

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1
Stylesheet Version v1.2

EPAS ID: PAT5295463

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	SECURITY INTEREST
CONVEYING PARTY DATA	
Name	Execution Date
BIG SWITCH NETWORKS, INC.	12/14/2018
BIG SWITCH NETWORKS GC, INC.	12/14/2018
RECEIVING PARTY DATA	
Name:	SILVER LAKE WATERMAN FUND II, L.P., AS AGENT
Street Address:	2775 SAND HILL ROAD, SUITE 100
City:	MENLO PARK
State/Country:	CALIFORNIA
Postal Code:	94025
PROPERTY NUMBERS Total: 56	
Property Type	Number
Patent Number:	9001827
Patent Number:	9130870
Patent Number:	8416796
Patent Number:	8787388
PCT Number:	US1165077
Patent Number:	9185056
PCT Number:	US1255923
Patent Number:	8693344
Patent Number:	8856384
Application Number:	13252966
PCT Number:	US2012058587
PCT Number:	US1258601
Patent Number:	9036636
Patent Number:	9264295
Patent Number:	8923296
Patent Number:	9331930
PCT Number:	US1323865
Patent Number:	9548900
Patent Number:	9374285

Property Type	Number
Patent Number:	9413614
Patent Number:	9654380
Patent Number:	9042234
Patent Number:	9787567
Patent Number:	9008080
Patent Number:	9356838
Patent Number:	9548896
Application Number:	13754671
Patent Number:	9819551
Patent Number:	9935831
Application Number:	14337161
PCT Number:	US1472162
PCT Number:	US1466317
PCT Number:	US1540755
Patent Number:	9600263
Application Number:	15730309
PCT Number:	US1530874
PCT Number:	US1540804
Patent Number:	9813312
Application Number:	62027238
Application Number:	14337178
PCT Number:	US1540933
PCT Number:	US1540940
Patent Number:	9813323
Application Number:	15782735
Application Number:	16141562
PCT Number:	US1616225
PCT Number:	US1851790
Application Number:	15081166
Application Number:	16121247
Application Number:	15081201
Application Number:	15234757
Application Number:	15227856
Application Number:	15225368
PCT Number:	US2017046239
PCT Number:	US2017045254
PCT Number:	US2017044508

CORRESPONDENCE DATA**Fax Number:** (415)947-2099*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:** 4159472000**Email:** qluflood@wsgr.com**Correspondent Name:** WSGR, C/O QUI LU FLOOD, SENIOR PARALEGAL**Address Line 1:** ONE MARKET, SPEAR TOWER, SUITE 3300**Address Line 4:** SAN FRANCISCO, CALIFORNIA 94105**ATTORNEY DOCKET NUMBER:** 43628.031**NAME OF SUBMITTER:** QUI LU FLOOD**SIGNATURE:** /QUI LU FLOOD/**DATE SIGNED:** 12/20/2018**Total Attachments: 21**

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INTELLECTUAL PROPERTY SECURITY AGREEMENT

This INTELLECTUAL PROPERTY SECURITY AGREEMENT (this "*Agreement*"), dated as of December 14, 2018, is executed by BIG SWITCH NETWORKS, INC., a Delaware corporation ("*BSN*") and BIG SWITCH NETWORKS G.C. INC., a Delaware corporation ("*BSNGC*") and with BSN each a "*Grantor*" and collectively the "*Grantors*"), in favor of SILVER LAKE WATERMAN FUND II, L.P., a Delaware limited partnership, as agent ("*Agent*") on behalf of certain lenders ("*Lenders*").

RECITALS

A. Lenders have agreed to make certain advances of money and to extend certain financial accommodation (the "*Loans*") to Grantors, in the amounts and manner set forth in that certain Loan and Security Agreement by and among, Grantors, Agent and Lenders dated January 22, 2016 (as the same may be amended, modified or supplemented from time to time, the "*Loan Agreement*"; capitalized terms used herein are used as defined in the Loan Agreement). Lenders are willing to make the Loans to Grantors, but only upon the condition, among others, that Grantors shall grant to Agent, for the ratable benefit of the Lenders, a security interest in certain Copyrights, Trademarks, and Patents (as each term is described below) of Grantors to secure the obligations of Grantors under the Loan Agreement.

B. Pursuant to the terms of the Loan Agreement, Grantors have granted to Agent a security interest in all of Grantors' right, title and interest, whether presently existing or hereafter acquired, in, to and under all of the Collateral.

NOW, THEREFORE, for good and valuable consideration, receipt of which is hereby acknowledged, and intending to be legally bound, as collateral security for the prompt and complete payment when due of its obligations under the Loan Agreement, Grantors hereby represents, warrants, covenants and agrees as follows:

AGREEMENT

1. Grant of Security Interest. To secure its obligations under the Loan Agreement and the Transaction Documents, Grantors grant and pledge to Agent a security interest in all of Grantors' right, title and interest in, to and under its intellectual property (all of which shall collectively be called the "*Intellectual Property Collateral*"), including, without limitation, the following:

(a) Any and all copyright rights, copyright applications, copyright registrations and like protections in each work or authorship and derivative work thereof, whether published or unpublished and whether or not the same also constitutes a trade secret, now or hereafter existing, created, acquired or held, including without limitation those set forth on Exhibit A attached hereto (collectively, the "*Copyrights*");

(b) All patents, patent applications and like protections including, without limitation, improvements, divisions, continuations, renewals, reissues, extensions and continuations-in-part of the same, including without limitation the patents and patent applications set forth on Exhibit B attached hereto and any patents and patent applications claiming the priority benefit of the patents and patent applications set forth on Exhibit B attached hereto (collectively, the "*Patents*"); and

(c) Any trademark and servicemark rights, whether registered or not, applications to register and registrations of the same and like protections, and the entire goodwill of the business of Grantors connected with and symbolized by such trademarks, including without limitation those set forth on Exhibit C attached hereto (collectively, the "*Trademarks*").

2. Grantors authorizes the Commissioner for Patents, the Commissioner for Trademarks and the Register of Copyrights and any other government officials to record and register this Agreement upon request by Agent.

3. Grantors hereby authorizes Agent to modify this Agreement unilaterally by amending the exhibits to this Agreement to include any Intellectual Property Collateral which Grantors obtain subsequent to the date of this Agreement and file a duplicate original of this Agreement containing amended exhibits reflecting such new Intellectual Property Collateral.

4. This Agreement has been entered into pursuant to and in conjunction with the Loan Agreement, which is hereby incorporated by reference. The provisions of the Loan Agreement shall supersede and control over any conflicting or inconsistent provision herein. The rights and remedies of Agent and the Lenders with respect to

the Intellectual Property Collateral are as provided by the Loan Agreement and related documents, and nothing in this Agreement shall be deemed to limit such rights and remedies

5. This Agreement will be binding on and shall inure to the benefit of the parties hereto and their respective successors and permitted assigns.

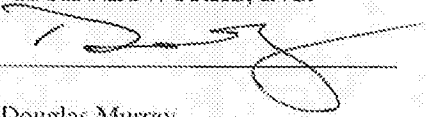
6. This Agreement and any claim, controversy, dispute or cause of action (whether in contract or tort or otherwise) based upon, arising out of or relating to this Agreement and the transactions contemplated hereby and thereby shall be governed by, and construed in accordance with, the laws of the United States and the State of California, without giving effect to any choice or conflict of law provision or rule (whether of the State of California or any other jurisdiction).

Agent's address is: 2275 Sand Hill Road, Suite 100
Menlo Park, CA 94025

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IN WITNESS WHEREOF, Grantors have caused this Agreement to be executed as of the day and year first above written.

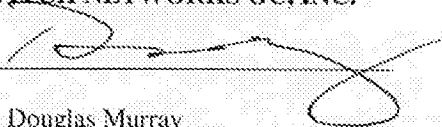
BIG SWITCH NETWORKS, INC.

By: 

Name: Douglas Murray

Title: Chief Executive Officer

BIG SWITCH NETWORKS GC, INC.

By: 

Name: Douglas Murray

Title: President and Chief Executive Officer

[Signature page to Intellectual Property Security Agreement]

SCHEDULE A

COPYRIGHTS

Title	Registration No.	Registration Date
Open Network Linux Penguin	VA 2-007-458	3/31/2016

SCHEDULE B
PATENTS

<u>Title</u>	<u>Filed</u>	<u>App. No.</u>	<u>Status</u>
METHODS FOR CONFIGURING NETWORK SWITCHES	12/17/10	12/971,924	Issued as US Patent No. 9,001,827 on 4/7/2015
METHODS FOR CONFIGURING NETWORK SWITCHES	12/15/11	PCT/US11/65077	In National Phase
METHODS FOR CONFIGURING NETWORK SWITCHES	6/10/13	2013-544766	Issued as JP Patent No. 5654142 on 11/28/2014
METHODS FOR CONFIGURING NETWORK SWITCHES	11/19/14	2014-234870	Issued as JP Patent No. 5913536 on 4/8/2016
METHODS FOR CONFIGURING NETWORK SWITCHES	6/5/13	11849775.9	Pending
METHODS FOR DETERMINING NETWORK TOPOLOGIES	4/15/11	13/088,262	Issued as US Patent No. 9,130,870 on 9/8/2015
SYSTEMS AND METHODS FOR MANAGING VIRTUAL SWITCHES	5/6/11	13/103,012	Issued as US Patent No. 8,416,796 on 04/09/2013
SYSTEMS AND METHODS FOR MANAGING VIRTUAL SWITCHES	5/4/12	PCT/US12/36653	Abandoned per instructions from Rob Adams 10/4/2013
SYSTEM AND METHODS FOR FORWARDING PACKETS THROUGH A NETWORK	8/29/11	13/220,431	Issued as US Patent No. 8,787,388 on 07/22/2014

SYSTEM AND METHODS FOR CONTROLLING NETWORK TRAFFIC THROUGH VIRTUAL SWITCHES	9/20/11	13/237,806	Issued as US Patent No. 9,185,056 on 11/10/2015
SYSTEM AND METHODS FOR CONTROLLING NETWORK TRAFFIC THROUGH VIRTUAL SWITCHES	9/18/12	PCT/US2012/55923	In National Phase
SYSTEM AND METHODS FOR CONTROLLING NETWORK TRAFFIC THROUGH VIRTUAL SWITCHES	3/12/14	2012312587	Issued as AU Patent No. 2012312587 on 1/21/2016
SYSTEM AND METHODS FOR CONTROLLING NETWORK TRAFFIC THROUGH VIRTUAL SWITCHES	3/28/14	12768977.6	Allowed
SYSTEM AND METHODS FOR CONTROLLING NETWORK TRAFFIC THROUGH VIRTUAL SWITCHES	3/18/14	592/KOLNP/2014	Pending
SYSTEM AND METHODS FOR CONTROLLING NETWORK TRAFFIC THROUGH VIRTUAL SWITCHES	3/20/14	2014-531910	Issued as JP Patent No. 5864758 on 1/8/2016
SYSTEM AND METHODS FOR CONTROLLING NETWORK TRAFFIC THROUGH VIRTUAL SWITCHES	4/15/14	10-2014-7010014	Issued as KR Patent No. 10-1572771 on 11/23/2015
SYSTEM AND METHODS FOR CONTROLLING NETWORK TRAFFIC THROUGH VIRTUAL SWITCHES	3/19/14	11201400762X	Issued as SG Patent No. 11201400762X on 11/26/2015
NOT PURSUED	N/A	N/A	Not pursued per instructions from Rob Adams 10/4/2011

SYSTEMS AND METHODS FOR GENERATING PACKET FORWARDING RULES BASED ON NETWORK POLICY	9/27/11	13/246,611	Issued as US Patent No. 8,693,344 on 4/8/2014
SYSTEM AND METHODS FOR MANAGING NETWORK HARDWARE ADDRESS REQUESTS WITH A CONTROLLER	10/4/11	13/252,966	Allowed
SYSTEM AND METHODS FOR MANAGING NETWORK HARDWARE ADDRESS REQUESTS WITH A CONTROLLER	10/4/12	PCT/US2012/058587	In National Phase
SYSTEM AND METHODS FOR MANAGING NETWORK HARDWARE ADDRESS REQUESTS WITH A CONTROLLER	3/28/14	12778869.3	Issued as EP Patent No. 2748992 on 8/22/2018
SYSTEM AND METHODS FOR MANAGING NETWORK HARDWARE ADDRESS REQUESTS WITH A CONTROLLER	4/4/14	2014-534662	Issued as JP Patent No. 5837989 on 11/13/2015
SYSTEM AND METHODS FOR MANAGING NETWORK PROTOCOL ADDRESS ASSIGNMENT WITH A CONTROLLER	10/14/11	13/274,157	Issued as US Patent No. 8,856,384 on 10/7/2014
SYSTEM AND METHODS FOR MANAGING NETWORK PROTOCOL ADDRESS ASSIGNMENT WITH A CONTROLLER	10/4/12	PCT/US2012/58601	In National Phase
SYSTEM AND METHODS FOR MANAGING NETWORK PROTOCOL ADDRESS ASSIGNMENT WITH A CONTROLLER	3/28/14	12775587.4	Issued as EP Patent No. 2749011 on 8/10/2016

SYSTEM AND METHODS FOR MANAGING NETWORK PROTOCOL ADDRESS ASSIGNMENT WITH A CONTROLLER	6/4/14	2014-535746	Issued as JP Patent No. 5813885 on 10/2/2015
SYSTEM AND METHODS FOR MANAGING NETWORK PACKET BROADCASTING	2/6/12	13/367,256	Issued as US Patent No. 9,036,636 on 5/19/2015
SYSTEMS AND METHODS FOR FORWARDING BROADCAST NETWORK PACKETS WITH A CONTROLLER	3/2/12	13/411,496	Issued as US Patent No. 9,264,295 on 2/16/2016
NOT PURSUED	N/A	N/A	Not pursued per verbal instructions from Rob Adams
SYSTEM AND METHODS FOR MANAGING NETWORK PACKET FORWARDING WITH A CONTROLLER	2/23/12	13/403,776	Issued as US Patent No. 8,923,296 on 12/30/2014
SYSTEM AND METHODS FOR MANAGING NETWORK PACKET FORWARDING WITH A CONTROLLER	8/22/14	2014-558751	Issued as JP Patent No. 6004405 on 9/16/2016
SYSTEM AND METHODS FOR MANAGING NETWORK PACKET FORWARDING WITH A CONTROLLER	1/30/13	PCT/US13/23865	In National Phase
SYSTEM AND METHODS FOR DETECTING END HOSTS THAT SHARE NETWORK ATTRIBUTES	4/24/12	13/454,903	Abandoned per instructions from Rob Sherwood 12/8/2014
SYSTEMS AND METHODS FOR FORWARDING NETWORK PACKETS IN A NETWORK USING NETWORK DOMAIN TOPOLOGY INFORMATION	9/4/12	13/603,160	Issued as US Patent No. 9,331,930 on 5/3/2016

SYSTEMS AND METHODS FOR FORWARDING NETWORK PACKETS IN A NETWORK USING NETWORK DOMAIN TOPOLOGY INFORMATION	8/18/15	14/829,538	Issued as US Patent No. 9,548,900 on 1/17/2017
SYSTEMS AND METHODS FOR DETERMINING NETWORK TOPOLOGIES	2/7/13	13/761,600	Issued as US Patent No. 9,374,285 on 6/21/2016
SYSTEMS AND METHODS FOR DETERMINING NETWORK TOPOLOGIES	11/3/15	14/931,292	Issued as US Patent No. 9,413,614 on 8/9/2016
SYSTEMS AND METHODS FOR DETERMINING NETWORK TOPOLOGIES	11/3/15	14/931,274	Issued as US Patent No. 9,654,380 on 5/16/2017
SYSTEMS AND METHODS FOR EFFICIENT NETWORK TRAFFIC FORWARDING	10/31/12	13/665,736	Issued as US Patent No. 9,042,234 on 5/26/2015
SYSTEMS AND METHODS FOR NETWORK TRAFFIC MONITORING	1/30/13	13/754,671	Issued as US Patent No. 9,787,567 on 10/10/2017
SYSTEMS AND METHODS FOR NETWORK TRAFFIC MONITORING	3/18/15	13/754,671	Pending
SYSTEMS AND METHODS FOR CONTROLLING SWITCHES TO MONITOR NETWORK TRAFFIC	2/25/13	13/776,419	Issued as US Patent No. 9,008,080 on 4/14/2015
SYSTEMS AND METHODS FOR DETERMINING NETWORK FORWARDING PATHS WITH A CONTROLLER	3/15/13	13/843,138	Issued as US Patent No. 9,356,838 on 5/31/2016
SYSTEMS AND METHODS FOR PERFORMING NETWORK SERVICE INSERTION	12/27/13	14/142,283	Issued as US Patent No. 9,548,896 on 1/17/2017

SYSTEMS AND METHODS FOR PERFORMING NETWORK SERVICE INSERTION	12/23/14	PCT/US14/72162	In National Phase
SYSTEMS AND METHODS FOR PERFORMING NETWORK SERVICE INSERTION	6/27/16	2016-543133	Pending
SYSTEMS AND METHODS FOR PERFORMING NETWORK SERVICE INSERTION	6/24/16	14831135	Issued as EP Patent No. 3072264 on 8/29/2018
SYSTEMS AND METHODS FOR TESTING NETWORKS WITH A CONTROLLER	11/20/13	14/085,538	Issued as US Patent No. 9,819,551 on 11/24/2017
SYSTEMS AND METHODS FOR TESTING NETWORKS WITH A CONTROLLER	11/19/14	PCT/US14/66317	In National Phase
SYSTEMS AND METHODS FOR TESTING NETWORKS WITH A CONTROLLER	5/19/16	14810073.8	Pending
SYSTEMS AND METHODS FOR TESTING NETWORKS WITH A CONTROLLER	7/13/16	2016-533570	Issued as JP Patent No. 6302064 on 3/9/2018
SYSTEMS AND METHODS FOR HANDLING LINK AGGREGATION FAILOVER WITH A CONTROLLER	7/21/14	14/337,161	Pending
SYSTEMS AND METHODS FOR HANDLING LINK AGGREGATION FAILOVER WITH A CONTROLLER	7/16/15	PCT/US15/40755	Not nationalized
SYSTEMS AND METHODS FOR CONTROLLING NETWORK SWITCHES USING A SWITCH MODELING INTERFACE AT A CONTROLLER	6/3/14	14/295,196	Issued as US Patent No. 9,935,831 on 4/3/2018

SYSTEMS AND METHODS FOR CONTROLLING NETWORK SWITCHES USING A SWITCH MODELING INTERFACE AT A CONTROLLER	5/14/15	PCT/US15/30874	In National Phase
SYSTEMS AND METHODS FOR CONTROLLING NETWORK SWITCHES USING A SWITCH MODELING INTERFACE AT A CONTROLLER	11/14/16	2015271104	Issued as AU Patent No. 2015271104 on 8/30/2018
SYSTEMS AND METHODS FOR CONTROLLING NETWORK SWITCHES USING A SWITCH MODELING INTERFACE AT A CONTROLLER	11/23/16	201580027330.2	Pending
SYSTEMS AND METHODS FOR CONTROLLING NETWORK SWITCHES USING A SWITCH MODELING INTERFACE AT A CONTROLLER	12/5/16	15730309	Pending
SYSTEMS AND METHODS FOR CONTROLLING NETWORK SWITCHES USING A SWITCH MODELING INTERFACE AT A CONTROLLER	11/17/16	2016-568396	Pending
SYSTEMS AND METHODS FOR PERFORMING UNINTERRUPTED NETWORK UPGRADES WITH CONTROLLERS	7/21/14	14/337,193	Issued as US Patent No. 9,600,263 on 3/21/2017
SYSTEMS AND METHODS FOR PERFORMING UNINTERRUPTED NETWORK UPGRADES WITH CONTROLLERS	7/16/15	PCT/US15/40804	Not nationalized

SYSTEMS AND METHODS FOR PERFORMING DEBUGGING OPERATIONS ON NETWORKS USING A CONTROLLER	7/21/14	62/027,238	Converted
SYSTEMS AND METHODS FOR PERFORMING DEBUGGING OPERATIONS ON NETWORKS USING A CONTROLLER	2/19/15	14/626,450	Issued as US Patent No. 9,813,312 on 11/7/2017
SYSTEMS AND METHODS FOR PERFORMING DEBUGGING OPERATIONS ON NETWORKS USING A CONTROLLER	7/17/15	PCT/US15/40933	In National Phase
SYSTEMS AND METHODS FOR PERFORMING DEBUGGING OPERATIONS ON NETWORKS USING A CONTROLLER	2/27/17	201580045963.6	Pending
SYSTEMS AND METHODS FOR PERFORMING DEBUGGING OPERATIONS ON NETWORKS USING A CONTROLLER	1/20/17	15747664.9	Pending
SYSTEMS AND METHODS FOR PERFORMING LOGICAL NETWORK FORWARDING USING A CONTROLLER	7/21/14	14/337,178	Pending
SYSTEMS AND METHODS FOR PERFORMING LOGICAL NETWORK FORWARDING USING A CONTROLLER	7/17/15	PCT/US15/40940	In National Phase
SYSTEMS AND METHODS FOR PERFORMING LOGICAL NETWORK FORWARDING USING A CONTROLLER	2/27/17	201580045965.5	Pending
SYSTEMS AND METHODS FOR PERFORMING LOGICAL NETWORK FORWARDING USING A CONTROLLER	1/19/17	15750855.7	Allowed

SYSTEMS AND METHODS FOR CONTROLLING SWITCHES TO CAPTURE AND MONITOR NETWORK TRAFFIC	2/10/15	14/618,635	Issued as US Patent No. 9,813,323 on 11/7/2017
SYSTEMS AND METHODS FOR CONTROLLING SWITCHES TO CAPTURE AND MONITOR NETWORK TRAFFIC	2/2/16	PCT/US16/16225	In National Phase
SYSTEMS AND METHODS FOR CONTROLLING SWITCHES TO CAPTURE AND MONITOR NETWORK TRAFFIC	8/11/17	16706700.8	Pending
SYSTEMS AND METHODS FOR CONTROLLING SWITCHES TO CAPTURE AND MONITOR NETWORK TRAFFIC	9/20/17	201680017120.X	Pending
SYSTEMS AND METHODS FOR CONTROLLING SWITCHES TO RECORD NETWORK PACKETS USING A TRAFFIC MONITORING NETWORK	10/12/17	15/782,735	Pending
SYSTEMS AND METHODS FOR CONTROLLING SWITCHES TO RECORD NETWORK PACKETS USING A TRAFFIC MONITORING NETWORK	9/19/18	PCT/US18/51790	Pending
SYSTEMS AND METHODS FOR GENERATING NETWORK FLOW INFORMATION	9/25/18	16/141,562	Pending
NETWORKS WITH MULTIPLE TIERS OF SWITCHES	12/6/18		Pending

Title	Country	Application No.	Filing Date	Status
BUILDING A HYPER-SCALE MONITORING FABRIC	China	201680029959.50	25-Mar-16	Pending
BUILDING A HYPER-SCALE MONITORING FABRIC	European Patent Office	16773827.70	25-Mar-16	Pending
BUILDING A HYPER-SCALE MONITORING FABRIC	Hong Kong	18104349.00	29-Mar-18	Pending
BUILDING A HYPER-SCALE MONITORING FABRIC	United States of America	15/081,166	25-Mar-16	Issued
SYSTEMS AND METHODS TO BUILD A MONITORING FABRIC	United States of America	16/121,247	4-Sep-18	Pending
OPTIMIZATION OF SERVICE IN-LINE CHAIN TRAFFIC	United States of America	15/081,201	25-Mar-16	Issued
SYSTEMS AND METHODS TO SECURELY CONSTRUCT A NETWORK FABRIC	United States of America	15/234,757	11-Aug-15	Pending
SECURELY CONSTRUCTING A NETWORK FABRIC	PCT	PCT/US2017/046239	30-Aug-17	Pending
SYSTEMS AND METHODS TO MANAGE MULTICAST TRAFFIC	United States of America	15/227,856	3-Aug-16	Pending
SYSTEMS AND METHODS TO CENTRALLY MANAGE MULTICAST TRAFFIC	PCT	PCT/US2017/045254	3-Aug-17	Pending
SYSTEMS AND METHODS FOR NETWORK ADDRESS TRANSLATION	United States of America	15/225,368	1-Aug-16	Pending
SYSTEMS AND METHODS FOR NETWORK ADDRESS TRANSLATION	PCT	PCT/US2017/044508	28-Jul-17	Pending

SCHEDULE C

TRADEMARKS

Trademark	Country	App Date	App Number	Reg Date	Reg Number	Status
BIG CLOUD FABRIC	Australia	25-Nov-2015	1737021	04-May-2016	1737021	Registered
BIG CLOUD FABRIC	Brazil	26-Nov-2015	910329370			Pending
BIG CLOUD FABRIC	Canada	15-May-2017	1837675			Pending
BIG CLOUD FABRIC	China	02-Nov-2016	21762863	14-Jan-2018	21762863	Registered
BIG CLOUD FABRIC	EUTM	25-Nov-2015	014830681	23-Mar-2016	014830681	Registered
BIG CLOUD FABRIC	Hong Kong	26-Oct-2016	303943152	09-Jun-2017	303943152	Registered
BIG CLOUD FABRIC	India	16-Jun-2017	3572685	22-Dec-2017	3572685	Registered
BIG CLOUD FABRIC	Israel	01-Jun-2017	294928	01-Aug-2018	294928	Registered
BIG CLOUD FABRIC	Japan	26-Nov-2015	2015115973	05-Feb-2016	5824577	Registered
BIG CLOUD FABRIC	New Zealand	25-Oct-2016	1053639	27-Apr-2017	1053639	Registered
BIG CLOUD FABRIC	South Korea	26-Nov-2015	4020150087366	16-Dec-2016	401221943	Registered
BIG CLOUD FABRIC	Switzerland	22-Oct-2016	629607016	30-May-2017	702841	Registered
BIG CLOUD FABRIC	Taiwan	25-Nov-2015	104070395	16-Nov-2016	01803248	Registered
BIG CLOUD FABRIC	United Kingdom	30-May-2017	3234283	20-Oct-2017	UK00003234283	Registered
BIG CLOUD FABRIC	United States	26-May-2015	86641057	22-May-2018	5472401	Registered

BIG MONITORING FABRIC	Australia	25-Oct-2016	1804758	17-May-2017	1804758	Registered
BIG MONITORING FABRIC	Brazil	24-Oct-2016	911809228	21-Aug-2018	911809228	Registered
BIG MONITORING FABRIC	Canada	15-May-2017	1837677			Pending
BIG MONITORING FABRIC	China	02-Nov-2016	21762870	14-Jan-2018	21762870	Registered
BIG MONITORING FABRIC	EUTM	24-Oct-2016	015960073	24-Feb-2017	015960073	Registered
BIG MONITORING FABRIC	Hong Kong	26-Oct-2016	303943170	09-Jun-2017	303943170	Registered
BIG MONITORING FABRIC	India	16-Jun-2017	3572686	22-Dec-2017	3572686	Registered
BIG MONITORING FABRIC	Israel	01-Jun-2017	294929	01-Aug-2018	294929	Registered
BIG MONITORING FABRIC	Japan	31-Oct-2016	2016120848	07-Jul-2017	5962447	Registered
BIG MONITORING FABRIC	New Zealand	25-Oct-2016	1053638	27-Apr-2017	1053638	Registered
BIG MONITORING FABRIC	Singapor e	12-Apr-2017	40201706404R	20-Jul-2017	4020170640 4R	Registered
BIG MONITORING FABRIC	South Korea	24-Oct-2016	4020160088381	13-Jun-2017	401260394	Registered
BIG MONITORING FABRIC	Switzerland	22-Oct-2016	629622016	30-May-2017	702842	Registered

BIG MONITORING FABRIC	Taiwan	24-Oct-2016	105062781	01-Jun-2017	01843569	Registered
BIG MONITORING FABRIC	United Kingdom	30-May-2017	3234287	18-Aug-2017	UK00003234287	Registered
BIG MONITORING FABRIC	United States	12-Oct-2016	87201270			Pending
BIG SWITCH NETWORKS	Australia	21-Oct-2016	1820017 / A0062435	21-Oct-2016	1820017 / IR 1328207	Registered
BIG SWITCH NETWORKS	Brazil	24-Oct-2016	911809155	21-Aug-2018	911809155	Registered
BIG SWITCH NETWORKS	Canada	15-May-2017	1837668			Pending
BIG SWITCH NETWORKS	Canada	15-May-2017	1837665			Pending
BIG SWITCH NETWORKS	EUTM	17-Jan-2011	009662966	23-Jun-2011	009662966	Registered
BIG SWITCH NETWORKS	Hong Kong	26-Oct-2016	303943189			Pending
BIG SWITCH NETWORKS	India	21-Oct-2016	3570079 / A0062435		IR 1328207	Pending
BIG SWITCH NETWORKS	Israel	21-Oct-2016	A0062435	21-Oct-2016	IR 1328207	Registered
BIG SWITCH NETWORKS	Japan	24-Jan-2011	2011004036	24-Jun-2011	5421461	Registered
BIG SWITCH NETWORKS	New Zealand	21-Oct-2016	A0062435 / 1058861	21-Oct-2016	IR 1328207	Registered
BIG SWITCH NETWORKS	Singapore	12-Apr-2017	40201706402W	20-Jul-2017	40201706402W	Registered
BIG SWITCH NETWORKS	South Korea	1-Oct-2016	A0062435	21-Oct-2016	IR 1328207	Registered
BIG SWITCH NETWORKS	Switzerland	17-Jan-2011	505742011	09-May-2011	615045	Registered

BIG SWITCH NETWORKS	Taiwan	24-Oct-2016	105062783	16-Jul-2017	01856433	Registered
BIG SWITCH NETWORKS	United Kingdom	21-Oct-2016	A0062435	21-Oct-2016	IR 1328207	Registered
BIG SWITCH NETWORKS	United States	12-Oct-2016	87201269			Pending
BIG SWITCH NETWORKS	United States	27-Jul-2010	85980014	26-Nov-2013	4441525	Registered
BIG SWITCH NETWORKS WIPO		21-Oct-2016	A0062435	21-Oct-2016	IR 1328207	Registered
BIG SWITCH NETWORKS (and Chinese characters)	China	20-Jun-2018	31702491			Pending
BIG SWITCH NETWORKS (and Chinese characters)	China	20-Jun-2018	31702492			Pending
BIG SWITCH NETWORKS Logo	Australia	01-Nov-2016	A0062685	01-Nov-2016	1831939 / IR 1334818	Registered
BIG SWITCH NETWORKS Logo	Brazil	24-Oct-2016	911809058			Pending
BIG SWITCH NETWORKS Logo	Canada	15-May-2017	1837671			Pending
BIG SWITCH NETWORKS Logo	China	01-Nov-2016	A0062685	01-Nov-2016	IR 1334818	Registered
BIG SWITCH NETWORKS Logo	EUTM	01-Nov-2016	A0062685	01-Nov-2016	IR 1334818	Registered
BIG SWITCH NETWORKS Logo	India	01-Nov-2016	A0062685	01-Nov-2016	3570403 / IR 1334818	Registered

BIG SWITCH NETWORKS Logo	Israel	01-Nov-2016	A0062685	01-Nov-2016	IR 1334818	Registered
BIG SWITCH NETWORKS Logo	Japan	01-Nov-2016	A0062685	01-Nov-2016	IR 1334818	Registered
BIG SWITCH NETWORKS Logo	New Zealand	01-Nov-2016	A0062685	01-Nov-2016	106 2608 / IR 1334818	Registered
BIG SWITCH NETWORKS Logo	South Korea	01-Nov-2016	A0062685	01-Nov-2016	IR 1334818	Registered
BIG SWITCH NETWORKS Logo	Switzerland	01-Nov-2016	A0062685	01-Nov-2016	IR 1334818	Registered
BIG SWITCH NETWORKS Logo	United Kingdom	01-Nov-2016	A0062685	01-Nov-2016	IR 1334818	Registered
BIG SWITCH NETWORKS Logo	United States	12-Oct-2016	87201264			Pending
BIG SWITCH NETWORKS Logo	WIPO	01-Nov-2016	A0062685	01-Nov-2016	IR 1334818	Registered
BIG SWITCH NETWORKS Logo (in color)	Hong Kong	26-Oct-2016	303943161	01-Jun-2017	303943161	Registered
BIG SWITCH NETWORKS Logo (in color)	Taiwan	24-Oct-2016	105062780	16-Jul-2017	01856432	Registered
BIG SWITCH NETWORKS Logo (in color) (series)	Singapore	12-Apr-2017	40201706426P	20-Jul-2017	40201706426P	Registered
BIGSECURE	Australia	11-May-2017	A0067010 / 1876213	11-May-2017	1876213 / IR 1366266	Registered
BIGSECURE	Brazil	12-May-2017	912713356			Pending
BIGSECURE	Brazil	12-May-2017	912711795			Pending

BIGSECURE	Canada	15-May-2017	1837663			Pending
BIGSECURE	China	11-May-2017	A0067010		IR 1366266	Pending
BIGSECURE	EUTM	11-May-2017	A0067010	11-May-2017	IR 1366266	Registered
BIGSECURE	Hong Kong	12-May-2017	304138524			Pending
BIGSECURE	India	11-May-2017	A0067010		IR 1366266	Pending
BIGSECURE	Japan	11-May-2017	A0067010	11-May-2017	IR 1366266	Registered
BIGSECURE	New Zealand	11-May-2017	A0067010	11-May-2017	IR 1366266	Registered
BIGSECURE	Singapore	11-May-2017	A0067010	11-May-2017	IR 1366266	Registered
BIGSECURE	South Korea	11-May-2017	A0067010		IR 1366266	Pending
BIGSECURE	Switzerland	11-May-2017	A0067010	11-May-2017	IR 1366266	Registered
BIGSECURE	Taiwan	12-May-2017	106028421	01-Feb-2018	01896911	Registered
BIGSECURE	United Kingdom	11-May-2017	A0067010	11-May-2017	IR 1366266	Registered
BIGSECURE	United States	14-Nov-2016	87236211			Pending
BIGSECURE	WIPO	11-May-2017	A0067010	11-May-2017	IR 1366266	Registered
FLOODLIGHT	EUTM	17-Feb-2012	010654218	26-Jul-2012	010654218	Registered
FLOODLIGHT	United States	14-Oct-2011	85447680	27-Aug-2013	4392919	Registered
ONLX	Australia	27-Dec-2017	1897265			Pending
ONLX	Brazil	05-Jan-2018	913985988			Pending
ONLX	Canada	10-Jan-2018	1876888			Pending
ONLX	China	28-Dec-2017				Pending
ONLX	EUTM	27-Dec-2017	017637422			Pending

ONLX	Hong Kong	10-Jan-2018	304393387	11-Jun-2018	304393387	Registered
ONLX	India	20-Jan-2018	3733384	17-Jul-2018	3733384	Registered
ONLX	Israel	24-Dec-2017	301381			Pending
ONLX	Japan	09-Jan-2018	2018002076	03-Aug-2018	6068492	Registered
ONLX	New Zealand	03-Jan-2018	1083871			Pending
ONLX	Singapore	27-Dec-2017	40201725670X			Pending
ONLX	South Korea	26-Dec-2017	4020170166167			Pending
ONLX	Switzerland	27-Dec-2017	664802017	21-Jun-2018	717997	Registered
ONLX	Taiwan	26-Dec-2017	106082451	01-Sep-2018	01935225	Registered
ONLX	United Kingdom	27-Dec-2017	3279385	30-Mar-2018	3279385	Registered
ONLX	United States	U 24-Jul-2017	87540803			Pending
OPEN SDN	EUTM	04-Jul-2012	011015724	10-May-2013	011015724	Registered
OPEN SDN	Japan	04-Jul-2012	2012054051	02-Nov-2012	5533643	Registered