

TRADEMARK ASSIGNMENT COVER SHEET

Electronic Version v1.1
Stylesheet Version v1.2

ETAS ID: TM786208

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	RELEASE OF SECURITY INTEREST

CONVEYING PARTY DATA

Name	Formerly	Execution Date	Entity Type
Canadian Imperial Bank of Commerce		01/12/2023	Chartered Bank:

RECEIVING PARTY DATA

Name:	SIERRA WIRELESS AMERICA, INC.
Street Address:	13811 Wireless Way
City:	Richmond, B.C.
State/Country:	CANADA
Postal Code:	V6V 3A4
Entity Type:	Corporation: CANADA

PROPERTY NUMBERS Total: 3

Property Type	Number	Word Mark
Registration Number:	3902433	AIRLINK
Registration Number:	3510793	ALEOS
Registration Number:	4013326	UPLINK

CORRESPONDENCE DATA**Fax Number:** 6046437900*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:** 16046437942**Email:** rrodrigues@mccarthy.ca**Correspondent Name:** Vincent Yip, c/o MCCARTHY TETRAULT LLP**Address Line 1:** 745 Thurlow Street, Suite 2400**Address Line 4:** Vancouver, BC, CANADA V6E 0C5

NAME OF SUBMITTER:	Vincent Kam Sun Yip
SIGNATURE:	/VincentKamSunYip/
DATE SIGNED:	02/10/2023

Total Attachments: 55

source=Release of Security Interest - IP- Sierra Wireless (Subordinate) (Executed)datedJAN2023#page1.tif

source=Release of Security Interest - IP- Sierra Wireless (Subordinate) (Executed)datedJAN2023#page2.tif

source=Release of Security Interest - IP- Sierra Wireless (Subordinate) (Executed)datedJAN2023#page3.tif

OP \$90.00 3902433

source=Release of Security Interest - IP- Sierra Wireless (Subordinate) (Executed)datedJAN2023#page52.tif
source=Release of Security Interest - IP- Sierra Wireless (Subordinate) (Executed)datedJAN2023#page53.tif
source=Release of Security Interest - IP- Sierra Wireless (Subordinate) (Executed)datedJAN2023#page54.tif
source=Release of Security Interest - IP- Sierra Wireless (Subordinate) (Executed)datedJAN2023#page55.tif

TERMINATION AND RELEASE OF SECURITY INTEREST IN INTELLECTUAL PROPERTY

DATED: January 12, 2023

This TERMINATION AND RELEASE OF SECURITY INTEREST IN INTELLECTUAL PROPERTY (“**Termination and Release**”) is made by **Canadian Imperial Bank of Commerce**, as agent (in such capacity, the “**Agent**”), having a branch office and postal address at 595 Bay Street, 7th Floor, Toronto, Ontario, M5G 2C2, in favor of Sierra Wireless Inc. (the “**Borrower**”) and Sierra Wireless America, Inc. (“**America**” and, together with Borrower, the “**Obligors**” and each an “**Obligor**”).

RECITALS:

- A. As security for payment and performance of the Obligations, each Obligor collaterally assigned, transferred and conveyed to the Agent, and granted to the Agent a security interest in, all of the Obligor’s right, title and interest, in, to and under the **Collateral** or the **Intellectual Property** (as such terms are defined in the Security Agreements referred to below), as applicable, including the intellectual property registrations and applications set forth in Schedule "A" hereto owned by Sierra Wireless, Inc. and Sierra Wireless America, Inc., as applicable, pursuant to (a) an Intellectual Property Security Agreement made by the Obligors in favour of the Agent dated January 19, 2022, (b) a Trademark Security Agreement between America and the Agent, dated January 19, 2022, and (c) a Patent Security Agreement between America and the Agent dated January 19, 2022 (collectively, the "**Security Agreements**").
- B. The Agent caused such Security Agreements to be recorded at the Canadian Intellectual Property Office, the United States Patent and Trademark Office, the United States Copyright Office, or such other office or registry as was appropriate against the Intellectual Property, as applicable, with the recordation details as set out on Schedule “B” hereto.
- C. The Agent wishes to terminate the Security Agreements and to release its security interests thereunder, including its security interest in the Collateral and the Intellectual Property of the Obligors (as those terms are defined in the Security Agreements), including, but not limited to, the intellectual property registrations and applications set forth in Schedule "A" hereto.

NOW THEREFORE, for good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the Agent hereby forever releases, terminates and discharges all security interests granted to it under the Security Agreements, including its security interest in the Collateral and the Intellectual Property (as such terms are defined in the Security Agreements), and any right, title or interest of the Agent in the Collateral and Intellectual Property shall hereby cease and become void.

The Agent hereby terminates and cancels the Security Agreements.

The Agent hereby agrees, upon the reasonable request and at the sole expense of the Obligors, to duly execute, acknowledge, procure and deliver any further documents and to do such other acts as may be reasonably necessary to effect the release of the security interest in the Collateral and the Intellectual Property contemplated hereby.

Unless otherwise defined herein or the context otherwise requires, capitalized terms used in this Termination and Release, including its preamble and recitals, have the meanings provided or provided by reference in the (i) Security Agreements, or (ii) the Credit Agreement dated as of January 19, 2022, between and among the Borrower, as borrower, America, as guarantor, the other credit parties from time to time party thereto, Canadian Imperial Bank of Commerce, Business Development Bank of Canada and the other financial institutions party from time to time thereto, as lenders, and the Agent, as agent (as amended, supplemented or otherwise modified from time to time), as applicable.

[Signature Page Follows]

DATED as of the date set forth above.

**CANADIAN IMPERIAL BANK OF COMMERCE,
as Agent**

By:



Name: Mark McQueen

Title: Executive MD, Authorized Signatory



Name: Adam Weiers

Title: Director, Authorized Signatory

SCHEDULE "A"

INTELLECTUAL PROPERTY

PATENTS

Type	Country	Title	Status	Official Filing Date	Publication No.	Publication Date	Patent/Registration No.	Issue Date	Expiry Date	Assignee
PAT	US	Methods and apparatuses for supporting multi transport block grant data transmission	Published	24-Feb-21	US 2021-273751	2-Sep-21				Sierra Wireless, Inc.
PAT	US	Method and apparatus for resource allocation for half duplex frequency division duplexing in a wireless communication system	Published	8-Oct-20	US 2021-028918	28-Jan-21				Sierra Wireless, Inc.
PAT	US	Method and Apparatus for Facilitating Transmissions In A Wireless Communication System	Issued	2-Oct-20	US 2021-105099	8-Apr-21	11,381,349	5-Jul-22	2-Oct-40	Sierra Wireless, Inc.
PAT	US	Methods and apparatuses for small data transmissions	Published	5-Sep-19	US 2020-092905	19-Mar-20				Sierra Wireless, Inc.
PAT	US	Method and apparatus for multi-transport	Issued	9-Aug-19	US 2020-053750	13-Feb-20	11,419,131	16-Aug-22	14-Aug-39	Sierra Wireless, Inc.

		block grant transmissions								
PAT	US	Methods and systems for remote software update	Issued	1-Aug-19	US 2020-042313	6-Feb-20	11,169,796	9-Nov-21	1-Aug-39	Sierra Wireless, Inc.
LP	US	LAN/WWAN GATEWAY CARRIER CUSTOMIZATION	Issued	10-Nov-06	US 2007-0104169	10-May-07	8,054,778	8-Nov-11		Sierra Wireless America Inc.
LP	US	GATEWAY NETWORK MULTIPLEXING	Issued	10-Nov-06	US 2007-0104168	10-May-07	8,121,071	21-Feb-12		Sierra Wireless America Inc.
LP	CA	Cognitive Wireless System	Issued	7-Jan-11	CA 2,730,269	14-Jan-11	2,730,269	17-Apr-18		Sierra Wireless
PAT	CN	Method and Apparatus for Facilitating Push Communication across a Network Boundary	Issued	12-May-10	CN 102714636 A	3-Oct-12	ZL 2010800600 40.5	25-Nov-15	12-May-30	Sierra Wireless, Inc.
PAT	US	Minimise PDP Activations	Issued	17-Nov-09	US 2010-0124191	20-May-10	8,228,848	24-Jul-12	18-Jun-30	Sierra Wireless, Inc.
PAT	CN	Method and Apparatus for Managing Wireless Communication Based on Network Traffic Level	Issued	22-Jun-11	CN 102948192 A	27-Feb-13	ZL2011800 31107.7	29-Jun-16	22-Jun-31	Sierra Wireless, Inc.
PAT	US	METHOD AND APPARATUS FOR MANAGING WIRELESS COMMUNICATION	Issued	21-Jun-11	US 2010-0099430	26-Apr-12	8,964,549	24-Feb-15	4-Nov-31	Sierra Wireless, Inc.

		BASED ON NETWORK TRAFFIC LEVEL									
PAT	AU	Method and System for Performing Position Updates in a Wireless Communication System	Issued	11-May-10				2010246848	8-Jan-15	11-May-30	Sierra Wireless, Inc.
US	US	Method and System for Performing Position Updates in a Wireless Communication System	Issued	11-May-10	US 2010-0285816	11-Nov-10	8,494,551		23-Jul-13	1-Aug-31	Sierra Wireless, Inc.
PAT	US	ACTIVE/STANDBY OPERATION OF A FEMTOCELL BASE STATION	Issued	4-Aug-10	US 2012-0033611	9-Feb-12	8,520,634		27-Aug-13	16-Sep-31	Sierra Wireless, Inc.
PAT	CN	Method and Apparatus for Managing Communications in a Wireless Communication System	Issued	9-Oct-12	201180018182.X	19-Dec-12	ZL 201180018182.X		20-Jan-16	15-Feb-31	Sierra Wireless, Inc.
LP	DE	Method and Apparatus for Managing Communications in a Wireless Communication System	Validati on	14-Sep-12	2537366	26-Dec-12	2537366		7-Nov-18		Sierra Wireless, Inc.

LP	FR	Method and Apparatus for Managing Communications in a Wireless Communication System	Validati on	14-Sep-12	2537366	26-Dec-12	2537366	7-Nov-18	Sierra Wireless, Inc.
LP	GB	Method and Apparatus for Managing Communications in a Wireless Communication System	Validati on	14-Sep-12	2537366	26-Dec-12	2537366	7-Nov-18	Sierra Wireless, Inc.
PAT	US	METHOD AND APPARATUS FOR MANAGING COMMUNICATIONS IN A WIRELESS COMMUNICATION SYSTEM	Issued	15-Feb-11	US 2011/0199901	18-Aug-11	8,565,080	22-Oct-13	8-Nov-31 Sierra Wireless, Inc.
US	US	MANAGING COMMUNICATION OPERATIONS OF WIRELESS DEVICES	Issued	25-Apr-11	US 2011/0261891	27-Oct-11	8,582,631	12-Nov-13	Sierra Wireless, Inc.
PAT	US	Self-Provisioning Antenna System and Method	Issued	1-Dec-10	US 2012/0139788	7-Jun-12	8,405,547	26-Mar-13	Sierra Wireless America Inc.
PAT	DE	TLS Abbreviated Session Identifier Protocol	Validati on	9-May-13	2850776/DE602 013027219.0	25-Mar-15	EP2850776	27-Sep-17	Sierra Wireless, Inc.

PAT	GB	TLS Abbreviated Session Identifier Protocol	Validati on	9-May-13		25-Mar-15	EP2850776	27-Sep-17		Sierra Wireless, Inc.
PAT	US	TLS Abbreviated Session Identifier Protocol	Issued	14-May-12	US-2013-0305036	14-Nov-13	8,843,738	27-Sep-14	14-May-32	Sierra Wireless, Inc.
PAT	US	Method And Apparatus For Management Of Network Communications	Issued	7-May-12	US-2012-0284385-A1	8-Nov-12	8,972,556	3-Mar-15	15-Oct-32	Sierra Wireless, Inc.
PAT	US	Subscription and Charging Control for Wireless Communications Between Proximate Devices	Issued	1-Feb-13	US 2013/0203378	8-Aug-13	9,854,423	26-Dec-17		Sierra Wireless, Inc.
PAT	US	Method and System for Radio Resource Allocation	Pending	2-Jun-16	US 2016/0278098	22-Sep-16				Sierra Wireless, Inc.
PAT	DE	Method and System for Radio Resource Allocation	Issued	4-Oct-13	2904867	12-Aug-15	2904867	-		Sierra Wireless, Inc.
PAT	EP	Method and System for Radio Resource Allocation	Issued	4-Oct-13	2904867	12-Aug-15	2904867	-		Sierra Wireless, Inc.
PAT	FR	Method and System for Radio Resource Allocation	Issued	4-Oct-13	2904867	12-Aug-15	2904867	-		Sierra Wireless, Inc.
PAT	GB	Method and System for Radio Resource Allocation	Issued	4-Oct-13	2904867	12-Aug-15	2904867	-		Sierra Wireless, Inc.

PAT	US	Method and System for Wireless Communication with Machine-to-Machine Devices	Issued	13-Dec-13	US-2014-0105009	17-Apr-14	9,445,302	13-Sep-16	12-Jul-33	Sierra Wireless, Inc.
PAT	US	Wireless Communication with Machine-to-Machine Devices	Issued	14-Jun-13	US-2013-0336111	19-Dec-13	9,380,430	28-Jun-16	6-Mar-34	Sierra Wireless, Inc.
VAL	DE	Method, Apparatus and System for Uplink Radio Resource Allocation in an LTE Communication System	Validati on	4-Oct-13	2904864	12-Aug-15	2904864	18-Sep-19		Sierra Wireless, Inc.
VAL	FR	Method, Apparatus and System for Uplink Radio Resource Allocation in an LTE Communication System	Validati on	4-Oct-13	2904864	12-Aug-15	2904864	18-Sep-19		Sierra Wireless, Inc.
VAL	GB	Method, Apparatus and System for Uplink Radio Resource Allocation in an LTE Communication System	Validati on	4-Oct-13	2904864	12-Aug-15	2904864	18-Sep-19		Sierra Wireless, Inc.
PAT	US	Method, Apparatus and System for Uplink Radio Resource Allocation in an LTE Communication System	Issued	4-Oct-13	US-2014-0098781	10-Apr-14	10,455,575	22-Oct-19		Sierra Wireless, Inc.

PAT	DE	Method and System for Providing Differentiated Wireless Network Access and Billing to Subscribers	Validati on	2-Apr-14	2989814	2-Mar-16	2989814, DE60 2014 046 442.4.	8-May- 19	Sierra Wireless, Inc.
PAT	EP	Method and System for Providing Differentiated Wireless Network Access and Billing to Subscribers	Issued	2-Apr-14	2989814	2-Mar-16	2989814	8-May- 19	Sierra Wireless, Inc.
PAT	FR	Method and System for Providing Differentiated Wireless Network Access and Billing to Subscribers	Validati on	2-Apr-14	2989814	2-Mar-16	2989814	8-May- 19	Sierra Wireless, Inc.
PAT	UK	Method and System for Providing Differentiated Wireless Network Access and Billing to Subscribers	Validati on	2-Apr-14	2989814	2-Mar-16	2989814	8-May- 19	Sierra Wireless, Inc.
PAT	NL	Method and System for Providing Differentiated Wireless Network Access and Billing to Subscribers	Validati on	2-Apr-14	2989814	2-Mar-16	2989814	8-May- 19	Sierra Wireless, Inc.
LP	US	Method and System for Providing Differentiated	Issued	2-Apr-14	US-2014- 0295790	2-Oct-14	9,948,789	17-Apr- 18	Sierra Wireless, Inc.

		Wireless Network Access and Billing to Subscribers								
PAT	CN	Method and System for Hybrid Automatic Repeat Request Combining on an LTE Downlink Control Channel	Issued	28-Dec-12	CN105009630A	28-Oct-15	ZL201380073980.1	27-Sep-19	8-Aug-33	Sierra Wireless, Inc.
VAL	DE	Method and System for Hybrid Automatic Repeat Request Combining on an LTE Downlink Control Channel	Validati on	8-Aug-13	2939464	4-Nov-15	2939464	7-Mar-18		Sierra Wireless, Inc.
VAL	FR	Method and System for Hybrid Automatic Repeat Request Combining on an LTE Downlink Control Channel	Validati on	8-Aug-13	2939464	4-Nov-15	2939464	7-Mar-18		Sierra Wireless, Inc.
VAL	GB	Method and System for Hybrid Automatic Repeat Request Combining on an LTE Downlink Control Channel	Validati on	8-Aug-13	2939464	4-Nov-15	2939464	7-Mar-18		Sierra Wireless, Inc.
PAT	US	Method and System for Hybrid Automatic Repeat Request Combining on an LTE Downlink Control Channel	Issued	28-Dec-12	US-2014-0185534	3-Jul-14	9,144,066	22-Sep-15	21-May-33	Sierra Wireless, Inc.

PAT	US	Method and Device Enabling A Dynamic Bundle Size HARQ Mechanism	Issued	1-Aug-13	US-2015-0039958	5-Feb-15	9,184,880	10-Nov-15		Sierra Wireless, Inc.
PAT	US	Method and Device for Communication between a Device and a Server	Issued	15-Mar-07	US 2009/0216344	27-Aug-09	8,484,285	9-Jul-13	15-Mar-27	Sierra Wireless, Inc.
PAT	US	Method And Apparatus For Broadcast Channel Decoding	Issued	2-Apr-14	US-2014-0301296	9-Oct-14	9,369,230	14-Jun-16	25-Apr-34	Sierra Wireless, Inc.
PAT	US	Method and Apparatus for Determining Time-Varying Limitations of A Power Source	Issued	24-May-13	US-2014-0347100	27-Nov-14	9,075,086	7-Jul-15	4-Jul-33	Sierra Wireless, Inc.
LP	US	Method and Apparatus for Communication of System Information in a Wireless System	Issued	25-Apr-14	US-2014-0334372	13-Nov-14	10,009,831	26-Jun-18		Sierra Wireless, Inc.
PAT	EP	Method and Apparatus for Electrical Keying of an Integrated Circuit Package Having Rotationally Symmetric Footprint	Pending	30-Sep-14						Sierra Wireless, Inc.
PAT	US	Method and Apparatus for Electrical Keying of an Integrated Circuit Package Having Rotationally Symmetric Footprint	Issued	1-Oct-13	US-2015-0091390	2-Apr-15	9,668,356	30-May-17		Sierra Wireless, Inc.

PAT	US	Wireless Device Customization Resources	Issued	24-Feb-15	US-2015-0245215	27-Aug-15	9,894,523	13-Feb-18	24-Feb-35	Sierra Wireless, Inc.
PAT	EP	Method and Apparatus for Communicating with LTE Terminals Having Restricted Capabilities	Allowed	26-Sep-14	EP3050389					Sierra Wireless, Inc.
PAT	DE	Method and Apparatus for Communicating with LTE Terminals Having Restricted Capabilities	Allowed	26-Sep-14	EP3050389					Sierra Wireless, Inc.
PAT	FR	Method and Apparatus for Communicating with LTE Terminals Having Restricted Capabilities	Allowed	26-Sep-14	EP3050389					Sierra Wireless, Inc.
PAT	GB	Method and Apparatus for Communicating with LTE Terminals Having Restricted Capabilities	Allowed	26-Sep-14	EP3050389					Sierra Wireless, Inc.
PAT	NL	Method and Apparatus for Communicating with LTE Terminals Having Restricted Capabilities	Allowed	26-Sep-14	EP3050389					Sierra Wireless, Inc.
PAT	US	Method and Apparatus for Communicating with LTE Terminals Having Restricted Capabilities	Issued	26-Sep-13	US 2015/0085689	26-Mar-15	9,716,988	25-Jul-17	26-Sep-34	Sierra Wireless, Inc.

PAT	US	Abbreviated Blind Detection in Wireless Communication Systems including LTE	Issued	15-Mar-14	US-2015-0264665	17-Sep-15	9,681,256	13-Jun-17	Sierra Wireless, Inc.
PAT	US	Method, Apparatus And System For Gesture Based Security	Issued	9-Dec-14	US-2016-0162676	09-Jun-16	10,346,603	09-Jul-19	Sierra Wireless, Inc.
PAT	US	Method and Apparatus for Communicating System Information and Random Access in a Wireless System	Issued	7-Apr-16	US-2016-0302024	13-Oct-16	10,111,067	23-Oct-18	Sierra Wireless, Inc.
PAT	EP	Method and Apparatus for Resource Allocation for Half Duplex Frequency Division Duplexing in a Wireless Communication System	Published	13-May-16	3295701	21-Mar-18			Sierra Wireless, Inc.
PAT	US	Method and Apparatus for Resource Allocation for Half Duplex Frequency Division Duplexing in a Wireless Communication System	Issued	16-May-16	US-2016-0338089	17-Nov-16	10,819,496	27-Oct-20	Sierra Wireless, Inc.
PAT	EP	Method and System for Transmitting	Validated	18-Apr-18	EP3354064		EP3354064	20-Jan-21	Sierra Wireless, Inc.

		Control Information for User Equipment								
PAT	US	Method and System for Transmitting Control Information for User Equipment	Issued	26-Sep-16	US-2017-0094644-A1	30-Mar-17	10,225,829	5-Mar-19		Sierra Wireless, Inc.
PAT	EP	Method and System for Paging User Equipment	Pending	19-Apr-18						
PAT	US	Method and System for Paging User Equipment	Issued	3-Oct-16	US-2017-0099649-A1	6-Apr-17	11,382,060	5-Jul-22	6-Sep-37	Sierra Wireless, Inc.
PAT	EP	Method and Apparatus for Paging Terminals in a Wireless Communication System	Pending	24-May-18						Sierra Wireless, Inc.
LP	US	Method and Apparatus for Paging Terminals in a Wireless Communication System	Issued	4-Nov-16	US-2017-0135066-A1	11-May-17	10271302	23-Apr-19		Sierra Wireless, Inc.
PAT	EP	Methods and Apparatuses for User Equipment Access to a Wireless Communication System	Published	29-Sep-17	EP3520545	7-Aug-19	EP3520545	29-Dec-21	29-Sep-37	Sierra Wireless, Inc.
PAT	US	Methods and Apparatuses for User Equipment Access to a Wireless	Issued	29-Sep-17	US2018/098360	5-Apr-18	11,202,324	14-Dec-21	29-Sep-37	Sierra Wireless, Inc.

		Communication System											
PAT	CN	Method and Apparatus for Secure Computing Device Start Up	Published	22-Mar-18	CN110494856A	22-Nov-19							Sierra Wireless, Inc.
PAT	EP	Method and Apparatus for Secure Computing Device Start Up	Pending	22-Mar-19	3602375	5 Feb. 2020							Sierra Wireless, Inc.
PAT	WO	Method and Apparatus for Secure Computing Device Start Up	Published	22-Mar-18	WO2018/176125	4-Oct-18							Sierra Wireless, Inc.
PAT	US	Method and Apparatus for Secure Computing Device Start Up	Issued	28-Mar-18	US20180285570 A1	4-Oct-18	11,048,801			29-Jun-20			Sierra Wireless, Inc.
PAT	US	Protection Circuit Involving Positive Temperature Coefficient Device	Issued	2-Mar-18	US20190273373	5-Sep-19	10,868,416			15-Dec-20			Sierra Wireless, Inc.
PAT	US	Method and System for Using Enhanced Primary Synchronization Signal	Issued	2-May-18	2018/0324722	8-Nov-18	10,764,847			1-Sep-20			Sierra Wireless, Inc.
PAT	EP	Method and Apparatus for Indicating a System Information Block Change	Published	8-Aug-18	18844149.7								
PAT	US	Method and Apparatus for Indicating a System Information Block Change	Issued	8-Aug-18	US2019/053156	14-Feb-19	11,172,442			9-Nov-21		8-Aug-38	Sierra Wireless, Inc.

PAT	US	Method and Apparatus for Secure Software Update	Issued	15-Jun-18	US20190384586		10,977,024	13-Apr-21		Sierra Wireless, Inc.
PAT	US	2 T one in-phase pi/2 BPSK Sub-PRB Modulation	Issued	15-Nov-18	US20190149381 A1	16-May-19	10,931,492	23-Feb-21		Sierra Wireless, Inc.
PAT	US	Methods and Apparatuses For Phase Rotation in 2 Sub Carrier Pi/2 Binary Phase Shift Keying Communication	Issued	16-Jan-19	US20190222447 A1	18-Jul-19	10,630,445	21-Apr-20		Sierra Wireless, Inc.
PAT	WO	DMRS for a 2 sub-carrier pi/2 BPSK Modulation in an OFDMA system, Joint filing with D18010410 as Methods and Apparatuses for Implementation of Cyclic Prefix and Demodulation Reference Signals in 2 Sub-Carrier Pi/2 Binary Phase Shift Keying Modulation in a Communication System	Published	16-Jan-19	WO2019140519	25-Jul-19				Sierra Wireless, Inc.
PAT	US	DMRS for a 2 sub-carrier pi/2 BPSK Modulation in an OFDMA system	Published	16-Jan-19	US20190222388	18-Jul-19				Sierra Wireless, Inc.

PAT	US	Method and Apparatus for Multi-Transport Block Grant Transmissions (Multi-DCI TBI HARQ)	Published	9-Aug-18	US20200053769	13-Feb-20				Sierra Wireless Inc.
PAT	WO	Method and Apparatus for Communication of System Information in a Wireless System	Pending	3-Sep-19	WO2020/047655	12-Mar-20				Sierra Wireless Inc.
PAT	US	Method and Apparatus for Communication of System Information in a Wireless System	Published	5-Sep-19	US2020/0092905	19-Mar-19				Sierra Wireless Inc.
PAT	US	Method and Apparatus for Supporting Two-step Random Access Channel Usage in a Wireless Communication System	Issued	14-Feb-20	US 2020-267774	20-Aug-20	11,395,343	19-Jul-22	12-Jul-40	Sierra Wireless, Inc.
PAT	US	Method and Apparatus for Supporting Two-Step Random Access Channel Usage in a Wireless Channel Using a	Published	14-Feb-20	US2020/0267774	20-Aug-20				Sierra Wireless Inc.
PAT	US	Method and apparatus for time advance validation using reference signal received power	Issued	13-Feb-20	US 2020-260397	26-Jul-22	11,399,355	26-Jul-22	31-May-40	Sierra Wireless, Inc.

PAT	US	Methods and Apparatuses for Supporting Multi Transport Block Grant Data Transmission in a Wireless communication System	Published	27-Feb-20	US2021/0273751	2-Sep-21				Sierra Wireless, Inc.
VAL	DE	System and Method for Remotely Monitoring Modem Status	Validation	30-Jul-02	EP1415436		EP1415436	12-Sep-07		Sierra Wireless, Inc.
VAL	FR	System and Method for Remotely Monitoring Modem Status	Validation	30-Jul-02	EP1415436		EP1415436	12-Sep-07		Sierra Wireless, Inc.
VAL	GB	System and Method for Remotely Monitoring Modem Status	Validation	30-Jul-02	EP1415436		EP1415436	12-Sep-07	Projected to March 16, 2024 (30-Jul-21+960 PTA)	Sierra Wireless, Inc.
LP	US	System and Method for Remotely Monitoring Modem Status	Issued	30-Jul-01	US 2003-0023720	30-Jan-03	7,600,013	06-Oct-09		Sierra Wireless, Inc.
LP	US	System and Method for Remotely Monitoring Modem Status	Issued	20-Dec-01	US 2003-0120818	26-Jun-03	7,023,878	4-Apr-06		Sierra Wireless, Inc.

		Monitoring Modern Status								
PAT	US	Always-on Virtual Private Network Access	Issued	26-Jul-02	US 2004-0068666	8-Apr-04	8,707,406	22-Apr-14		Sierra Wireless, Inc.
VAL	DE	Efficient Notification Of New Electronic Mail Arrival	Validati on	2-Sep-04	EP1661305	31-May-06	1661305	8-Jan-14		Sierra Wireless, Inc.
VAL	FR	Efficient Notification Of New Electronic Mail Arrival	Validati on	2-Sep-04	EP1661305	31-May-06	1661305	8-Jan-14		Sierra Wireless, Inc.
VAL	GB	Efficient Notification Of New Electronic Mail Arrival	Validati on	2-Sep-04	EP1661305	31-May-06	1661305	8-Jan-14		Sierra Wireless, Inc.
VAL	HK	Efficient Notification Of New Electronic Mail Arrival (Previously incorrect labelled -872, Validation from EP-780, HK stage II)	Validati on	2-Sep-04	HK1092619	2-Sep-07	HK1092619	11-Apr-14		Sierra Wireless, Inc.
LP	CN	Dynamic Bus Based Virtual Channel Multiplexing Device Driver Architecture	Issued	6-Oct-06	CN101490637	22-Jul-09	ZL200680041579.X	7-Sep-11		Sierra Wireless, Inc.
PAT	DE	METHOD AND APPARATUS FOR GLOBAL NAVIGATION SATELLITE SYSTEM RECEIVER COUPLED TO A	Validati on	22-Sep-09	2331984	15-Jun-11	2331984	29-May-13		Sierra Wireless, Inc.

		HOST COMPUTER SYSTEM								
		METHOD AND APPARATUS FOR GLOBAL NAVIGATION SATELLITE SYSTEM RECEIVER COUPLED TO A HOST COMPUTER SYSTEM	Validati on	22-Sep-09	2331984	15-Jun-11	2331984	29-May-13		Sierra Wireless, Inc.
PAT	FR	METHOD AND APPARATUS FOR PORT FORWARDING IN NETWORK ADDRESS TRANSLATION	Issued	17-Nov-09	2478470	7-Sep-11	2478470	16-Apr-14		Sierra Wireless, Inc.
PAT	US	Method and Apparatus for Port Forwarding in Network Address Translation	Issued	17-Nov-09	US 2012-0023257-A1	26-Jan-12	8,812,730	19-Aug-14	31-Jan-30	Sierra Wireless, Inc.
PAT	DE	Method and System for Aggregating Communications	Validati on	12-Feb-10	2,396,937	21-Dec-11	EP2396937 (DE60 2010 046 215.3)	25-Oct-17	12-Feb-30	Sierra Wireless, Inc.
PAT	FR	Method and System for Aggregating Communications	Validati on	12-Feb-10	2,396,937	21-Dec-11	EP2396937	25-Oct-17	12-Feb-30	Sierra Wireless, Inc.
PAT	GB	Method and System for Aggregating Communications	Validati on	12-Feb-10	2,396,937	21-Dec-11	EP2396937	25-Oct-17	12-Feb-30	Sierra Wireless, Inc.

PAT	US	Method and System for Aggregating Communications	Issued	12-Feb-09	US 2010-0205260	12-Aug-10	8,924,486	30-Dec-14	31-Jul-29	Sierra Wireless, Inc.
PAT	DE	METHOD AND APPARATUS FOR ASSOCIATING INDENTITY MODULES AND TERMINAL EQUIPMENT	Validati on	17-Nov-09	2,356,836	17-Aug-11	EP2356836 / DE60 2009 043 759.3	1-Jan-17	17-Nov-29	Sierra Wireless, Inc.
PAT	FR	METHOD AND APPARATUS FOR ASSOCIATING INDENTITY MODULES AND TERMINAL EQUIPMENT	Validati on	17-Nov-09	2,356,836	17-Aug-11	EP2356836	1-Jan-17	17-Nov-29	Sierra Wireless, Inc.
PAT	GB	METHOD AND APPARATUS FOR ASSOCIATING INDENTITY MODULES AND TERMINAL EQUIPMENT	Validati on	17-Nov-09	2,356,836	17-Aug-11	EP2356836	1-Jan-17	17-Nov-29	Sierra Wireless, Inc.
PAT	NL	METHOD AND APPARATUS FOR ASSOCIATING INDENTITY MODULES AND TERMINAL EQUIPMENT	Validati on	17-Nov-09	2,356,836	17-Aug-11	EP2356836	1-Jan-17	17-Nov-29	Sierra Wireless, Inc.

PAT	US	Method and Apparatus for Associating Universal Integrated Circuit Card and Mobile Equipment	Issued	17-Nov-09	US 2011/0287740	24-Nov-11	9,628,474	18-Apr-17	17-Nov-29	Sierra Wireless, Inc.
	US	Method for switching a terminal over from a first radiocommunications network to a second radiocommunications network, corresponding computer program product, storage means and terminal	Issued	1-Oct-2014	US 2015-0094011		9,635,532	25-Apr-17	1-Oct-34	Sierra Wireless, S.A.
	US	Method and device for controlling the access of equipment for a network of the machine-to-machine type to the resources of a cellular telephony network	Issued	28-Feb-2013	US 2014-0087743		9,148,746	29-Sep-2015		Sierra Wireless, S.A.
	US	System for communicating between a non-connected equipment and a management server	Issued	1-Oct-2012	US 2013-0272195		8,902,818	2-Dec-2014		Sierra Wireless, S.A.
	US	Methods for transmitting and managing voice	Issued	16-Oct-2009	US 2010-0099400		8,289,847	16-Oct-12		Sierra Wireless, S.A.

		frames, computer program product, means of storage and corresponding devices							
	US	Device for electromagnetic shielding and dissipation of heat released by an electronic component, and corresponding electronic circuit	Issued	19-Jun-2009	US 2011-0194259		8,422,234	16-Apr-13	Sierra Wireless, S.A.
	US	Method of locating a radiocommunication device, corresponding computer program product, storage means and radiocommunication module	Issued	16-Jun-2009	US 2011-0312323		8,301,170	30-Oct-12	Sierra Wireless, S.A.
LP	MX	METODO Y SISTEMAS PARA ADMINISTRAR MODULOS DE IDENTIDAD DE SUSCRIPTORES EN REDES INALAMBRICAS PARA APLICACIONES MAQUINA-A-MAQUINA.	Issued	9-Jan-12			314,471	23-Oct-13	Sierra Wireless America, Inc.

LP	MX	ENTREGA DE DATOS Y AUDIO DE EVENTOS DEL SISTEMADE ALARMA SOBRE REDES HIBRIDAS.	Issued	6-Mar-12	WO 2012/138443	20-Jan-15	327,784		Sierra Wireless America, Inc.
LP	MX	ENTREGA DE DATOS Y AUDIO DE EVENTOS DEL SISTEMA DE ALARMA.	Issued	4-Apr-12	WO 2012/138683	25-Oct-13	327,143	20-Jan-15	Sierra Wireless America, Inc.
PAT	MX	CONTROL IMPERACTIVO DE SISTEMAS DE ALARMA POR INTERFAZ DE TELEFONO UTILIZANDO UNA PUERTA DE ENLACE INTERMEDIA.	Issued	27-Apr-12	WO 2012/149262	13-Feb-20	327,926	16-Feb-15	Sierra Wireless America, Inc.
PAT	WO	Method and Apparatus for Multi-Transport Block Grant Transmissions (Multi-TB Scheduling with Time Diversity)	Published	9-Aug-18	WO 2020/028993				Sierra Wireless, Inc.
PAT	EP	METHOD AND APPARATUS FOR MULTI-TRANSPORT BLOCK GRANT TRANSMISSIONS	Pending	9-Aug-18		23-Sep-20			Sierra Wireless, Inc.

PAT	EP	2 T one in-phase pi/2 BPSK Sub-PRB Modulation	Published	14-Nov-18	3711268	25-Nov-20				Sierra Wireless, Inc.
		"DMRS for a 2 sub-carrier pi/2 BPSK Modulation in an OFDMA system. Joint filing with D18010410 as Methods and Apparatuses for Implementation of Cyclic Prefix and Demodulation Reference Signals in 2 Sub-Carrier Pi/2 Binary Phase Shift Keying Modulation in a Communication System"								
PAT	EP	Methods and Systems for Remote Software Update	Pending	1-Aug-19	EP3830689					Sierra Wireless, Inc.
PAT	EP	Method and Apparatus for Communication of System Information in a Wireless System	Pending	3-Sep-19		25-Jul-19				Sierra Wireless, Inc.
PAT	EP	Methods and Apparatuses For Phase Rotation in 2 Sub Carrier Pi/2 Binary Phase Shift Keying Communication	Published	16-Jan-20	EP19740781.0					Sierra Wireless, Inc.

		(Focus of claims is the successful, in US, phase rotation. Note: MBM reference is as for the combined PCT filing ~306)								
PAT	EP	Method and Apparatus for Time Advance Validation Using Reference Signal Received Power	Pending	13-Feb-20		20-Aug-20				Sierra Wireless, Inc.
PAT	WO	Method and Apparatus for Supporting Two-Step Random Access Channel Usage in a Wireless Channel Using a	Published	14-Feb-20	WO 2020/163969					Sierra Wireless, Inc.
PAT	WO	METHOD AND APPARATUS FOR DEVICE TO DEVICE COMMUNICATION FOR CELLULAR DEVICES	Pending	27-Nov-20	WO 2021/108897					Sierra Wireless, Inc.
PAT	WO	Methods and Apparatuses for Supporting Multi Transport Block Grant Data Transmission in a Wireless communication System	Pending	24-Feb-21		4-Oct-13				Sierra Wireless, Inc.
LP	US	LAN/WWAN GATEWAY	Issued	10-Nov-06	US 2007-0104169	10-May-07	8,054,778	8-Nov-11		Sierra Wireless

		CARRIER CUSTOMIZATION								America Inc.
LP	US	System for Communicating Messages Via a Forward Overhead Control Channel for a Programmable Logic Control Device	Issued	20-Sep- 00			6,718,177	6-Apr- 04		Numerex Corp.*
LP	US	Interconnect System and Method for Multiple Protocol Short Message Services	Issued	2-Jan-02			6,882,843	19-Apr- 05		Numerex Corp.*
LP	US	Communications Device for Conveying Geographic Location Information Over Capacity Constrained Wireless Systems	Issued	30-Sep- 02			6,718,237	6-Apr- 04		Numerex Corp.*
LP	US	Communication Device for Conveying Geographic Location Information Over Capacity Constrained Wireless Systems	Issued	6-Feb-04			7,272,494	18-Sep- 07		Numerex Corp.*
LP	US	Method and System for Remote Interaction with a Vehicle via Wireless Communication	Issued	21-Jan- 05			7,323,970	29-Jan- 08		Numerex Corp.*
LP	US	Two-way Voice and Voice over IP	Issued	6-Feb-06			7,734,020	8-Jun-10		Numerex Corp.*

		receivers for Alarm Systems								
LP	US	Method and System for Remotely Monitoring the Operations of a Vehicle	Issued	14-Dec-07			7,880,599	1-Feb-11		Numerex Corp.*
LP	US	Method and System for Interacting with a Vehicle over a Mobile Radiotelephone Network	Issued	14-Dec-07			7,936,256	3-May-11		Numerex Corp.*
LP	US	Enhanced 911 notification for Internet Enabled Alarm Systems	Issued	23-Jan-08			8,369,487	5-Feb-13		Numerex Corp.*
LP	US	Service escrowed transportable wireless event reporting system	Issued	6-Feb-08			8,265,605	11-Sep-12		Numerex Corp.*
LP	US	Intelligent Short Message Delivery System and Method	Issued	27-Oct-08			8,738,046	27-May-14		Numerex Corp.*
LP	US	Alarm System for use over Satellite Broadband	Issued	17-Jul-09			9,131,040	8-Sep-15		Numerex Corp.*
LP	US	Digital Upgrade System and Method	Issued	26-Feb-10			8,041,383	18-Oct-11		Numerex Corp.*
LP	US	Communication of Managing Vending Operations Based on Wireless Data	Issued	6-Jan-11			8,126,764	28-Feb-12		Numerex Corp.*
LP	US	Satellite Based Tracking and Data	Issued	7-Apr-11			9,119,013	25-Aug-15		Numerex Corp.*

		Device with Multi-Frequency Radio							
		Frequency Interface							
LP	US	Analytical Scoring Engine for Remote Device Data	Issued	22-Apr-11			9,785,702	10-Oct-17	Numerex Corp. *
LP	US	Alarm System IP Network with PSTN Output	Issued	30-Jul-11			9,054,893	9-Jun-15	Numerex Corp. *
LP	US	IP Network Service Redirector Device and Method	Issued	15-Aug-11			8,769,111	1-Jul-14	Numerex Corp. *
LP	US	Method and system for managing subscriber identity modules on wireless networks for machine-to-machine applications	Issued	6-Jan-12			8,412,186	2-Apr-13	Numerex Corp. *
LP	US	Local Data Appliance for Collecting and Storing Remote Sensor Data	Issued	30-Mar-12			8,990,915	24-Mar-15	Numerex Corp. *
LP	US	Delivery of Alarm System Event Data and Audio	Issued	4-Apr-12			8,798,260	5-Aug-14	Numerex Corp. *
LP	US	System and Method for Alarm System Tamper Detection and Reporting	Issued	31-May-12			9,214,082	15-Dec-15	Numerex Corp. *
LP	US	Wireless SNMP Agent Gateway	Issued	31-May-12			9,325,814	9-Aug-16	Numerex Corp. *

LP	US	Service escrowed transportable wireless event reporting system	Issued	7-Aug-12			8,543,097	24-Sep-13	Numerex Corp. *
LP	US	Dynamic Reverse Geofencing	Issued	10-Sep-12			8,761,795	24-Jun-14	Numerex Corp. *
LP	US	Method and System for Remote Coupling Security System Control	Issued	3-Oct-12			8,970,364	3-Mar-15	Numerex Corp. *
LP	US	Using Statistical Analysis to Infer an Accurate GPS Location for Use in Tracking Devices	Issued	4-Jan-13			9,207,331	8-Dec-15	Numerex Corp. *
LP	US	System and Method for Using Alarm System Zones for Remote or Mobile Objects	Issued	18-Apr-13			9,041,527	26-May-15	Numerex Corp. *
LP	US	Wireless VoIP Network for Security System Monitoring	Issued	11-Jul-13			9,094,410	28-Jul-15	Numerex Corp. *
LP	US	Service escrowed transportable wireless event reporting system	Issued	21-Aug-13			8,855,716	7-Oct-14	Numerex Corp. *
LP	US	Alarm Sensor Supporting Long-Range Wireless Communication	Issued	29-Aug-13			9,153,124	6-Oct-15	Numerex Corp. *
LP	US	Method and system for untethered two-way voice communication for an alarm system	Issued	27-Sep-13			9,177,464	3-Nov-15	Numerex Corp. *

LP	US	Delivery of Security Solutions Based on Demand	Issued	8-Nov-13			9,235,855	12-Jan-16	Numerex Corp.*
LP	US	Delivery of Alarm System Event Data and Audio Over Hybrid Network	Issued	20-Feb-14			9,350,871	24-May-16	Numerex Corp.*
LP	US	Mobile Management Message Distribution and Active On-Network Determination	Issued	8-May-14			9,510,180	29-Nov-16	Numerex Corp.*
LP	US	Dynamic Reverse Geofencing	Issued	23-Jun-14			9,801,015	24-Oct-17	Numerex Corp.*
LP	US	Method and System for Mitigating Invasion Risk Associated with Stranger Interactions in a Security System Environment	Issued	16-Jul-14			9,183,730	10-Nov-15	Numerex Corp.*
LP	US	Delivery of Alarm System Event Data and Audio	Issued	4-Aug-14			9,462,135	4-Oct-16	Numerex Corp.*
LP	US	Method and System for Detecting Alarm System Tampering	Issued	24-Oct-14			9,449,497	20-Sep-16	Numerex Corp.*
LP	US	Offender Monitor with Managed Rate of Location Reading	Issued	27-Oct-14			9,773,392	26-Sep-17	Numerex Corp.*
LP	US	Offender Monitor with Orientation Based Monitoring	Issued	28-Oct-14			9,401,082	26-Jul-16	Numerex Corp.*

LP	US	Method and System for Generating Geofences for Managing Offender Movement	Issued	28-Oct-14			9,875,638	23-Jan-18	Numerex Corp.*
LP	US	Method and System For Energy Management of an Offender Monitor	Issued	6-Nov-14			9,582,982	28-Feb-17	Numerex Corp.*
LP	US	Method and System for Managing a Location Detector	Issued	3-Dec-14			9,820,223	14-Nov-17	Numerex Corp.*
LP	US	Alarm System IP Network with PSTN Output	Issued	16-Jan-15			9,356,798	31-May-16	Numerex Corp.*
LP	US	System and Method for Using Alarm System Zones for Remote or Mobile Objects	Issued	26-May-15			9,824,575	21-Nov-17	Numerex Corp.*
LP	US	Method and System for Locating a Wireless Tracking Device Associated with a Network of Alarm Panels	Issued	1-Jul-15			9,503,848	22-Nov-16	Numerex Corp.*
LP	US	Method and System for Locating a Wireless Tracking Device	Issued	1-Jul-15			9,794,742	17-Oct-17	Numerex Corp.*
LP	US	System and Method for Camera Registration	Issued	8-Jul-15			11,055,724	6-Jul-21	Numerex Corp.*

LP	US	Motor Fault Detection System and Method	Issued	19-Aug-15			10,107,675	23-Oct-18	Numerex Corp.*
LP	US	Mobile Management Message Distribution and Active On-Network Determination	Issued	23-Sep-15			9,763,025	12-Sep-17	Numerex Corp.*
LP	US	Method and System for Locating a Personal Emergency Response System (PERS) Device Based on Real Estate Lockbox Interaction	Issued	8-Jan-16			10,304,317	28-May-19	Numerex Corp.*
LP	US	Offender Monitor Messaging System	Issued	28-Jul-16			9,877,172	23-Jan-18	Numerex Corp.*
LP	US	Method And System For Locating A Wireless Tracking Device	Issued	5-Sep-17	US20170366931 A1	21-Dec-17	10,264,391	16-Apr-19	Numerex Corp.*
PAT	US	Method and Apparatus for Multi-Transport Block Grant Transmissions (Multi-DCI TBI HARQ)	Pending as part of D18062510	9-Aug-18					Sierra Wireless Inc.
PAT	US	DMRS for a 2 sub-carrier pi/2 BPSK Modulation in an OFDMA system	Published	16-Jan-19	US20190222388	18-Jul-19			Sierra Wireless Inc.
PAT	US	METHOD AND APPARATUS FOR DEVICE TO DEVICE COMMUNICATION	Pending	30-Oct-19					Sierra Wireless Inc.

		FOR CELLULAR DEVICES; All information related to D19102910PR2 has been moved to D19092510PR2 because the two disclosures are related - SB: 5th May 2020																		
PAT	US	Method and Apparatus for Resource Allocation for Half Duplex Frequency Division Duplexing in a Wireless Communication System	Pending	8-Oct-20	US-2021-0028918	28-Jan-21														Sierra Wireless, Inc.

* Please note Numerex Corp. has merged with and into Sierra Wireless America, Inc. These IP interests have not been assigned to Sierra Wireless America, Inc. yet.

TRADEMARKS

Registered Trademarks

Trademark:	Owner	Country	Regn No.:	Regn date:
AIRPRIME 1560-261	Sierra Wireless, Inc.	Brazil	840563310	May 14, 2016
AIRPRIME 1560-204	Sierra Wireless, Inc.	Canada	TMA807,260	Sep 22, 2011

AIRPRIME	Sierra Wireless, Inc.	US	4,110,874	Mar 13, 2012
1560-237-E				
AIRPRIME	Sierra Wireless, Inc.	China	8581057	Aug 7, 2010
1560-240				
AIRPRIME	Sierra Wireless, Inc.	Australia	1376348	Aug 6, 2010
1560-242				
AIRPRIME	Sierra Wireless, Inc.	EU	9300815	Aug 6, 2010
1560-238				
AIRPRIME	Sierra Wireless, Inc.	Hong Kong	301683081	Aug 6, 2010
1560-241				
AIRPRIME	Sierra Wireless, Inc.	Japan	5517547	Aug 31, 2012
1560-239				
AIRPRIME	Sierra Wireless, Inc.	Korea	40-1093529	Mar 12, 2015
1560-267				
AIRPRIME	Sierra Wireless, Inc.	New Zealand	828430	Aug 6, 2010
1560-243				
AIRPRIME	Sierra Wireless, Inc.	South Africa	2014/11094	May 2, 2014
1560-276-E				
AIRVANTAGE	Sierra Wireless, Inc.	Canada	TMA849,519	Apr 25, 2013
1560-203				
AIRVANTAGE	Sierra Wireless, Inc.	EU	8773004	Jun 16, 2010
1560-206				
AIRVANTAGE	Sierra Wireless, Inc.	New Zealand	817956	Jul 8, 2010

1560-208						
AIRVANTAGE	Sierra Wireless, Inc.	Australia	1339232	Jan. 4, 2010		
1560-207						
AIRVANTAGE	Sierra Wireless, Inc.	Hong Kong	301509769	Dec. 28, 2009		
1560-210						
AIRVANTAGE	Sierra Wireless, Inc.	Korea	45-0054823	Mar 12, 2015		
1560-268						
AIRVANTAGE (Class 9)	Sierra Wireless, Inc.	China	8009329	Jan. 20, 2010		
1560-209						
AIRVANTAGE (Class 38)	Sierra Wireless, Inc.	China	8009328	Jan. 20, 2010		
1560-209						
AIRVANTAGE (Class 42)	Sierra Wireless, Inc.	China	8009327	Jan. 20, 2010		
1560-209						
AIRVANTAGE (Class 9)	Sierra Wireless, Inc.	South Africa	2014/11094	May 2, 2014		
1560-275-E						
AIRVANTAGE (Class 38)	Sierra Wireless, Inc.	South Africa	2014/11092	May 2, 2014		
1560-280-E						
AIRVANTAGE (Class 42)	Sierra Wireless, Inc.	South Africa	2014/11093	May 2, 2014		
1560-281-E						

AIRVANTAGE 1560-205	Sierra Wireless, Inc.	US	4,243,932	Nov 20, 2012
CF3 1560-294-E	Sierra Wireless, Inc.	Canada	TMA953,746	Oct 28, 2016
CF3 1560-295-E	Sierra Wireless, Inc.	US	5,153,592	Mar 7, 2017
HEART OF THE WIRELESS MACHINE 1560-161	Sierra Wireless, Inc.	Canada	TMA432,491	Aug. 26, 1994
INMOTION SOLUTIONS 1560-161	Sierra Wireless, Inc.	Canada	TMA951,759	Oct 7, 2016
INMOTION SOLUTIONS (Class 9) 1560-289	Sierra Wireless, Inc.	South Africa	2015/11070	Apr 29, 2015
INMOTION SOLUTIONS (Class 37) 1560-292-E	Sierra Wireless, Inc.	South Africa	2015/11071	Apr 29, 2015
LEGATO 1560-293-E	Sierra Wireless, Inc.	Canada	TMA943,123	Jul 12, 2016
LEGATO 1560-264-E	Sierra Wireless, Inc.	EU	12664066	Aug 1, 2014
LEGATO 1560-272	Sierra Wireless, Inc.	EU	12664066	Aug 1, 2014

LEGATO	Sierra Wireless, Inc.	Japan	5828117	Feb 19, 2016
1560-283-E				
LEGATO	Sierra Wireless, Inc.	US	4,698,092	Mar 10, 2015
1560-265				
LEGATO & Design	Sierra Wireless, Inc.	Canada	TMA946,523	Aug 17, 2016
1560-269-E				
LEGATO & Design	Sierra Wireless, Inc.	US	4,853,539	Nov 17, 2015
1560-270-E				
MANGOH	Sierra Wireless, Inc.	AU	1865495	Mar 5, 2017
1560-324				
MANGOH	Sierra Wireless, Inc.	CA	TMA1020154	April 26, 2019
1560-321				
MANGOH	Sierra Wireless, Inc.	EU	016473481	Aug 14, 2017
1560-320-E				
MANGOH	Sierra Wireless, Inc.	US	5,578,114	Oct 9, 2018
1560-322-E				
MANGOH & Design	Sierra Wireless, Inc.	Canada	TMA951,403	Oct 4, 2016
1560-303-E				
MANGOH & Design	Sierra Wireless, Inc.	US	5,184,368	Apr 18, 2017
1560-304-E				
MANGOH & Design (horizontal)	Sierra Wireless, Inc.	Canada	TMA956,052	Nov 22, 2016
1560-306-E				

MANGO & Design (horizontal)	Sierra Wireless, Inc.	US	5,174,239	Apr 4, 2017
1560-307-E				
MANGO & Design (horizontal)	Sierra Wireless, Inc.	EU	15478787	Oct. 27, 2016
1560-310-E				
OCTAVE	Sierra Wireless, Inc.	EU	018049451	Sep 3, 2019
1560-333				
PROJECT MANGO	Sierra Wireless, Inc.	Canada	TMA943,947	Jul 21, 2016
1560-296-E				
PROJECT MANGO	Sierra Wireless, Inc.	EU	14754212	Nov 2, 2015
1560-305-E				
PROJECT MANGO	Sierra Wireless, Inc.	US	5,102,879	Dec 20, 2016
1560-297-E				
SIERRA WIRELESS	Sierra Wireless, Inc.	Australia	1343459	Feb 3, 2010
1560-214				
SIERRA WIRELESS	Sierra Wireless, Inc.	Canada	TMA816,324	Jan 27, 2012
1560-196				
SIERRA WIRELESS	Sierra Wireless, Inc.	EU	8849911	Jul 27, 2010
1560-213				
SIERRA WIRELESS	Sierra Wireless, Inc.	EU	15795008	Sep 2, 2016
1560-314-E				
SIERRA WIRELESS in Chinese Characters	Sierra Wireless, Inc.	China	3302964	Oct. 21, 2003

1560-177	SIERRA WIRELESS (Class 9)	Sierra Wireless, Inc.	China	8078368	Apr 14, 2014
1560-217	SIERRA WIRELESS (Class 42)	Sierra Wireless, Inc.	China	8078367	Feb 22, 2010
1560-224	SIERRA WIRELESS	Sierra Wireless, Inc.	Chile	1234957	Jan 25, 2017
1560-313-E	SIERRA WIRELESS	Sierra Wireless, Inc.	Hong Kong	301542753	Feb 10, 2010
1560-216	SIERRA WIRELESS	Sierra Wireless, Inc.	Japan	5614114	Sep 13, 2013
1560-218	SIERRA WIRELESS	Sierra Wireless, Inc.	Madrid	1387060	Nov 8, 2016
1560-316	SIERRA WIRELESS	Sierra Wireless, Inc.	Madrid	1387060	Jan. 27, 2020
1560-316MX	SIERRA WIRELESS	Sierra Wireless, Inc.	Madrid	1387060	Jun 11, 2018
1560-316PH	SIERRA WIRELESS	Sierra Wireless, Inc.	Madrid	1387060	May 7, 2019
1560-316US	SIERRA WIRELESS	Sierra Wireless, Inc.	New Zealand	819031	Sep 3, 2013
1560-215					

SIERRA WIRELESS (Class 9)	Sierra Wireless, Inc.	South Africa	2014/11088	May 2, 2014
1560-277-E SIERRA WIRELESS (Class 42)	Sierra Wireless, Inc.	South Africa	2014/11089	May 2, 2014
1560-278-E SIERRA WIRELESS (Class 45)	Sierra Wireless, Inc.	South Africa	2014/11090	May 2, 2014
1560-279-E SIERRA WIRELESS	Sierra Wireless, Inc.	US	4,177,465	Jul 24, 2012
1560-212 SIERRA WIRELESS in Chinese Characters	Sierra Wireless, Inc.	Hong Kong	200313261	Sept. 3, 2002
1560-182 SIERRA WIRELESS & Design	Sierra Wireless, Inc.	Australia	1372559	Jul 16, 2010
1560-229 SIERRA WIRELESS & Design (Class 9 & 42)	Sierra Wireless, Inc.	Australia	1519957	Oct 15, 2012
1560-255 SIERRA WIRELESS & Design	Sierra Wireless, Inc.	Canada	TMA930,708	Mar 4, 2016
1560-211-E SIERRA WIRELESS & Design	Sierra Wireless, Inc.	EU	9251191	May 2, 2011
1560-227				

SIERRA WIRELESS & Design (Class 9)	Sierra Wireless, Inc.	China	8550458	Jun 14, 2014
1560-231				
SIERRA WIRELESS & Design (Class 38)	Sierra Wireless, Inc.	China	8550457	Aug 6, 2010
1560-244				
SIERRA WIRELESS & Design (Class 41)	Sierra Wireless, Inc.	China	8550550	Aug 6, 2010
1560-245				
SIERRA WIRELESS & Design (Class 42)	Sierra Wireless, Inc.	China	8550549	Aug 6, 2010
1560-246				
SIERRA WIRELESS & Design	Sierra Wireless, Inc.	Hong Kong	301665108	Jul 15, 2010
1560-232				
SIERRA WIRELESS & Design (Class 41)	Sierra Wireless, Inc.	India	2002172	Aug 2, 2010
1560-249				
SIERRA WIRELESS & Design	Sierra Wireless, Inc.	Japan	5601546	Jul 26, 2013
1560-230				
SIERRA WIRELESS & Design (Class 9)	Sierra Wireless, Inc.	India	2002170	Aug 2, 2010
1560-233-E				
SIERRA WIRELESS & Design (Class 9)	Sierra Wireless, Inc.	Korea	40-1196972	Aug 18, 2016

1560-286-E						
SIERRA WIRELESS & Design	Sierra Wireless, Inc.	Korea	45-0045992		Aug 27, 2013	
1560-236						
SIERRA WIRELESS & Design	Sierra Wireless, Inc.	New Zealand	827305		Sep 3, 2013	
1560-228						
SIERRA WIRELESS & Design	Sierra Wireless, Inc.	Taiwan	1530738		Aug 1, 2012	
1560-235						
SIERRA WIRELESS & Design	Sierra Wireless, Inc.	Singapore	T1009218B		Jul 21, 2010	
1560-234						
SIERRA WIRELESS & Design	Sierra Wireless, Inc.	US	4,287,452		Feb 12, 2013	
1560-226						
SIERRA WIRELESS SKYLIGHT	Sierra Wireless, Inc.	Canada	TMA918,986		Oct 30, 2015	
1560-262-E						
SIERRA WIRELESS SKYLIGHT	Sierra Wireless, Inc.	US	4,958,080		May 17, 2016	
1560-263-E						
SIERRA WIRELESS HEART OF THE WIRELESS MACHINE & Design	Sierra Wireless, Inc.	Australia	931923		Oct. 10, 2005	

1560-129					
SIERRA WIRELESS HEART OF THE WIRELESS MACHINE & Design	Sierra Wireless, Inc.	India	1321252	Nov. 19, 2004	
1560-132					
SIERRA WIRELESS HEART OF THE WIRELESS MACHINE & Design	Sierra Wireless, Inc.	Taiwan	1078183	Jan. 1, 2004	
1560-136					
SWOOSH Design	Sierra Wireless, Inc.	US	2,726,412	June 17, 2003	
1560-138					
AIRLINK	Sierra Wireless America, Inc.	Australia	1609556	Mar 5, 2014	
1559-140-E					
AIRLINK	Sierra Wireless America, Inc.	Canada	TMA775,836	Aug 31, 2010	
1559-108					
AIRLINK	Sierra Wireless America, Inc.	EU	11935483	Nov 20, 2013	
1559-141					
AIRLINK	Sierra Wireless America, Inc.	US	3,902,433	Jan. 11, 2011	
1559-109-E					
AIRLINK	Sierra Wireless America, Inc.	International	957777	Feb. 4, 2008	
1559-119					
AIRLINK	Sierra Wireless America, Inc.	Japan	957777	Feb. 4, 2008	
1559-119JP					

AIRLINK	Sierra Wireless America, Inc.	New Zealand	783705	Feb. 4, 2008
1559-110-E	Sierra Wireless America, Inc.	Canada	TMA752,709	Nov. 10, 2009
1559-112	Sierra Wireless America, Inc.	Taiwan	1343665	Jan. 1, 2009
1559-113	Sierra Wireless America, Inc.	US	3,510,793	Oct. 7, 2008
ALEOS	Sierra Wireless America, Inc.	International	953067	Feb. 4, 2008
1559-122	Sierra Wireless America, Inc.	Australia	953067	Feb. 4, 2008
ALEOS	Sierra Wireless America, Inc.	EU	953067	Feb. 4, 2008
1559-126AU	Sierra Wireless America, Inc.	JP	953067	Feb. 4, 2008
ALEOS	Sierra Wireless America, Inc.	Singapore	953067	Feb. 4, 2008
1559-126EU	Sierra Wireless America, Inc.	New Zealand	783706	Aug. 3, 2007
ALEOS	Sierra Wireless America, Inc.	Korea	40-1240459	Mar. 17, 2017
1559-126JP	Sierra Wireless America, Inc.			
ALEOS	Sierra Wireless America, Inc.			
1559-126SG	Sierra Wireless America, Inc.			
ALEOS	Sierra Wireless America, Inc.			
1559-128-E	Sierra Wireless America, Inc.			
SIERRA WIRELESS AIRLINK	Sierra Wireless, Inc.			
1559-143				

UPLINK	Sierra Wireless America, Inc.	US	4,683,816	Feb. 10, 2015
1559-148				
UPLINK	Sierra Wireless America, Inc.	US	4,013,326	Aug. 16, 2011
1559-149				
UPLINK	Sierra Wireless America, Inc.	US	3,279,435	Aug. 14, 2007
1559-150				
UPLINK GPS	Sierra Wireless America, Inc.	US	4,546,091	Jun. 10, 2014
1559-147				

Pending Trademark Applications

Trademark:	Owner	Country	Appln No.:	Filing date:
OCTAVE	Sierra Wireless, Inc.	CA	1,926,213	Oct 19, 2018
1560-330				
OCTAVE	Sierra Wireless, Inc.	CA	1,931,736	Nov 21, 2018
1560-332				
OCTAVE	Sierra Wireless, Inc.	US	88/203,627	Nov 22, 2018
1560-331				
SIERRA WIRELESS	Sierra Wireless, Inc.	CA	1,824,191	Feb 23, 2017
1560-319				
SIERRA WIRELESS	Sierra Wireless, Inc.	Brazil	840616023	Aug 20, 2013
1560-260				
SIERRA WIRELESS	Sierra Wireless, Inc.	Vietnam	4-2015-32739	Nov 20, 2015

1560-302				
----------	--	--	--	--

COPYRIGHTS

Registered Copyrights

Country	Owner	Copyright Registration No./Registration Date	Title	Category of Work / Status	Copyright Description
CA	Sierra Wireless, Inc.	490003 February 19, 2001	AirBoard	Literary/Artistic / Registered	Instruction manuals for wireless modems and graphics associated with the wireless modems

SCHEDULE "B"

SECURITY INTEREST RECORDATION DETAILS

Canadian Intellectual Property Office

	Office	File/Registration Number (as applicable)
1.	CIPO	1192083
2.	CIPO	1469813
3.	CIPO	05841838

United States Patent and Trademark Office

	Office	Reel/Frame	Registration / Application No.	Registration / Filing Date
1.	USPTO	R/F: 059250/0448	Application No.: 09919069 Patent No.: 7600013 Application No.: 10022351 Patent No.: 7023878 Application No.: 10206681 Patent No.: 8707406 Application No.: 12282950 Patent No.: 8484285 Application No.: 12370421 Patent No.: 8924486	Filing Date: 7/30/2001 Issue Date: 10/06/2009 Filing Date: 12/20/2001 Issue Date: 04/04/2006 Filing Date: 07/26/2022 Issue Date: 04/22/2014 Filing Date: 04/21/2009 Issue Date: 07/09/2013 Filing Date: 02/12/2009 Issue Date: 07/09/2013

		<p>Application No.: 12620372 Patent No.: 8228848</p> <p>Application No.: 12777475 Patent No.: 8494551</p> <p>Application No.: 12850423 Patent No.: 8520634</p> <p>Application No.: 13027750 Patent No.: 8565080</p> <p>Application No.: 13093757 Patent No.: 8582631</p> <p>Application No.: 13109342 Patent No.: 8812730</p> <p>Application No.: 13129660 Patent No.: 9628474</p> <p>Application No.: 13165555 Patent No.: 8964549</p> <p>Application No.: 13465219 Patent No.: 8972556</p> <p>Application No.: 13471390 Patent No.: 8843738</p> <p>Application No.: 13730244 Patent No.: 9144066</p> <p>Application No.: 13757413 Patent No.: 9854423</p> <p>Application No.: 13901838 Patent No.: 9075086</p> <p>Application No.: 13918303 Patent No.: 9380430</p>	<p>Filing Date: 11/17/2009 Issue Date: 07/24/2012</p> <p>Filing Date: 05/11/2010 Issue Date: 07/23/2013</p> <p>Filing Date: 08/04/2010 Issue Date: 08/27/2013</p> <p>Filing Date: 02/15/2011 Issue Date: 10/22/2013</p> <p>Filing Date: 04/25/2011 Issue Date: 11/12/2013</p> <p>Filing Date: 05/17/2011 Issue Date: 08/19/2014</p> <p>Filing Date: 08/10/2011 Issue Date: 04/18/2017</p> <p>Filing Date: 06/21/2011 Issue Date: 02/24/2015</p> <p>Filing Date: 05/07/2012 Issue Date: 03/03/2015</p> <p>Filing Date: 05/14/2012 Issue Date: 09/23/2014</p> <p>Filing Date: 12/28/2012 Issue Date: 09/22/2015</p> <p>Filing Date: 02/01/2013 Issue Date: 12/26/2017</p> <p>Filing Date: 05/24/2013 Issue Date: 07/07/2015</p> <p>Filing Date: 06/14/2013 Issue Date: 06/28/2016</p>
--	--	---	---

		<p>Application No.: 13957009 Patent No.: 9184880</p> <p>Application No.: 14043435 Patent No.: 9668356</p> <p>Application No.: 14046475 Patent No.: 10455575</p> <p>Application No.: 14106601 Patent No.: 9445302</p> <p>Application No.: 14214739 Patent No.: 9681256</p> <p>Application No.: 14243604 Patent No.: 9948789</p> <p>Application No.: 14243621 Patent No.: 9369230</p> <p>Application No.: 14262433 Patent No.: 10009831</p> <p>Application No.: 14497145 Patent No.: 9716988</p> <p>Application No.: 14559035 Patent No.: 10346603</p> <p>Application No.: 14630532 Patent No.: 9894523</p> <p>Application No.: 15092845 Patent No.: 10111067</p> <p>Application No.: 15155206 Patent No.: 10819496</p> <p>Application No.: 1517550 Patent No.: 11229028</p>	<p>Filing Date: 08/01/2013 Issue Date: 11/10/2015</p> <p>Filing Date: 10/01/2013 Issue Date: 05/30/2017</p> <p>Filing Date: 10/04/2013 Issue Date: 10/22/2019</p> <p>Filing Date: 12/13/2013 Issue Date: 09/13/2016</p> <p>Filing Date: 03/15/2014 Issue Date: 06/13/2017</p> <p>Filing Date: 04/02/2014 Issue Date: 04/17/2018</p> <p>Filing Date: 04/02/2014 Issue Date: 06/14/2016</p> <p>Filing Date: 04/25/2014 Issue Date: 06/26/2018</p> <p>Filing Date: 09/25/2014 Issue Date: 07/25/2017</p> <p>Filing Date: 12/03/2014 Issue Date: 07/09/2019</p> <p>Filing Date: 02/24/2015 Issue Date: 02/13/2018</p> <p>Filing Date: 04/07/2016 Issue Date: 10/23/2018</p> <p>Filing Date: 05/16/2016 Issue Date: 10/27/2020</p> <p>Filing Date: 06/02/2016 Issue Date: 01/18/2022</p>
--	--	--	---

		<p>Application No.: 15276053 Patent No.: 10225829</p> <p>Application No.: 15283967 Patent No.: N/A</p> <p>Application No.: 15343945 Patent No.: 10271302</p> <p>Application No.: 15721374 Patent No.: 11202324</p> <p>Application No.: 15910087 Patent No.: 10868416</p> <p>Application No.: 15938701 Patent No.: 11048801</p> <p>Application No.: 15968929 Patent No.: 10764847</p> <p>Application No.: 16009694 Patent No.: 10977024</p> <p>Application No.: 16058781 Patent No.: 11172442</p> <p>Application No.: 16192092 Patent No.: 10931492</p> <p>Application No.: 16249217 Patent No.: 10630445</p> <p>Application No.: 16529611 Patent No.: 11169796</p> <p>Application No.: 16536964 Patent No.: N/A</p> <p>Application No.: 16537152 Patent No.: N/A</p>	<p>Filing Date: 09/26/2016 Issue Date: 03/05/2019</p> <p>Filing Date: 10/03/2016 Issue Date: N/A</p> <p>Filing Date: 11/04/2016 Issue Date: 04/23/2019</p> <p>Filing Date: 09/29/2017 Issue Date: 12/14/2021</p> <p>Filing Date: 03/02/2018 Issue Date: 12/15/2020</p> <p>Filing Date: 03/28/2018 Issue Date: 06/29/2021</p> <p>Filing Date: 05/02/2018 Issue Date: 09/01/2020</p> <p>Filing Date: 06/15/2018 Issue Date: 04/13/2021</p> <p>Filing Date: 08/08/2018 Issue Date: 11/09/2021</p> <p>Filing Date: 11/15/2018 Issue Date: 02/23/2021</p> <p>Filing Date: 01/16/2019 Issue Date: 04/21/2020</p> <p>Filing Date: 08/01/2019 Issue Date: 11/09/2021</p> <p>Filing Date: 08/09/2019 Issue Date: N/A</p> <p>Filing Date: 08/09/2019 Issue Date: N/A</p> <p>Filing Date: 09/05/2019</p>
--	--	--	---

			<p>Application No.: 16561337 Patent No.: N/A Application No.: 16789938 Patent No.: N/A Application No.: 16791956 Patent No.: N/A Application No.: 17062161 Patent No.: N/A Application No.: 17066002 Patent No.: N/A Application No.: 17184151 Patent No.: N/A</p>	<p>Issue Date: N/A Filing Date: 02/13/2020 Issue Date: N/A Filing Date: 02/14/2020 Issue Date: N/A Filing Date: 10/02/2020 Issue Date: N/A Filing Date: 10/08/2020 Issue Date: N/A Filing Date: 02/24/2021 Issue Date: N/A</p>
2.	USPTO	R/F: 7644/0033	<p>Serial No.: 76211736 Registration No.: 2726412 Serial No.: 77895705 Registration No.: 4243932 Serial No.: 77922725 Registration No.: 4177465 Serial No.: 85084290 Registration No.: 4287452 Serial No.: 85100974 Registration No.: 4110874 Serial No.: 86059457 Registration No.: 4958080 Serial No.: 86064008 Registration No.: 4698092 Serial No.: 86161474 Registration No.: 4853539</p>	<p>Filing Date: 02/20/2001 Registration Date: 06/17/2003 Filing Date: 12/17/2009 Registration Date: 11/20/2012 Filing Date: 01/28/2010 Registration Date: 07/24/2012 Filing Date: 07/14/2010 Registration Date: 02/12/2013 Filing Date: 08/05/2010 Registration Date: 03/13/2012 Filing Date: 09/09/2013 Registration Date: 05/17/2016 Filing Date: 09/13/2013 Registration Date: 03/10/2015 Filing Date: 01/09/2014 Registration Date: 11/17/2015</p>

			<p>Serial No.: 86650350 Registration No.: 5153592</p> <p>Serial No.: 86664184 Registration No.: 5102879</p> <p>Serial No.: 86818504 Registration No.: 5184368</p> <p>Serial No.: 86855676 Registration No.: 5174239</p> <p>Serial No.: 87375399 Registration No.: 5578114</p> <p>Serial No.: 88203627</p>	<p>Filing Date: 06/03/2015 Registration Date: 03/07/2017</p> <p>Filing Date: 06/16/2015 Registration Date: 12/20/2016</p> <p>Filing Date: 11/12/2015 Registration Date: 04/18/2017</p> <p>Filing Date: 12/21/2015 Registration Date: 04/04/2017</p> <p>Filing Date: 03/17/2017 Registration Date: 10/09/2018</p> <p>Filing Date: 11/22/2018</p>
3.	USPTO	R/F: 058859/0145	<p>Application No.: 11595487 Patent No.: 8054778</p>	<p>Filing Date: 11/10/2006 Issue Date: 11/08/2011</p>
4.	USPTO	R/F: 058858/0865	<p>Application No.: 11595380 Patent No.: 8121071</p>	<p>Filing Date: 11/10/2006 Issue Date: 02/21/2012</p>
5.	USPTO	R/F: 058858/0574	<p>Application No.: 12927990 Patent No.: 8405547</p>	<p>Filing Date: 12/01/2010 Issue Date: 03/26/2013</p>
6.	USPTO	R/F: 7685/0219	<p>Serial No.: 77245894 Registration No.: 3902433</p> <p>Serial No.: 77246967 Registration No.: 3510793</p> <p>Serial No.: 78106931 Registration No.: 4013326</p> <p>Serial No.: 78691601 Registration No.: 3279435</p>	<p>Filing Date: 08/02/2007 Registration Date: 01/11/2011</p> <p>Filing Date: 08/03/2007 Registration Date: 10/07/2008</p> <p>Filing Date: 02/05/2002 Registration Date: 08/16/2011</p> <p>Filing Date: 08/12/2005 Registration Date: 08/14/2007</p> <p>Filing Date: 01/08/2013 Registration Date: 06/10/2014</p>

			Serial No.: 85818059 Registration No.: 4546091 Serial No.: 86190829 Registration No.: 4683816	Filing Date: 02/11/2014 Registration Date: 02/10/2015
--	--	--	--	--