

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1
Stylesheet Version v1.2

EPAS ID: PAT7156213

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT
CONVEYING PARTY DATA	
Name	Execution Date
RAJESH KUMAR MISHRA	11/10/2020
EUGINA JORDAN	02/02/2021
ZAHID GHADIALY	02/03/2021
KAITKI AGARWAL	11/10/2020
FERNANDO CERIONI	02/01/2022
ARUN PRASATH	07/27/2021
RECEIVING PARTY DATA	
Name:	PARALLEL WIRELESS, INC.
Street Address:	100 INNOVATIVE WAY, SUITE 3410
City:	NASHUA
State/Country:	NEW HAMPSHIRE
Postal Code:	03062
PROPERTY NUMBERS Total: 1	
Property Type	Number
Application Number:	17168171
CORRESPONDENCE DATA	
Fax Number:	
<i>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.</i>	
Phone:	603-367-3607
Email:	ip.inbox@parallelwireless.com, kle@parallelwireless.com
Correspondent Name:	PARALLEL WIRELESS, INC.
Address Line 1:	100 INNOVATIVE WAY, SUITE 3410
Address Line 4:	NASHUA, NEW HAMPSHIRE 03062
ATTORNEY DOCKET NUMBER:	PWS-72673US01
NAME OF SUBMITTER:	KRISTINE LE
SIGNATURE:	/kristine le/
DATE SIGNED:	02/02/2022
Total Attachments: 20	

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ASSIGNMENT
(Patent Application)

We/I, the undersigned, have invented certain inventions and improvements disclosed in a PCT, utility (provisional or non-provisional) or design patent application entitled

“OpenRAN Networking Infrastructure,”

specified in the documents filed under U.S. Provisional App. No. 62/970,134 filed on February 4, 2020 and U.S. App. No. 17/168,171 filed on February 4, 2021.

For one dollar (\$1.00) and other good and valuable consideration, the receipt and sufficiency of which we/I acknowledge, we/I:

1. Hereby assign, transfer, convey, and sell and have assigned, transferred, conveyed, and sold to Parallel Wireless, Inc., a corporation, having a principal place of business at 100 Innovative Way, Suite 3410, Nashua, NH, 03062 (“Assignee”), the entire right, title, and interest in and to:
 - a. all intellectual property (including, without limitation, any innovation, information, invention, discovery, product, process, work or design) disclosed, embodied, shown, or claimed in the above-referenced patent application, implicitly or explicitly;
 - b. the above-referenced patent application, the right to claim priority to the above-referenced patent application, all applications based in whole or in part upon the above-referenced patent application, including, without limitation, all applications that are a provisional, non-provisional, design, divisional, continuation, continuation-in-part, registration, utility model, industrial design, national phase application in any country, reissue, renewal, substitute, extension, reexamination, post-grant review, inter partes review, supplemental examination or non-U.S. patent application or application for other rights based in whole or in part on the above-referenced patent application;
 - c. all patents (including, without limitation, all U.S. and non-U.S. patents, registrations, utility models, industrial designs, design patents, counterparts, continuations, continuations-in-part, divisionals, reissues, renewals, substitutes, extensions, national phase applications in any country, reexaminations, post-grant reviews, inter partes reviews, and supplemental examinations) that are granted or issued upon, or that claim priority to, any and all applications described in (b) of this paragraph or that disclose or claim intellectual property described in (a) of this paragraph, in whole or in part; and
 - d. all claims for damages by reason of past infringement of any rights under the applications or patents described in (a), (b) or (c) of this paragraph (including provisional rights to reasonable royalties pursuant to 35 U.S.C. § 154(d)) and the right to sue for and collect such damages and royalties for Assignee’s own use.

2. Authorize and request the U.S. Patent and Trademark Office or any other U.S. or non-U.S. agency to issue to the Assignee any and all patent(s), or other rights or documents, resulting from the intellectual property, patent application(s) and patents described in paragraph 1 of this Assignment.
3. Agree to sign all papers and documents, including without limitation, applications, declarations, oaths and petitions, and, at the Assignee's expense, perform any other acts that are necessary in connection with prosecution of patent application(s) or intellectual property described in paragraph 1 of this Assignment and the enforcement of patent(s) or other rights resulting from such patent application(s) or intellectual property.
4. Agree that the terms, covenants, and conditions of this Assignment shall inure to the benefit of the Assignee, its successors, assigns and other legal representative, and shall be binding upon us/me, as well as our/my heirs, legal representatives, and assigns.
5. Promise and affirm that we/I have not entered, and will not enter, into any assignment, contract, or understanding that conflicts with this Assignment.
6. Authorize counsel of record to insert above the application number and filing date of the above-described patent application when known.

Signed on the dates indicated beside our/my signature.

Signature:  Date: July 27, 2021
Arun Prasath

Assignee Representative:

Signature:  Date: July 28, 2021
Michael Saji
Director, IP and Senior Corporate Counsel

ASSIGNMENT
(Patent Application)

We/I, the undersigned, have invented certain inventions and improvements disclosed in a PCT, utility (provisional or non-provisional) or design patent application entitled

"OPENRAN NETWORKING INFRASTRUCTURE,"

specified in the documents filed under the same title as U.S. Provisional App. No. 62/970,134 filed on February 4, 2020 and TO BE ADDED WHEN KNOWN.

For one dollar (\$1.00) and other good and valuable consideration, the receipt and sufficiency of which we/I acknowledge, we/I:


1. Hereby assign, transfer, convey, and sell and have assigned, transferred, conveyed, and sold to Parallel Wireless Inc., a corporation, having a principal place of business at 100 Innovative Way, Suite 3410, Nashua, NH, 03062 ("Assignee"), the entire right, title, and interest in and to:
 - a. all intellectual property (including, without limitation, any innovation, information, invention, discovery, product, process, work or design) disclosed, embodied, shown, or claimed in the above-referenced patent application, implicitly or explicitly;
 - b. the above-referenced patent application, the right to claim priority to the above-referenced patent application, all applications based in whole or in part upon the above-referenced patent application, including, without limitation, all applications that are a provisional, non-provisional, design, divisional, continuation, continuation-in-part, registration, utility model, industrial design, national phase application in any country, reissue, renewal, substitute, extension, reexamination, post-grant review, inter partes review, supplemental examination or non-U.S. patent application or application for other rights based in whole or in part on the above-referenced patent application;
 - c. all patents (including, without limitation, all U.S. and non-U.S. patents, registrations, utility models, industrial designs, design patents, counterparts, continuations, continuations-in-part, divisionals, reissues, renewals, substitutes, extensions, national phase applications in any country, reexaminations, post-grant reviews, inter partes reviews, and supplemental examinations) that are granted or issued upon, or that claim priority to, any and all applications described in (b) of this paragraph or that disclose or claim intellectual property described in (a) of this paragraph, in whole or in part; and
 - d. all claims for damages by reason of past infringement of any rights under the applications or patents described in (a), (b) or (c) of this paragraph (including provisional rights to reasonable royalties pursuant to 35 U.S.C. § 154(d)) and the right to sue for and collect such damages and royalties for Assignee's own use.

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6. Authorize counsel of record to insert above the application number and filing date of the above-described patent application when known.

Signed on the dates indicated beside our/my signature.

Signature: _____ Date: _____
Rajesh Kumar Mishra

Signature: _____ Date: _____
Eugina Jordan

Signature:  Date: 03 Feb 2021
Zahid Ghadialy

Signature: _____ Date: _____
Fernando Cerioni

Signature: _____ Date: _____
Arun Prasath

Assignee Representative:

Signature: _____ Date: _____

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Signed on the dates indicated beside our/my signature.

Signature: _____ Date: _____
Rajesh Kumar Mishra

Signature: E Jordan Date: 02/02/21
Eugina Jordan

Signature: _____ Date: _____
Zahid Ghadialy

Signature: _____ Date: _____
Fernando Cerioni

Signature: _____ Date: _____
Arun Prasath

Assignee Representative:

Signature: _____ Date: _____

ASSIGNMENT
(Patent Application)

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For one dollar (\$1.00) and other good and valuable consideration, the receipt and sufficiency of which we/I acknowledge, we/I:

1. Hereby assign, transfer, convey, and sell and have assigned, transferred, conveyed, and sold to Parallel Wireless, Inc., a corporation, having a principal place of business at 100 Innovative Way, Suite 3410, Nashua, NH, 03062 (“Assignee”), the entire right, title, and interest in and to:
 - a. all intellectual property (including, without limitation, any innovation, information, invention, discovery, product, process, work or design) disclosed, embodied, shown, or claimed in the above-referenced patent application, implicitly or explicitly;
 - b. the above-referenced patent application, the right to claim priority to the above-referenced patent application, all applications based in whole or in part upon the above-referenced patent application, including, without limitation, all applications that are a provisional, non-provisional, design, divisional, continuation, continuation-in-part, registration, utility model, industrial design, national phase application in any country, reissue, renewal, substitute, extension, reexamination, post-grant review, inter partes review, supplemental examination or non-U.S. patent application or application for other rights based in whole or in part on the above-referenced patent application;
 - c. all patents (including, without limitation, all U.S. and non-U.S. patents, registrations, utility models, industrial designs, design patents, counterparts, continuations, continuations-in-part, divisionals, reissues, renewals, substitutes, extensions, national phase applications in any country, reexaminations, post-grant reviews, inter partes reviews, and supplemental examinations) that are granted or issued upon, or that claim priority to, any and all applications described in (b) of this paragraph or that disclose or claim intellectual property described in (a) of this paragraph, in whole or in part; and
 - d. all claims for damages by reason of past infringement of any rights under the applications or patents described in (a), (b) or (c) of this paragraph (including provisional rights to reasonable royalties pursuant to 35 U.S.C. § 154(d)) and the right to sue for and collect such damages and royalties for Assignee’s own use.

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6. Authorize counsel of record to insert above the application number and filing date of the above-described patent application when known.

Signed on the dates indicated beside our/my signature.

Signature:  Date: February 1, 2022
461172F5E4A547B...
Fernando Cerioni

Assignee Representative:

Signature: _____ Date: _____

ASSIGNMENT
(Patent Applications)

I, the undersigned, have invented or co-invented certain inventions and improvements disclosed in the PCT, utility (provisional or non-provisional) or design patent applications identified below, or identified in documents or oral disclosures provided to Parallel Wireless under the designated attorney docket number:

Attorney Docket No.	Application Number	Title	Date Filed
PWS-71710US09	16/789082	Methods of Incorporating an Ad Hoc Cellular Network into a Fixed Cellular Network	February 12, 2020
PWS-71712US00	61/896940	Situation Aware Mobile Wireless Base Station for First Responders	October 29, 2013
PWS-71718US00	61/790785	Base station tamper detection and recovery mechanism	March 15, 2013
PWS-71743US00	61/916831	Land Mobile LTE Device, Methods, and Networks	December 16, 2013
PWS-71792US04	16/801136	Xx/Xn Protocol Programmability	February 25, 2020
PWS-71815US00	62/206666	Cell ID Disambiguation	August 18, 2015
PWS-71815US01	15/241060	Cell ID Disambiguation	August 18, 2016
PWS-71815US02	16/237191	Cell ID Disambiguation	December 31, 2018
PWS-71815WO01	PCT/US16/47660	Cell ID Disambiguation	August 18, 2016
PWS-71818US00	62/420099	Hand-in With Topology Hiding	November 10, 2016
PWS-71818US01	15/810003	Hand-in With Topology Hiding	November 10, 2017
PWS-71818US02	16/028069	Hand-in With Topology Hiding	July 5, 2018
PWS-71851US00	62/235178	Heterogeneous Network Gateway	September 30, 2015
PWS-71855US00	62/249210	Elastic Scheduling	October 31, 2015
PWS-71855US01	15/339916	Elastic Scheduling	October 31, 2016
PWS-71855US03	16/800263	Elastic Scheduling	February 25, 2020
PWS-71855WO01	PCT/US16/59799	Elastic Scheduling	October 31, 2016
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]

PWS-71888US00	62/451333	CDMA/EVDO Virtualization	January 27, 2017
PWS-71888US01	15/883083	CDMA/EVDO Virtualization	January 27, 2018
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
PWS-72512US00	62/503305	Base Station with Interference Monitoring	May 8, 2017
PWS-72512US01	15/974669	Base Station with Interference Monitoring Circuit	May 8, 2018
PWS-72526US01	16/182601	Updating Multiple Packet Filters in a Single Bearer Context IE	November 6, 2018
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
PWS-72548US00	62/801032	Hybrid Base Station and RRH	February 4, 2019
PWS-72548US01	16/782057	Hybrid Base Station and RRH	February 4, 2020
PWS-72548WO01	PCT/US20/16678	Hybrid Base Station and RRH	February 4, 2020
PWS-72554US01	16/801114	2G Over IP Architecture	February 25, 2020
PWS-72556US00	62/660642	Neighbor Relations for Moving Cells	April 20, 2018
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
PWS-72568US00	62/804209	5G Native Architecture	February 11, 2019
PWS-72568US01	16/788304	5G Native Architecture	February 11, 2020
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]

PWS-72597US00	62/784404	Distributed Cloud HNG Fabric	December 22, 2018
PWS-72597US01	16/724958	Distributed Cloud HNG Fabric	December 23, 2019
PWS-72613US00	62/900647	4G/5G Core Interworking	September 15, 2019
PWS-72613US01	17/022077	4G/5G Core Interworking	September 15, 2020
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
PWS-72623US00	63/023236	HetNet Gateway Software for Network Builds	May 11, 2020
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
PWS-72636US01	17/008422	Support for Linking of Packet Detection Rule (PDR) for Optimizing Throughput of Combined Serving Gateway (SGW)/Packet Gateway (PGW) Architecture	August 31, 2020
PWS-72637US00	62/890683	Integrated Base Station Security System	August 24, 2019
PWS-72637US01	17/001677	Integrated Base Station Security System	August 24, 2020
PWS-72649US00	62/933519	Decomposition and Distribution for Network Functions For Deployment Flexibility	November 10, 2019
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]

[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
PWS-72665US00	63/089814	Enterprise Multi-Technology Core and Subscriber Management	October 9, 2020
PWS-72673US00 PWS-72673US01	62/970134 17/168,171	OpenRAN Networking Infrastructure	February 4, 2020 February 4, 2021
PWS-72682US00	62/990307	OpenRAN Solution Suite	March 16, 2020
PWS-72686US00	63/006714	OpenRan Solution Suite	April 7, 2020
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]

KNL 2022-01-28

For one dollar (\$1.00) and other good and valuable consideration, the receipt and sufficiency of which we/I acknowledge, we/I:

1. Hereby assign, transfer, convey, and sell and have assigned, transferred, conveyed, and sold to Parallel Wireless Inc., a corporation, having a principal place of business at 100 Innovative Way, Suite 3410, Nashua, NH, 03062 ("Assignee"), the entire right, title, and interest in and to:
 - a. all intellectual property (including, without limitation, any innovation, information, invention, discovery, product, process, work or design) disclosed, embodied, shown, or claimed in the above-referenced patent applications, implicitly or explicitly, or in any documents or oral disclosures provided to Parallel Wireless, Inc. prior to June 15, 2018 relating to the above-referenced inventions;
 - b. the above-referenced patent applications, the right to claim priority to the above-referenced patent applications, all applications based in whole or in part upon the above-referenced patent applications, including, without limitation, all applications that are a provisional, non-provisional, design, divisional, continuation, continuation-in-part, registration, utility model, industrial design, national phase application in any country, reissue, renewal, substitute, extension, reexamination, post-grant review, inter partes review, supplemental examination or non-U.S. patent application or application for other rights based in whole or in part on the above-referenced patent applications;
 - c. all patents (including, without limitation, all U.S. and non-U.S. patents, registrations, utility models, industrial designs, design patents, counterparts, continuations, continuations-in-part, divisionals, reissues, renewals, substitutes, extensions, national phase applications in any country, reexaminations, post-grant reviews, inter partes reviews, and supplemental examinations) that are granted or issued upon, or that claim priority to, any and all applications described in (b) of this paragraph or that disclose or claim intellectual property described in (a) of this paragraph, in whole or in part; and
 - d. all claims for damages by reason of past infringement of any rights under the applications or patents described in (a), (b) or (c) of this paragraph (including

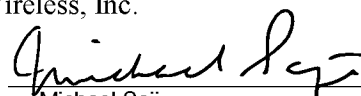
provisional rights to reasonable royalties pursuant to 35 U.S.C. § 154(d)) and the right to sue for and collect such damages and royalties for Assignee's own use.

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Signed on the date indicated beside my signature.

Signature:  Date: 11-10-20
Kaitki Agarwal

Parallel Wireless, Inc.

Signature:  Date: November 10, 2020
Name: Michael Saji
Title: Director, IP and Sr Corporate Counsel

ASSIGNMENT
(Patent Applications)

I, the undersigned, have invented or co-invented certain inventions and improvements disclosed in the PCT, utility (provisional or non-provisional) or design patent applications identified below, or identified in documents or oral disclosures provided to Parallel Wireless under the designated attorney docket number:

Attorney Docket No.	Application Number	Title	Date Filed
PWS-71699US00	61/386847	Utilizing Fixed Ad-Hoc Networks techniques in Wireless Base Stations for data transport	September 27, 2010
PWS-71700US91	TO BE ADDED WHEN KNOWN _____	5G Heterogeneous Mesh Network and a Multi-RAT Node Used Therein	TO BE ADDED WHEN KNOWN _____
PWS-71700US92	TO BE ADDED WHEN KNOWN _____	5G Heterogeneous Self-Organizing Network for Access and Backhaul	TO BE ADDED WHEN KNOWN _____
PWS-71700US93	TO BE ADDED WHEN KNOWN _____	5G Dynamic Multi-Access Wireless Network Virtualization	TO BE ADDED WHEN KNOWN _____
PWS-71701US00	61/716194	A means for wireless cellular base stations streaming multimedia from local resources	October 19, 2012
PWS-71701US01	14/436852	Wireless Broadband Network with Integrated Streaming Multimedia Services	April 17, 2015
PWS-71701WO01	PCT/US13/65573	Methods of incorporating an Ad Hoc Cellular Network into a Fixed Cellular Network	October 18, 2013
PWS-71710US08	16/372082	TV Whitespace for Public Safety	April 1, 2018
PWS-71710US09	16/789082	Methods of Incorporating an Ad Hoc Cellular Network into a Fixed Cellular Network	February 12, 2020
_____	_____	_____	_____
PWS-71712US00	61/896940	Situation Aware Mobile Wireless Base Station for First Responders	October 29, 2013

PWS-71714US00	61/783293	Method of Automatically Disabling Trace Logging Information	March 14, 2013
PWS-71716US00	61/790008	Low-Power, Self-Optimizing Base Station	March 15, 2013
PWS-71718US00	61/790785	Base station tamper detection and recovery mechanism	March 15, 2013
PWS-71719US00	61/790105	Forming Backhaul Links Using Wireless Equipment	March 15, 2013
PWS-71723US00	61/826750	Method of Disabling Incoming Calls within a Network	May 23, 2013
PWS-71725US00	61/839496	Directional Antenna Optimization for Base Stations	June 26, 2013
PWS-71741US00	61/826786	Method of Disabling Incoming Calls within a Network	May 23, 2013
PWS-71743US00	61/916831	Land Mobile LTE Device, Methods, and Networks	December 16, 2013
PWS-71745US00	61/926644	Directional Antenna Optimization for Base Stations	January 13, 2014
PWS-71756US91	TO BE ADDED WHEN KNOWN	5G Federated X2 Gateway	TO BE ADDED WHEN KNOWN
PWS-71792US04	16/801136	Xx/Xn Protocol Programmability	February 25, 2020
PWS-71815US00	62/206666	Cell ID Disambiguation	August 18, 2015
PWS-71815US01	15/241060	Cell ID Disambiguation	August 18, 2016
PWS-71815US02	16/237191	Cell ID Disambiguation	December 31, 2018
PWS-71815WO01	PCT/US16/47660	Cell ID Disambiguation	August 18, 2016
PWS-71822US00	62/150843	On-Chip and Off-Chip Transceiver With ICIC	April 21, 2015

PWS-71851US00	62/235178	Heterogeneous Network Gateway	September 30, 2015
PWS-71855US00	62/249210	Elastic Scheduling	October 31, 2015
PWS-71855US01	15/339916	Elastic Scheduling	October 31, 2016
PWS-71855US03	16/800263	Elastic Scheduling	February 25, 2020
PWS-71855WO01	PCT/US16/59799	Elastic Scheduling	October 31, 2016
PWS-71888US00	62/451333	CDMA/EVDO Virtualization	January 27, 2017
PWS-71888US01	15/883083	CDMA/EVDO Virtualization	January 27, 2018
PWS-72501US02	15/961719	X2 Brokering with Aggregation Optimization	April 24, 2018
PWS-72501WO02	PCT/US19/28875	Xx Brokering with Aggregation Optimization	April 24, 2019
PWS-72502US00	62/574152	Virtualized Cell Architecture	October 18, 2017
PWS-72502US01	16/164790	Virtualized Cell Architecture	October 18, 2018
PWS-72502WO01	PCT/US18/56599	Virtualized Cell Architecture	October 18, 2018

PWS-72513US00	62/631595	Out-of-band Monitoring and Provisioning	February 16, 2018
PWS-72513US01	16/279601	Out-of-Band Monitoring and Provisioning	February 19, 2019
PWS-72514US00	62/507984	Mobile Base Station Drive Test Optimization	May 18, 2017
PWS-72514US01	15/984318	Mobile Base Station Drive Test Optimization	May 18, 2018
PWS-72523US01	16/202083	Access Network Collective Admission Control	November 27, 2018
PWS-72523WO01	PCT/US18/62681	Access Network Collective Admission Control	November 27, 2018
PWS-72548US00	62/801032	Hybrid Base Station and RRH	February 4, 2019
PWS-72548US01	16/782057	Hybrid Base Station and RRH	February 4, 2020
PWS-72548WO01	PCT/US20/16678	Hybrid Base Station and RRH	February 4, 2020
PWS-72554US00	62/810317	2G Over IP Architecture	February 25, 2019
PWS-72554US01	16/801114	2G Over IP Architecture	February 25, 2020
PWS-72554US02	17/014346	2G HetNet Gateway System Architecture	September 8, 2020
PWS-72556US00	62/660642	Neighbor Relations for Moving Cells	April 20, 2018

[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
PWS-72566US00	62/676906	5G Interoperability Architecture	May 25, 2018
PWS-72566US01	16/424479	5G Interoperability Architecture	May 28, 2019
PWS-72566WO01	PCT/US19/34231	5G Interoperability Architecture	May 28, 2019
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
PWS-72568US00	62/804209	5G Native Architecture	February 11, 2019
PWS-72568US01	16/788304	5G Native Architecture	February 11, 2020
PWS-72570US00	62/746546	Radio Access Network Dynamic Functional Splits	October 16, 2018
PWS-72570US01	16/655225	Radio Access Network Dynamic Functional Splits	October 16, 2019
PWS-72570WO01	PCT/US19/56623	Radio Access Network Dynamic Functional Splits	October 16, 2019
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
PWS-72590US00	62/788081	2G/3G Signals Over 4G/5G Virtual RAN Architecture	January 3, 2019
PWS-72590US01	16/733947	2G/3G Signals Over 4G/5G Virtual RAN Architecture	January 3, 2020
PWS-72590WO01	PCT/US20/12213	2G/3G Signals Over 4G/5G Virtual RAN Architecture	January 3, 2020
PWS-72597US00	62/784404	Distributed Cloud HNG Fabric	December 22, 2018
PWS-72597US01	16/724958	Distributed Cloud HNG Fabric	December 23, 2019

PWS-72601US00	62/833266	Using Low Earth Orbit Satellites to Overcome Latency	April 12, 2019
PWS-72601US01	16/847618	Using Low Earth Orbit Satellites to Overcome Latency	April 13, 2020
PWS-72618US00	62/839083	Demand-Based Dynamic Carrier Scaling	April 26, 2019
PWS-72618US01	16/860051	Demand-Based Dynamic Carrier Scaling	April 27, 2020
PWS-72618WO01	PCT/US20/70005	Demand-Based Dynamic Carrier Scaling	April 27, 2020
PWS-72623US00	63/023236	HetNet Gateway Software for Network Builds	May 11, 2020
PWS-72634US00	62/879200	5G Enhanced HetNet Gateway	July 26, 2019
PWS-72634US01	16/940385	5G Enhanced HetNet Gateway	July 27, 2020
PWS-72634US02	16/947298	5G Enhanced HetNet Gateway	July 27, 2020
PWS-72637US00	62/890683	Integrated Base Station Security System	August 24, 2019
PWS-72637US01	17/001677	Integrated Base Station Security System	August 24, 2020
PWS-72639US00	62/885309	Virtual Baseband Radio Unit	August 11, 2019
PWS-72639US01	16/991014	Virtual Baseband Radio Unit	August 11, 2020
PWS-72646US00	62/909226	5G/4G/3G/2G Cloud-Native OpenRAN Architecture	October 1, 2019
PWS-72646US01	17/061484	5G/4G/3G/2G Cloud-Native OpenRAN Architecture	October 1, 2020
PWS-72647US00	62/908837	Real-Time Any-G SON	October 1, 2019
PWS-72647US01	17/061575	Real-Time Any-G SON	October 1, 2020
PWS-72647WO01	PCT/US20/53875	Real-Time Any-G SON	October 1, 2020
PWS-72660US00	62/945876	5G OpenRAN Controller	December 9, 2019
PWS-72665US00	63/089814	Enterprise Multi-Technology Core and Subscriber Management	October 9, 2020

PWS-72668US00	62/968814	Method for Securing OpenRAN Interfaces	January 31, 2020
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
PWS-72673US00 PWS-72673US01	62/970134 17/168,171	OpenRAN Networking Infrastructure	February 4, 2020 February 4, 2021
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
PWS-72682US00	62/990307	OpenRAN Solution Suite	March 16, 2020
PWS-72685US00	62/991582	Backhaul Estimation Scheduling	March 19, 2020
PWS-72686US00	63/006714	OpenRan Solution Suite	April 7, 2020
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]

KNL 2022-01-28

For one dollar (\$1.00) and other good and valuable consideration, the receipt and sufficiency of which we/I acknowledge, we/I:

1. Hereby assign, transfer, convey, and sell and have assigned, transferred, conveyed, and sold to Parallel Wireless Inc., a corporation, having a principal place of business at 100 Innovative Way, Suite 3410, Nashua, NH, 03062 ("Assignee"), the entire right, title, and interest in and to:
 - a. all intellectual property (including, without limitation, any innovation, information, invention, discovery, product, process, work or design) disclosed, embodied, shown, or claimed in the above-referenced patent applications, implicitly or explicitly, or in any documents or oral disclosures provided to Parallel Wireless, Inc. prior to June 15, 2018 relating to the above-referenced inventions;
 - b. the above-referenced patent applications, the right to claim priority to the above-referenced patent applications, all applications based in whole or in part upon the above-referenced patent applications, including, without limitation, all applications that are a provisional, non-provisional, design, divisional, continuation, continuation-in-part, registration, utility model, industrial design, national phase application in any country, reissue, renewal, substitute, extension, reexamination, post-grant review, inter partes review, supplemental examination or non-U.S. patent application or application for other rights based in whole or in part on the above-referenced patent applications;

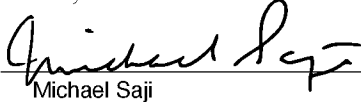
- c. all patents (including, without limitation, all U.S. and non-U.S. patents, registrations, utility models, industrial designs, design patents, counterparts, continuations, continuations-in-part, divisionals, reissues, renewals, substitutes, extensions, national phase applications in any country, reexaminations, post-grant reviews, inter partes reviews, and supplemental examinations) that are granted or issued upon, or that claim priority to, any and all applications described in (b) of this paragraph or that disclose or claim intellectual property described in (a) of this paragraph, in whole or in part; and
 - d. all claims for damages by reason of past infringement of any rights under the applications or patents described in (a), (b) or (c) of this paragraph (including provisional rights to reasonable royalties pursuant to 35 U.S.C. § 154(d)) and the right to sue for and collect such damages and royalties for Assignee's own use.
2. Authorize and request the U.S. Patent and Trademark Office or any other U.S. or non-U.S. agency to issue to the Assignee any and all patent(s), or other rights or documents, resulting from the intellectual property, patent application(s) and patents described in paragraph 1 of this Assignment.
 3. Agree to sign all papers and documents, including without limitation, applications, declarations, oaths and petitions, and, at the Assignee's expense, perform any other acts that are necessary in connection with prosecution of patent application(s) or intellectual property described in paragraph 1 of this Assignment and the enforcement of patent(s) or other rights resulting from such patent application(s) or intellectual property.
 4. Agree that the terms, covenants, and conditions of this Assignment shall inure to the benefit of the Assignee, its successors, assigns and other legal representative, and shall be binding upon us/me, as well as our/my heirs, legal representatives, and assigns.
 5. Promise and affirm that we/I have not entered, and will not enter, into any assignment, contract, or understanding that conflicts with this Assignment.
 6. Authorize counsel of record to insert above the application number(s) and filing date(s) of the above-described patent applications when known.

Signed on the date indicated beside my signature.

DocuSigned by:

 Signature: 56F60A37BF27485... Date: November 10, 2020
 Rajesh Kumar Mishra

Parallel Wireless, Inc.

Signature: 
 Name: Michael Saji Date: November 10, 2020
 Title: Director, IP and Sr Corporate Counsel