

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1
 Stylesheet Version v1.2

EPAS ID: PAT4347987

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	SECURITY INTEREST

CONVEYING PARTY DATA

Name	Execution Date
KODIAK NETWORKS, INC.	03/28/2017

RECEIVING PARTY DATA

Name:	SILICON VALLEY BANK
Street Address:	3003 TASMAN DRIVE
City:	SANTA CLARA
State/Country:	CALIFORNIA
Postal Code:	95054

PROPERTY NUMBERS Total: 63

Property Type	Number
Patent Number:	9462427
Patent Number:	9549298
Application Number:	14994844
Application Number:	15013548
Application Number:	15013718
Application Number:	15148633
Application Number:	15205931
Patent Number:	7403775
Patent Number:	7529557
Patent Number:	7689238
Patent Number:	7738892
Patent Number:	7738896
Patent Number:	7764950
Patent Number:	7787896
Patent Number:	7813722
Patent Number:	7853279
Patent Number:	8036692
Patent Number:	8369829
Patent Number:	8478261
Patent Number:	8498660

PATENT

Property Type	Number
Patent Number:	8670760
Patent Number:	8676189
Patent Number:	8958348
Patent Number:	9088876
Patent Number:	9137646
Patent Number:	9485787
Patent Number:	9510165
Application Number:	10564903
Application Number:	11183516
Application Number:	11567098
Application Number:	11891127
Application Number:	12259102
Application Number:	12961419
Application Number:	13710683
Application Number:	13917561
Application Number:	12951863
Application Number:	14782494
PCT Number:	US2016031231
PCT Number:	US2016016371
PCT Number:	US2016016206
PCT Number:	US2016013447
PCT Number:	US2016013443
PCT Number:	US2015064819
PCT Number:	US2015058804
PCT Number:	US2015058821
PCT Number:	US2015058880
PCT Number:	US2015058088
PCT Number:	US2015056712
PCT Number:	US2015045951
PCT Number:	US2015010617
PCT Number:	US2014047863
PCT Number:	US2014047886
PCT Number:	US2013045733
PCT Number:	US2011033791
PCT Number:	US2010059138
PCT Number:	US2010029274
PCT Number:	US2009061369
PCT Number:	US2008081358

Property Type	Number
PCT Number:	US2007017743
PCT Number:	US2006011628
PCT Number:	US2005018243
PCT Number:	US2005016771
PCT Number:	US2005016534

CORRESPONDENCE DATA

Fax Number: (404)885-3900
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: 4048853868
Email: rusty.close@troutmansanders.com
Correspondent Name: CHRISTOPHER CLOSE
Address Line 1: TROUTMAN SANDERS LLP
Address Line 2: 600 PEACHTREE STREET NE, SUITE 5200
Address Line 4: ATLANTA, GEORGIA 30308-2216

ATTORNEY DOCKET NUMBER:	220763.001153
NAME OF SUBMITTER:	CHRISTOPHER CLOSE
SIGNATURE:	/Christopher Close/
DATE SIGNED:	03/31/2017

Total Attachments: 17
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INTELLECTUAL PROPERTY SECURITY AGREEMENT

This INTELLECTUAL PROPERTY SECURITY AGREEMENT (“**Agreement**”) is entered into as of March 28, 2017 by and between SILICON VALLEY BANK, a California corporation (“**Bank**”), and KODIAK NETWORKS, INC., a Delaware corporation (“**Borrower**”).

RECITALS

A. Bank has agreed to make certain advances of money and to extend certain financial accommodation to Grantor (the “**Loans**”) in the amounts and manner set forth in that certain Amended and Restated Loan and Security Agreement dated as of June 26, 2015, but effective as of May 2, 2015 (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). Bank is willing to make the Loans to Grantor, but only upon the condition, among others, that Grantor shall grant to Bank a security interest in certain Copyrights, Trademarks, Patents, and Mask Works (as each term is described below) to secure the obligations of Grantor under the Loan Agreement.

B. Pursuant to the terms of that certain Third Amendment to Amended and Restated Loan and Security Agreement by and between Bank and Grantor dated as of even date herewith (the “**Third Amendment**”), Grantor has granted to Bank a security interest in all of Grantor’s 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, Grantor hereby represents, warrants, covenants and agrees as follows:

AGREEMENT

1. Grant of Security Interest. To secure its obligations under the Loan Agreement, Grantor grants and pledges to Bank a security interest in all of Grantor’s 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) Any and all trade secrets, and any and all intellectual property rights in computer software and computer software products now or hereafter existing, created, acquired or held;

(c) Any and all design rights that may be available to Grantor now or hereafter existing, created, acquired or held;

(d) 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");

(e) 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 Grantor connected with and symbolized by such trademarks, including without limitation those set forth on Exhibit C attached hereto (collectively, the "Trademarks");

(f) All mask works or similar rights available for the protection of semiconductor chips, now owned or hereafter acquired, including, without limitation those set forth on Exhibit D attached hereto (collectively, the "Mask Works");

(g) Any and all claims for damages by way of past, present and future infringements of any of the rights included above, with the right, but not the obligation, to sue for and collect such damages for said use or infringement of the intellectual property rights identified above;

(h) All licenses or other rights to use any of the Copyrights, Patents, Trademarks, or Mask Works and all license fees and royalties arising from such use to the extent permitted by such license or rights;

(i) All amendments, extensions, renewals and extensions of any of the Copyrights, Trademarks, Patents, or Mask Works; and

(j) All proceeds and products of the foregoing, including without limitation all payments under insurance or any indemnity or warranty payable in respect of any of the foregoing.

2. Recordation. Grantor 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 Bank.

3. Authorization. Grantor hereby authorizes Bank to (a) modify this Agreement unilaterally by amending the exhibits to this Agreement to include any Intellectual Property Collateral which Grantor obtains subsequent to the date of this Agreement, and (b) file a duplicate original of this Agreement containing amended exhibits reflecting such new Intellectual Property Collateral.

4. Loan Documents. This Agreement has been entered into pursuant to and in conjunction with the Loan Agreement and the Third Amendment, which are 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 Bank 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. Execution in Counterparts. This Agreement may be executed in counterparts (and by different parties hereto in different counterparts), each of which shall constitute an original, but all of which when taken together shall constitute a single contract. Delivery of an executed counterpart of a signature page to this Agreement by facsimile or in electronic (i.e., "pdf" or "tif" format) shall be effective as delivery of a manually executed counterpart of this Agreement.

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

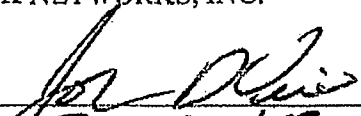
7. Governing Law. This Agreement and any claim, controversy, dispute or cause of action (whether in contract or tort or otherwise) based upon, arising out of or relating to this Agreement and the transactions contemplated hereby and thereby shall be governed by, and construed in accordance with, the 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).

[Signature page follows.]

IN WITNESS WHEREOF, the parties have caused this Intellectual Property Security Agreement to be duly executed by its officers thereunto duly authorized as of the first date written above.

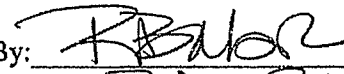
GRANTOR:

KODIAK NETWORKS, INC.

By: 
Name: JOHN D. VICE
Title: PRESIDENT + CEO

BANK:

SILICON VALLEY BANK

By: 
Name: RAISEN BABTZ
Title: VP

[Signature Page to Intellectual Property Security Agreement]

EXHIBIT A

Copyrights

Description	Registration Number	Application Number
None Identified		

EXHIBIT B

Patents

Description	Application Number	Registration Number
System and Method for Elastic Scaling using a Container-Based Platform		9,462,427 (10/04/2016)
Push-To-Talk Functions Associated with a Rotary Knob		9,549,298 (01/17/2017)
System and Method for Elastic Scaling in a Push to Talk (PTT) Platform using User Affinity Groups	14/994,844 (01/13/2016)	
Network-to-Network Interface Gateway System for Push-to-Talk-Over-Cellular Service	15/013,548 (02/02/2016)	
Session Management and Notification Mechanism for Push-to-Talk (PTT)	15/013,718 (02/02/2016)	
System and Method for Mobile Data Synchronization	15/148,633 (05/06/2016)	
Radio Access Network (RAN) Aware Service Delivery for Push-to-Talk-Over-Cellular (PoC) Networks	15/205,931 (07/08/2016)	

Description	Application Number	Registration Number
Roaming Gateway for Support of Advanced Voice Services While Roaming in Wireless Communications		7,403,775 (07/22/2008)
Press-to-Connect for Wireless Communications Systems		7,529,557 (05/05/2009)
Architecture and Implementation of Closed User Groups and Limiting Mobility in Wireless Networks		7,689,238 (03/30/2010)
Architecture, Client Specification and Application Programming Interface (API) for Supporting Advanced Voice Services (AVS) Including Push to Talk on Wireless Handsets and Networks		7,738,892 (06/15/2010)
Subscriber Identity Module (SIM) Enabling Advanced Voice Services (AVS) Including Push-to-Talk, Push-to-Conference and Push-to-Message on Wireless Handsets and Networks		7,738,896 (06/15/2010)
Advanced Voice Services Architecture Framework		7,764,950 (07/27/2010)
Dispatch Service Architecture Framework		7,787,896 (08/31/2010)

Description	Application Number	Registration Number
Enhanced Features in an Advanced Voice Services (AVS) Framework for Wireless Communications Systems		7,813,722 (10/12/2010)
Advanced Features on a Real-Time Exchange System		7,853,279 (12/14/2010)
Brew Platform Enabling Advanced Voice Services (AVS) Including Push-to-Talk, Push-to-Conference and Push-to-Message on Wireless Handsets and Networks		8,036,692 (10/11/2011)
Prepaid Billing Solutions for Push-to-Talk in a Wireless Communications Network		8,369,829 (02/05/2013)
Predictive Wakeup for Push-to-Talk-Over Cellular (POC) Call Setup Optimizations		8,478,261 (07/02/2013)
Enhanced Group Calling Features for Connected Portfolio Services in a Wireless Communications Network		8,498,660 (07/30/2013)
Converged Mobile-Web Communications Solution		8,670,760 (03/11/2014)

Description	Application Number	Registration Number
Converged Mobile-Web Communications Solution		8,676,189 (03/18/2014)
Hybrid Push-to-Talk for Mobile Phone Networks		8,958,348 (02/17/2015)
WiFi Interworking Solutions for Push-to-Talk-Over-Cellular (PoC)		9,088,876 (07/21/2015)
Method and Framework to Detect Service Users in an Insufficient Wireless Radio Coverage Network and to Improve a Service Delivery Experience by Guaranteed Presence		9,137,646 (09/15/2015)
Method to Achieve a Fully Acknowledged Mode Communication (FAMC) in Push-to-Talk-Over-Cellular (POC)		9,485,787 (11/01/2016)
Push-to-Talk-Over-Cellular (PoC) Service in Heterogeneous Networks (HETNETS) and Multimode Small Cell Environments		9,510,165 (11/29/2016)
Dispatch Service Architecture Framework		7,787,896 (08/31/2010)

Description	Application Number	Registration Number
Premium Voice Services for Wireless Communications Systems	10/564,903 (01/17/2006)	
Virtual Push to Talk (PTT) and Push to Share (PTS) for Wireless Communications Systems	11/183,516 (07/18/2005)	
Instant Messaging Interworking in an Advanced Voice Services (AVS) Framework for Wireless Communications Systems	11/567,098 (12/05/2006)	
Emergency Group Calling Across Multiple Wireless Networks	11/891,127 (08/09/2007)	
Connected Portfolio Services for a Wireless Communications Network	12/259,102 (10/27/2008)	
Community Group Client and Community Auto Discovery Solutions in a Wireless Communications Network	12/961,419 (12/06/2010)	
Push-to-Talk-Over-Cellular (POC)	13/710,683 (12/11/2012)	
Ruggedized Case or Sleeve for Providing Push-to-Talk (PTT) Functions	13/917,561 (06/13/2013)	

Description	Application Number	Registration Number
Advanced Features on a Real-Time Exchange System	12/951,863 (11/22/2010)	
VOIP Denial-of-Service Protection Mechanisms from Attack	14/782,494 10/05/2015	
System and Method for Data Synchronization	PCT US2016031231 (05/06/2016)	
Session Management and Notification Mechanisms for Push-to-Talk (PTT)	PCT US2016016371 (02/03/2016)	
Network-to-Network Interface Gateway System for Push-to-Talk-Over-Cellular Service	PCT US2016016206 (02/02/2016)	
System and Method for Elastic Scaling in a Push to Talk (PTT) Platform using User Affinity Groups	PCT US2016013447 (01/14/2016)	
System and Method for Elastic Scaling Using a Container-Based Platform	PCT US2016013443 (01/14/2016)	
System for Inter-Communication Between Integrated Digital Enhanced Network Systems and Push-to-Talk-Over-Cellular Systems	PCT US2015064819 (12/09/2015)	

Description	Application Number	Registration Number
Method for Providing Dynamic Quality of Service for Push-to-Talk Service	PCT US2015058804 (11/03/2015)	
Architecture Framework to Realize Push-to-X Services Using Cloud-Based Storage Services	PCT US2015058821 (11/03/2015)	
Method for Multiplexing Media Streams to Optimize Network Resource Usage for Push-to-Talk-Over-Cellular Service	PCT US2015058880 (11/03/2015)	
System and Method to Leverage Web Real-Time Communication for Implementing Push-to-Talk Solutions	PCT US2015058088 (10/29/2015)	
System for Inter-Communication Between Land Mobile Radio and Push-to-Talk-Over-Cellular Systems	PCT US2015056712 (10/21/2015)	
Relay-Mode and Direct-Mode Operations for Push-to-Talk-Over-Cellular (POC) Using WiFi Technologies	PCT US2015045951 (08/19/2015)	
Optimized Methods for Large Group Calling Using Unicast and Multicast Transport Bearers for Push-to-Talk-Over-Cellular (PoC)	PCT US2015010617 (01/08/2015)	
Effective Presence for Push-to-Talk-Over-Cellular (PoC) Networks	PCT US2014047863 (07/23/2014)	

Description	Application Number	Registration Number
Radio Access Network (RAN) Aware Service Delivery for Push-to-Talk-Over-Cellular (POC) Networks	PCT US2014047886 (07/23/2014)	
VOIP Denial-of-Service Protection Mechanisms from Attack	PCT US2014036414 (05/01/2014)	
Ruggedized Case or Sleeve for Providing Push-to-Talk (PTT) Functions	PCT US2013045733 (06/13/2013)	
Predictive Wakeup for Push-to-Talk-Over Cellular (POC) Call Setup Optimizations	PCT US2011033791 (04/25/2011)	
Community Group Client and Community Auto Discovery Solutions in a Wireless Communications Network	PCT US2010059138 (12/06/2010)	
Enhanced Group Calling Features for Connected Portfolio Services in a Wireless Communications Network	PCT US2010029274 (03/30/2010)	
Hybrid Push-to-Talk for Mobile Phone Networks	PCT US2009061369 (10/20/2009)	
Connected Portfolio Services for a Wireless Communications Network	PCT US2008081358 (10/27/2008)	

Description	Application Number	Registration Number
Emergency Group Calling Across Multiple Wireless Networks	PCT US2007017743 (08/09/2007)	
Technique for Implementing Advanced Voice Services Using an Unstructured Supplementary Service Data (USSD) Interface	PCT US2006011628 (03/30/2006)	
Subscriber Identity Module (SIM) Enabling Advanced Voice Services (AVS) Including Push-to-Talk, Push-to-Conference and Push-to-Message on Wireless Handsets and Networks	PCT US2005018243 (05/24/2005)	
Roaming Gateway for Support of Advanced Voice Services While Roaming in Wireless Communications Systems	PCT US2005016771 (05/13/2005)	
Architecture, Client Specification and Application Programming Interface (API) for Supporting Advanced Voice Services (AVS) Including Push to Talk on Wireless Handsets and Networks	PCT US2005016534 (05/11/2005)	
Premium Voice Services for Wireless Communications Systems	PCT US2004023038 (07/16/2004)	

Description	Application Number	Registration Number
Dispatch Service Architecture Framework	PCT US2003016386 (05/23/2003)	

EXHIBIT C

Trademarks

Description	Serial Number	Registration Number
KODIAK	87300557 (01/13/2017)	

EXHIBIT D

Mask Works

Description	Application	Registration
None Identified		