

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1
 Stylesheet Version v1.2

EPAS ID: PAT7429173

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	SECURITY AGREEMENT

CONVEYING PARTY DATA

Name	Execution Date
MAVENIR SYSTEMS, INC.	07/12/2022

RECEIVING PARTY DATA

Name:	JPMORGAN CHASE BANK, N.A.
Street Address:	CIB DMO WLO, MAIL CODE NY1-C413, 4 CMC
City:	BROOKLYN
State/Country:	NEW YORK
Postal Code:	11245-0001

PROPERTY NUMBERS Total: 66

Property Type	Number
Patent Number:	9749286
Patent Number:	9712488
Patent Number:	10225232
Patent Number:	9716996
Patent Number:	10021560
Patent Number:	8462770
Patent Number:	8363665
Patent Number:	9756524
Patent Number:	10506467
Patent Number:	8682322
Patent Number:	10004003
Patent Number:	9204361
Patent Number:	9363744
Patent Number:	10028175
Patent Number:	9906616
Patent Number:	9521145
Patent Number:	9549317
Patent Number:	9210615
Patent Number:	8503434
Patent Number:	10171548

PATENT

Property Type	Number
Patent Number:	8837365
Patent Number:	9614979
Patent Number:	7564853
Patent Number:	8477785
Patent Number:	9526005
Patent Number:	9832714
Patent Number:	11323410
Patent Number:	8887235
Patent Number:	8868083
Patent Number:	8280373
Patent Number:	9781624
Patent Number:	10327137
Patent Number:	7283539
Patent Number:	8150927
Patent Number:	8503438
Patent Number:	8423760
Patent Number:	7995519
Patent Number:	8693401
Patent Number:	7649895
Patent Number:	9232370
Patent Number:	9544337
Patent Number:	9641415
Patent Number:	9380486
Patent Number:	8121147
Patent Number:	9756681
Patent Number:	8073473
Patent Number:	9560515
Patent Number:	10932166
Patent Number:	10212192
Patent Number:	10341906
Patent Number:	10064146
Patent Number:	9913252
Patent Number:	7774006
Patent Number:	7760684
Patent Number:	7813730
Patent Number:	10873851
Application Number:	17213490
Application Number:	17335655

Property Type	Number
Application Number:	17350147
Application Number:	17382594
Application Number:	17736413
Application Number:	17576072
Application Number:	17697150
Application Number:	17731324
Application Number:	17723563
Application Number:	17505068

CORRESPONDENCE DATA

Fax Number: (800)914-4240

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: 800-713-0755

Email: Michael.Violet@wolterskluwer.com

Correspondent Name: CT CORPORATION

Address Line 1: 4400 EASTON COMMONS WAY

Address Line 2: SUITE 125

Address Line 4: COLUMBUS, OHIO 43219

NAME OF SUBMITTER: ELAINE CARRERA

SIGNATURE: /Elaine Carrera/

DATE SIGNED: 07/13/2022

Total Attachments: 14

source=16a. Mavenir - Patent Security Agreement (Mavenir Systems, Inc.)#page1.tif
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RECORDATION FORM COVER SHEET
PATENTS ONLY

To the Director of the U.S. Patent and Trademark Office: Please record the attached documents or the new address(es) below.

1. Name of conveying party(ies)
Mavenir Systems, Inc.

2. Name and address of receiving party(ies)
Name: JPMorgan Chase Bank, N.A.

Internal Address: _____

Additional name(s) of conveying party(ies) attached? Yes No

Street Address: CIB DMO WLO, Mail Code NY1-C413, 4 CMC

3. Nature of conveyance/Execution Date(s):

Execution Date(s) July 12, 2022

- Assignment Merger
- Security Agreement Change of Name
- Joint Research Agreement
- Government Interest Assignment
- Executive Order 9424, Confirmatory License
- Other _____

City: Brooklyn

State: NY

Country: USA Zip: 11245-0001

Additional name(s) & address(es) attached? Yes No

4. Application or patent number(s):

This document serves as an Oath/Declaration (37 CFR 1.63).

A. Patent Application No.(s)

B. Patent No.(s)

See Schedule A

See Schedule A

Additional numbers attached? Yes No

5. Name and address to whom correspondence concerning document should be mailed:

Name: Elaine Carrera, Senior Paralegal

Internal Address: _____

Street Address: c/o Cahill Gordon & Reindel LLP,
32 Old Slip

City: New York

State: NY Zip: 10005

Phone Number: (212) 701-3365

Docket Number: _____

Email Address: ecarrera@cahill.com

6. Total number of applications and patents involved: 65

7. Total fee (37 CFR 1.21(h) & 3.41) \$ _____

- Authorized to be charged to deposit account
- Enclosed
- None required (government interest not affecting title)

8. Payment Information

Deposit Account Number _____

Authorized UserName _____

9. Signature:

Elaine Carrera
Signature

July 12, 2022

Date

Elaine Carrera

Name of Person Signing

Total number of pages including cover sheet, attachments, and documents:

14

Documents to be recorded (including cover sheet) should be faxed to (571) 273-0140, or mailed to:
Mail Stop Assignment Recordation Services, Director of the USPTO, P.O.Box 1460, Alexandria, V.A. 22313-1460

INTELLECTUAL PROPERTY SECURITY AGREEMENT
(PATENTS)

This **INTELLECTUAL PROPERTY SECURITY AGREEMENT** (as amended, amended and restated, supplemented or otherwise modified from time to time, the “IP Security Agreement”) dated as of July 12, 2022, is among the Persons listed on the signature pages hereof (collectively, the “Grantors”) and JPMorgan Chase Bank, N.A., as collateral agent (the “Collateral Agent”) for the Secured Parties (as defined in the Credit Agreement referred to below).

WHEREAS, Mavenir Systems, Inc., a Delaware corporation (together with any other Co-Borrower, the “Borrower”) and Mavenir Private Holdings II Ltd, a company incorporated in England and Wales with registered number 10159026 (“Holdings”) have entered into the Credit Agreement dated as of July 12, 2022 (as amended, restated, amended and restated, supplemented, replaced, refinanced or otherwise modified from time to time, the “Credit Agreement”), with the lenders and financial institutions from time to time party thereto and JPMorgan Chase Bank, N.A., as Administrative Agent and Collateral Agent. Capitalized terms defined in the Credit Agreement or in the Security Agreement (as defined below) and not otherwise defined herein are used herein as defined in the Credit Agreement or the Security Agreement, as the case may be (and in the event of a conflict, the applicable definition shall be the one given to such term in the Security Agreement).

WHEREAS, as a condition precedent to the making of the Loans by the Lenders, the entry into Secured Hedge Agreements by the Hedge Banks from time to time and the entry into Secured Cash Management Agreements by the Cash Management Banks from time to time, each Grantor has executed and delivered that certain Security Agreement, dated as of July 12, 2022 (as amended, restated, amended and restated, supplemented or otherwise modified from time to time, the “Security Agreement”), among the Grantors from time to time party thereto and the Collateral Agent.

WHEREAS, under the terms of the Security Agreement, the Grantors have granted to the Collateral Agent, for the benefit of the Secured Parties, a security interest in, among other property, certain intellectual property of the Grantors, and have agreed thereunder to execute this IP Security Agreement for recording with the USPTO.

NOW, THEREFORE, for good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, each Grantor agrees as follows:

A. Grant of Security. Each Grantor, as collateral security for the prompt and complete payment and performance of the Secured Obligations of such Grantor, hereby grants to the Collateral Agent (and its successors and permitted assigns), for the benefit of the Secured Parties, a security interest in and to all of such Grantor’s right, title and interest in and to the following, whether now owned or hereafter acquired by the undersigned (the “Collateral”):

a. all patents and patent applications, including, without limitation, those set forth in Schedule A hereto (the “Patents”);

b. all reissues, divisions, continuations, continuations-in-part, extensions, renewals and reexaminations of any of the foregoing, all rights in the foregoing provided by international treaties or conventions, all rights corresponding thereto throughout the world and all other rights of any kind whatsoever of such Grantor accruing thereunder or pertaining thereto;

c. any and all claims for damages and injunctive relief for past, present and future infringement, dilution, misappropriation, violation, misuse or breach with respect to any of the foregoing, with the right, but not the obligation, to sue for and collect, or otherwise recover, such damages; and

d. any and all proceeds of, collateral for, income, royalties and other payments now or hereafter due and payable with respect to, and supporting obligations relating to, any and all of the Collateral of or arising from any of the foregoing; provided that notwithstanding anything to the contrary contained in the foregoing clauses (a) through (d), the security interest created hereby shall not extend to, and the term "Collateral" shall not include, any Excluded Property.

B. Security for Obligations. The grant of a security interest in, the Collateral by each Grantor under this IP Security Agreement secures the payment of all Secured Obligations of such Grantor now or hereafter existing under or in respect of the Secured Documents (as such Secured Documents may be amended, restated, amended and restated, supplemented, replaced, refinanced or otherwise modified from time to time (including any increases of the principal amount outstanding thereunder)). Without limiting the generality of the foregoing, this IP Security Agreement secures, as to each Grantor, the payment of all amounts that constitute part of the Secured Obligations that would be owed by such Grantor to any Secured Party under the Secured Documents but for the fact that they are unenforceable or not allowable due to the existence of a bankruptcy, or reorganization or similar proceeding involving a Loan Party.

C. Recordation. Each Grantor authorizes and requests that the Commissioner for Patents record this IP Security Agreement.

D. Execution in Counterparts; Electronic Execution. This IP Security Agreement may be executed in any number of counterparts, each of which when so executed shall be deemed to be an original and all of which taken together shall constitute one and the same agreement. The words "execution," "execute," "signed," "signature," and words of like import in this IP Security Agreement or any amendment or other modification hereof shall be deemed to include electronic signatures or the keeping of records in electronic form, each of which shall be of the same legal effect, validity or enforceability as a manually executed signature or the use of a paper-based recordkeeping system, as the case may be, to the extent and as provided for in any applicable Law, including the Federal Electronic Signatures in Global and National Commerce Act, the New York State Electronic Signatures and Records Act, or any other similar state laws based on the Uniform Electronic Transactions Act.

E. Grants, Rights and Remedies. This IP Security Agreement has been entered into in conjunction with the provisions of the Security Agreement. Each Grantor does hereby acknowledge and confirm that the grant of the security interest hereunder to, and the rights and remedies of, the Collateral Agent with respect to the Collateral are more fully set forth in the Security Agreement, the terms and provisions of which are incorporated herein by reference as if

fully set forth herein. In the event of any conflict between the terms of this IP Security Agreement and the terms of the Security Agreement, the terms of the Security Agreement shall govern.

F. Governing Law; Jurisdiction; Etc. Sections 10.15, 10.16 and 10.17 of the Credit Agreement are hereby incorporated by reference, mutatis mutandis.

G. Intercreditor Agreement. Notwithstanding any provision to the contrary in this IP Security Agreement (but without expanding the scope of the Collateral as set forth in this IP Security Agreement and the Credit Agreement), in the event of any conflict or inconsistency between the provisions of the First Lien/Second Lien Intercreditor Agreement (or any other intercreditor agreement entered into by the Collateral Agent in accordance with Section 9.11 of the Credit Agreement) and this IP Security Agreement, the provisions of the First Lien/Second Lien Intercreditor Agreement or such other intercreditor agreement, as applicable, shall prevail.

[SIGNATURE PAGES FOLLOW]

IN WITNESS WHEREOF, the Grantor and the Collateral Agent have caused this Patent Security Agreement to be duly executed and delivered by its officer thereunto duly authorized as of the date first written above.

MAVENIR SYSTEMS, INC.

By: 

Name: Terrence Hungle

Title: Executive Vice President and
Chief Financial Officer

[Signature Page to Patent Security Agreement]

PATENT
REEL: 060641 FRAME: 0249

JPMORGAN CHASE BANK, N.A. as Collateral
Agent

By: EAJ K

Name: Eleftherios Karsos

Title: Authorized Officer

SCHEDULE A

Patents

Title	Pat No. Pub No. App No.	Pat Date Pub Date App Date	Current Owner	Status
METHOD AND SYSTEM FOR OPTIMIZED LOAD BALANCING ACROSS DISTRIBUTED DATA PLANE PROCESSING ENTITIES FOR MOBILE CORE NETWORK	9749286 20160021572 14/801,615	08-29-2017 01-21-2016 07-16-2015	MAVENIR SYSTEMS, INC.	Granted
METHOD AND SYSTEM FOR IDLE MODE TRANSFER FOR LOAD BALANCING ACROSS DISTRIBUTED DATA PLANE PROCESSING ENTITIES FOR MOBILE CORE NETWORK	9712488 20160021573 14/801,629	07-18-2017 01-21-2016 07-16-2015	MAVENIR SYSTEMS, INC.	Granted
METHOD AND SYSTEM FOR IDLE MODE TRANSFER FOR LOAD BALANCING ACROSS DISTRIBUTED DATA PLANE PROCESSING ENTITIES FOR MOBILE CORE NETWORK	10225232 20170353427 15/628,516	03-05-2019 12-07-2017 06-20-2017	MAVENIR SYSTEMS, INC.	Granted
METHOD AND SYSTEM FOR SELECTIVE AND SECURE INTERACTION OF BYOD (BRING YOUR OWN DEVICE) WITH ENTERPRISE NETWORK THROUGH MOBILE WIRELESS NETWORKS	9716996 20140349611 13/899,533	07-25-2017 11-27-2014 05-21-2013	MAVENIR SYSTEMS, INC.	Granted
METHOD AND SYSTEM FOR SELECTIVE AND SECURE INTERACTION OF BYOD (BRING YOUR OWN DEVICE) WITH ENTERPRISE NETWORK THROUGH MOBILE WIRELESS NETWORKS	10021560 20170353852 15/628,507	07-10-2018 12-07-2017 06-20-2017	MAVENIR SYSTEMS, INC.	Granted
METHOD AND SYSTEM FOR BYPASSING 3GPP PACKET SWITCHED CORE NETWORK WHEN ACCESSING INTERNET FROM 3GPP UES USING 3GPP RADIO ACCESS NETWORK	8462770 20100027533 12/415,853	06-11-2013 02-04-2010 03-31-2009	MAVENIR SYSTEMS, INC.	Granted

Title	Pat No. Pub No. App No.	Pat Date Pub Date App Date	Current Owner	Status
METHOD AND SYSTEM FOR BYPASSING 3GPP PACKET SWITCHED CORE NETWORK WHEN ACCESSING INTERNET FROM 3GPP UES USING IP-BTS, FEMTO CELL, OR LTE ACCESS NETWORK	8363665 20100077102 12/620,969	01-29-2013 03-25-2010 11-18-2009	MAVENIR SYSTEMS, INC.	Granted
METHOD AND SYSTEM FOR SIGNALING SAVING ON RADIO ACCESS NETWORKS USING EARLY THROTTLING MECHANISM FOR COMMUNICATION DEVICES	9756524 20140056132 13/972,760	09-05-2017 02-27-2014 08-21-2013	MAVENIR SYSTEMS, INC.	Granted
METHOD AND SYSTEM FOR SIGNALING SAVING ON RADIO ACCESS NETWORKS USING EARLY THROTTLING MECHANISM FOR COMMUNICATION DEVICES	10506467 20170359751 15/639,810	12-10-2019 12-14-2017 06-30-2017	MAVENIR SYSTEMS, INC.	Granted
INTERNETWORKING FOR CIRCUIT SWITCHED FALLBACK	8682322 20120302234 13/480,792	03-25-2014 11-29-2012 05-25-2012	MAVENIR SYSTEMS, INC.	Granted
INTERNETWORKING FOR CIRCUIT SWITCHED FALLBACK-NETWORK INITIATED USSD REQUEST/NOTIFICATION PROCEDURE MOBILE-TERMINATED LOCATION REQUEST PROCEDURE PROVIDE SUBSCRIBER INFORMATION PROCEDURE	10004003 20170332285 14/403,996	06-19-2018 11-16-2017 05-20-2015	MAVENIR SYSTEMS, INC.	Granted
METHOD AND SYSTEM FOR SCALABLE AND MANAGEABLE NON-ACCESS STRATUM (NAS) NODE SELECTION FUNCTION FOR EVOLVED PACKET SYSTEM	9204361 20150117308 14/067,272	12-01-2015 04-30-2015 10-30-2013	MAVENIR SYSTEMS, INC.	Granted
METHOD AND SYSTEM FOR SCALABLE AND MANAGEABLE NON-ACCESS STRATUM (NAS) NODE SELECTION FUNCTION FOR EVOLVED PACKET SYSTEMS	9363744 20160050620 14/856,248	06-07-2016 02-18-2016 09-16-2015	MAVENIR SYSTEMS, INC.	Granted

Title	Pat No. Pub No. App No.	Pat Date Pub Date App Date	Current Owner	Status
SYSTEMS AND METHODS FOR SINGLE RADIO VOICE CALL CONTINUITY IN A MULTI-LINE, MULTI-DEVICE SERVICE ENVIRONMENT IN A COMMUNICATIONS NETWORK	10028175 20160353331 14/992,771	07-17-2018 12-01-2016 01-11-2016	MAVENIR SYSTEMS, INC.	Granted
SYSTEMS AND METHODS FOR MULTI-LINE, MULTI-DEVICE SERVICE IN A COMMUNICATIONS NETWORK	9906616 20160352855 14/992,791	02-27-2018 12-01-2016 01-11-2016	MAVENIR SYSTEMS, INC.	Granted
METHODS AND APPARATUSES TO PROVIDE SECURE COMMUNICATION BETWEEN AN UNTRUSTED WIRELESS ACCESS NETWORK AND A TRUSTED CONTROLLED NETWORK	9521145 20130097418 13/326,191	12-13-2016 04-18-2013 12-14-2011	MAVENIR SYSTEMS, INC.	Granted
METHODS AND APPARATUSES TO PROVIDE SECURE COMMUNICATION BETWEEN AN UNTRUSTED WIRELESS ACCESS NETWORK AND A TRUSTED CONTROLLED NETWORK	9549317 20130097674 13/572,573	01-17-2017 04-18-2013 08-10-2012	MAVENIR SYSTEMS, INC.	Granted
METHOD AND SYSTEM FOR ELASTIC AND RESILIENT 3G/4G MOBILE PACKET NETWORKING FOR SUBSCRIBER DATA FLOW USING VIRTUALIZED SWITCHING AND FORWARDING	9210615 20140078988 14/029,784	12-08-2015 03-20-2014 09-17-2013	MAVENIR SYSTEMS, INC.	Granted
METHOD AND SYSTEM FOR INSERTING A NEW NODE INTO A COMMUNICATIONS PATH BETWEEN TWO EXISTING NODES WITHOUT DISRUPTION	8503434 20110075659 12/568,613	08-06-2013 03-31-2011 09-28-2009	MAVENIR SYSTEMS, INC.	Granted
METHOD AND SYSTEM FOR EFFICIENT ENRICHMENT OF UPPER LAYER PROTOCOL CONTENT IN TRANSMISSION CONTROL PROGRAM (TCP) BASED SESSIONS	10171548 20160065644 14/469,049	01-01-2019 03-03-2016 08-26-2014	MAVENIR SYSTEMS, INC.	Granted
METHOD AND SYSTEM FOR SECURELY ROUTING TRAFFIC ON X2 INTERFACE IN A 3GPP NETWORK	8837365 20130051316 13/309,332	09-16-2014 02-28-2013 12-01-2011	MAVENIR SYSTEMS, INC.	Granted

Title	Pat No. Pub No. App No.	Pat Date Pub Date App Date	Current Owner	Status
SYSTEM AND METHOD FOR GENERATING CHARGING DATA FOR SHORT MESSAGE DELIVERY	9614979 20160295025 14/677,083	04-04-2017 10-06-2016 04-02-2015	MAVENIR SYSTEMS, INC.	Granted
INTER-WORKING BETWEEN UMA AND SIP SIGNALING	7564853 11/351,834	07-21-2009 02-09-2006	MAVENIR SYSTEMS, INC.	Granted
METHOD AND SYSTEM FOR INTERWORKING A WLAN INTO A WWAN FOR SESSION AND MOBILITY MANAGEMENT	8477785 20120008578 13/177,353	07-02-2013 01-12-2012 07-06-2011	MAVENIR SYSTEMS, INC.	Granted
GSM A3/A8 AUTHENTICATION IN AN IMS NETWORK	9526005 20150304846 14/683,483	12-20-2016 10-22-2015 04-10-2015	MAVENIR SYSTEMS, INC.	Granted
METHOD AND SYSTEM FOR NETWORK NODE SELECTION BASED USER EQUIPMENT AGENT ASSISTED MODIFICATION OF TEMPORARY IDENTITY IN 3G AND 4G NETWORKS	9832714 20160242110 14/622,545	11-28-2017 08-18-2016 02-13-2015	MAVENIR SYSTEMS, INC.	Granted
METHOD AND SYSTEM FOR SECURE DISTRIBUTION OF MOBILE DATA TRAFFIC TO CLOSER NETWORK ENDPOINTS	11323410 20170127273 15/299,714	05-03-2022 05-04-2017 10-21-2016	MAVENIR SYSTEMS, INC.	Granted
AUTHENTICATION INTERWORKING	8887235 20080092212 11/550,343	11-11-2014 04-17-2008 10-17-2006	MAVENIR SYSTEMS, INC.	Granted
DISCOVERING CELLULAR NETWORK ELEMENTS	8868083 20080293433 12/119,633	10-21-2014 11-27-2008 05-13-2008	MAVENIR SYSTEMS, INC.	Granted
TERMINAL DEVICE CONTROL SERVER AND METHOD FOR CONTROLLING ACCESS TO A MOBILE COMMUNICATION NETWORK	8280373 20090061863 11/849,940	10-02-2012 03-05-2009 09-04-2007	MAVENIR SYSTEMS, INC.	Granted
SYSTEM AND METHOD FOR INTUITIVE PACKET BUFFERING AND ADAPTIVE PAGING	9781624 20160128078 14/529,901	10-03-2017 05-05-2016 10-31-2014	MAVENIR SYSTEMS, INC.	Granted
SYSTEM AND METHOD FOR DETECTING MALICIOUS ATTACKS IN A TELECOMMUNICATION NETWORK	10327137 20160277926 14/658,324	06-18-2019 09-22-2016 03-16-2015	MAVENIR SYSTEMS, INC.	Granted

Title	Pat No. Pub No. App No.	Pat Date Pub Date App Date	Current Owner	Status
METHOD AND SYSTEM FOR MANAGING MESSAGE-BASED APPLICATIONS AND APPLICATIONS PROVIDERS IN A COMMUNICATIONS NETWORK	7283539 20030227894 10/164,605	10-16-2007 12-11-2003 06-10-2002	MAVENIR SYSTEMS, INC.	Granted
PROCESSING OF MESSAGES TO BE TRANSMITTED OVER COMMUNICATION NETWORKS	8150927 20080189373 11/719,515	04-03-2012 08-07-2008 11-18-2007	MAVENIR SYSTEMS, INC.	Granted
METHOD AND SYSTEM FOR SELECTIVELY BYPASSING PACKET CORE NETWORK WITHIN A SESSION BASED ON TRAFFIC TYPE	8503438 20110116499 12/949,624	08-06-2013 05-19-2011 11-18-2010	MAVENIR SYSTEMS, INC.	Granted
METHOD AND SYSTEM FOR REDUCING PACKET OVERHEAD FOR AN LTE ARCHITECTURE WHILE SECURING TRAFFIC IN AN UNSECURED ENVIRONMENT	8423760 20110208959 12/711,140	04-16-2013 08-25-2011 02-23-2010	MAVENIR SYSTEMS, INC.	Granted
CENTRALISED MANAGEMENT FOR A SET OF NETWORK NODES	7995519 20090098861 11/885,311	08-09-2011 04-16-2009 03-21-2006	MAVENIR SYSTEMS, INC.	Granted
METHOD AND SYSTEM FOR OPTIMIZED HANDLING OF CONTEXT USING HIERARCHICAL GROUPING (FOR MACHINE TYPE COMMUNICATIONS)	8693401 20130021972 13/553,772	04-08-2014 01-24-2013 07-19-2012	MAVENIR SYSTEMS, INC.	Granted
APPARATUS AND METHOD FOR ROUTING MULTIMEDIA MESSAGES BETWEEN A USER AGENT AND MULTIPLE MULTIMEDIA MESSAGE SERVICE CENTERS	7649895 20050141522 10/747,366	01-19-2010 06-30-2005 12-30-2003	MAVENIR SYSTEMS, INC.	Granted
ENHANCED CONVERGED IP MESSAGE SERVER SYSTEM AND METHOD	9232370 20140222901 14/169,229	01-05-2016 08-07-2014 01-31-2014	MAVENIR SYSTEMS, INC.	Granted
CONVERGED MEDIA PACKET GATEWAY FOR A NOVEL LTE DATA AND VOICE CORE NETWORK ARCHITECTURE	9544337 20150063346 14/477,002	01-10-2017 03-05-2015 09-04-2014	MAVENIR SYSTEMS, INC.	Granted
METHOD AND SYSTEM FOR SEAMLESS SCTP FAILOVER BETWEEN SCTP SERVERS	9641415 20150256436 14/636,165	05-02-2017 09-10-2015 03-02-2015	MAVENIR SYSTEMS, INC.	Granted

Title	Pat No. Pub No. App No.	Pat Date Pub Date App Date	Current Owner	Status
RUNNING ON DIFFERENT MACHINES				
METHOD AND SYSTEM FOR SIGNALING REDUCTION ON RADIO ACCESS NETWORKS USING TARGETED INTELLIGENCE FOR COMMUNICATION DEVICES	9380486 20150327112 13/763,372	06-28-2016 11-12-2015 02-08-2013	MAVENIR SYSTEMS, INC.	Granted
CONTEXT-SENSITIVE MULTIMEDIA MESSAGE SERVICE RESPONSE	8121147 20070070979 11/234,648	02-21-2012 03-29-2007 09-23-2005	MAVENIR SYSTEMS, INC.	Granted
SYSTEM AND METHOD FOR PROVIDING IP VERSION INTERWORKING FOR IMS ACCESS THROUGH EPC	9756681 20160057788 14/465,303	09-05-2017 02-25-2016 08-21-2014	MAVENIR SYSTEMS, INC.	Granted
METHOD FOR PROCESSING A MESSAGE	8073473 20070191035 11/559,463	12-06-2011 08-16-2007 11-14-2006	MAVENIR SYSTEMS, INC.	Granted
SYSTEM AND METHOD FOR SUPPLEMENTARY SERVICES SETTING SYNCHRONIZATION	9560515 20160100306 14/508,078	01-31-2017 04-07-2016 10-07-2014	MAVENIR SYSTEMS, INC.	Granted
METHOD AND SYSTEM FOR SESSION RESILIENCE IN PACKET GATEWAYS	10932166 20190223062 16/360,156	02-23-2021 07-18-2019 03-21-2019	MAVENIR SYSTEMS, INC.	Granted
SYSTEMS AND METHODS FOR INTERWORKING WITH OVER THE TOP APPLICATIONS IN COMMUNICATIONS NETWORK	10212192 20180198830 15/402,608	02-19-2019 07-12-2018 01-10-2017	MAVENIR SYSTEMS, INC.	Granted
SYSTEM AND METHOD FOR CIRCUIT SWITCHED FALLBACK IN IMS CENTRALIZED SERVICES	10341906 20180035335 15/727,734	07-02-2019 02-01-2018 10-09-2017	MAVENIR SYSTEMS, INC.	Granted
METHOD AND SYSTEM FOR SUPPLEMENTARY SERVICES SYNCHRONIZATION ACROSS NETWORKS	10064146 20170086155 15/274,379	08-28-2018 03-23-2017 09-23-2016	MAVENIR SYSTEMS, INC.	Granted
COMMUNICATION SYSTEM AND METHOD FOR MULTI-LINE, MULTI-DEVICE SERVICE WITH USER CAPABILITY DISCOVERY	9913252 20170201965 14/992,848	03-06-2018 07-13-2017 01-11-2016	MAVENIR SYSTEMS, INC.	Granted
APPARATUS AND METHOD FOR IMPROVING SHORT MESSAGE SERVICE DEPENDABILITY	7774006 20070178919 11/351,566	08-10-2010 08-02-2007 02-10-2006	MAVENIR SYSTEMS, INC.	Granted

Title	Pat No. Pub No. App No.	Pat Date Pub Date App Date	Current Owner	Status
MEASURING MEDIA DISTRIBUTION AND IMPACT IN A MOBILE COMMUNICATION NETWORK	7760684 20070191040 11/674,355	07-20-2010 08-16-2007 02-13-2007	MAVENIR SYSTEMS, INC.	Granted
PROVIDING MOBILE CORE SERVICES INDEPENDENT OF A MOBILE DEVICE	7813730 20080091824 11/550,334	10-12-2010 04-17-2008 10-17-2006	MAVENIR SYSTEMS, INC.	Granted
METHOD AND SYSTEM FOR SCALABLE DOWNLINK DATA LOAD DISTRIBUTION BETWEEN DATA PROCESSING UNITS FOR MOBILE PACKET DATA GATEWAY USING NETWORK ADDRESS TRANSLATION	10873851 20200092714 16/494,170	12-22-2020 03-19-2020 09-13-2019	MAVENIR SYSTEMS, INC.	Granted
DECODING UPLINK IN A MASSIVE MULTIPLE INPUT MULTIPLE OUTPUT WIRELESS COMMUNICATION SYSTEM FOR AN OPEN RADIO ACCESS NETWORK	20210306039 17/213490	2109-30-2021 03-26-2021	MAVENIR SYSTEMS, INC.	Published
METHOD FOR ENABLING NON-DELAY MANAGED TRAFFIC FOR O-RAN FRONTHAUL INTERFACE IN CLOUD RAN SYSTEMS	20210385686 17/335655	2-09-2021 06-01-2021	MAVENIR SYSTEMS, INC.	Published
METHOD FOR ASSIGNING IDENTIFIERS TO FRONTHAUL TRAFFIC FLOW IN O-RAN COMPLIANT RADIO ACCESS NETWORK	20220041326 17/350147	01-13-2022 06-17-2021	MAVENIR SYSTEMS, INC.	Published

Title	Pat No. Pub No. App No.	Pat Date Pub Date App Date	Current Owner	Status
METHOD FOR SELECTING THE TRANSPORT NETWORK LAYER ASSOCIATION (TNLA) WITHIN 5G RAN SYSTEMS	20220030512 17/382594	01-27-2022 07-22-2021	MAVENIR SYSTEMS, INC.	Published
METHOD AND APPARATUS FOR USER PLANE RESOURCE OPTIMIZATION	17/736413	5/4/2022	MAVENIR SYSTEMS INC.	Pending
METHOD AND APPARATUS FOR UNIQUE IDENTIFICATION OF INDIVIDUAL USERS IN THE RADIO ACCESS NETWORK (RAN) INTELLIGENT CONTROLLER	17/576072	1/14/2022	MAVENIR SYSTEMS INC.	Pending
NARROW- BAND INTERNET OF THINGS PHYSICAL RANDOM-ACCESS CHANNEL (NPRACH) RECEIVER	17/697150	3/17/2022	MAVENIR SYSTEMS INC.	Pending
METHOD AND APPARATUS FOR SURVIVAL TIME HANDLING FOR TIME SENSITIVE CONNECTIONS	17/731324	4/28/2022	MAVENIR SYSTEMS INC.	Pending
SYSTEMS AND METHODS FOR ENABLING COMMUNICATIONS OVER SHARED SPECTRUM USING O-RAN FRONTHAUL INTERFACE IN RADIO ACCESS NETWORKS	17/723563	4/19/2022	MAVENIR SYSTEMS INC.	Pending
MULTIPLE NAMESPACES SUPPORT IN PRIORITY CALL IN IMS NETWORK.	20220131907 17505068	04-28-2022 10-19-2021	MAVENIR SYSTEMS, INC.	Pending