whether copyrightable or not; and (v) any other intellectual property or

proprietary rights of Assignor, its Affiliates or any predecessor of Assignor or Assignor's Affiliates.

Assignor, for itself, and its heirs, assigns, and legal representatives hereby further covenants to and with Assignee, its assigns, successors, and legal representatives to fully cooperate therewith in perfecting this assignment and carrying out the purposes thereof in the United States and in any and all foreign jurisdictions, said cooperation extending to the Assigned Patents, and including, at the reasonable request of Assignee or Assignee designee, the execution, acknowledgment, or delivery of additional assignments or other formal documents as may be required or appropriate in connection therewith, but in all such cases shall be at the expense of Assignee.

[remainder of this page left blank intentionally]

IN WITNESS WHEREOF, each of Assignor and Assignee has caused this Assignment of the Assigned Patents to be executed by its duly authorized representative on the respective dates entered below and such Assignment shall be effective upon execution of this Assignment by Assignor and Assignee.

ASSIGNOR

ALCATEL LUCENT

By: _____

Craig A. Thompson
Senior Vice President
Intellectual Property Business

Date: 3/3/2014

ALCATEL-LUCENT USA INC.

By: _____

Craig A. Thompson
Senior Vice President
Intellectual Property Business

Date: 3/8/2014

ASSIGNEE

LGS INNOVATIONS LLC

By: _____

Name: Michael D. Garson

Title: General Counsel and Secretary

Date: _____

ACKNOWLEDGMENT
STATE OF NEW JERSEY)

: ss:

COUNTY OF UNION)

I CERTIFY that on 3/31/2014, Craig A. Thompson personally came before me and this person acknowledged under oath, to my satisfaction that: this person signed, sealed and delivered this Assignment of Assigned Patents as Senior Vice President, Intellectual Property Business.

Name: Stacey Costley

Notary Public

My commission Expires: 4/13/2017

[Notaries Seal]

[*Signature Page to Assignment of the Assigned Patents*]

IN WITNESS WHEREOF, each of Assignor and Assignee has caused this Assignment of the Assigned Patents to be executed by its duly authorized representative on the respective dates entered below and such Assignment shall be effective upon execution of this Assignment by Assignor and Assignee.

ASSIGNOR

ALCATEL LUCENT

By: _____

Craig A. Thompson
Senior Vice President
Intellectual Property Business

Date: _____

ALCATEL-LUCENT USA INC.

By: _____

Craig A. Thompson
Senior Vice President
Intellectual Property Business

Date: _____

ASSIGNEE

LGS INNOVATIONS LLC

By: _____

Name: Michael D. Garson

Title: General Counsel and Secretary

Date: March 31, 2014

ACKNOWLEDGMENT
STATE OF NEW JERSEY)

: ss:

COUNTY OF UNION)

I CERTIFY that on _____, Craig A. Thompson personally came before me and this person acknowledged under oath, to my satisfaction that: this person signed, sealed and delivered this Assignment of Assigned Patents as Senior Vice President, Intellectual Property Business.

Name: _____

Notary Public

My commission Expires: _____

[Notaries Seal]

[*Signature Page to Assignment of the Assigned Patents*]