505286298 01/18/2019

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT5333073

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
YANG CAO	11/19/2018
KAITKI AGARWAL	11/05/2018
PRASHANTH RAO	11/05/2018
ZEEV LUBENSKI	12/29/2015
RAHUL ATRI	10/03/2016

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:	15470430

CORRESPONDENCE DATA

Fax Number:

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: 6033673607

Email: ip.inbox@parallelwireless.com **Correspondent Name:** PARALLEL WIRELESS, INC.

Address Line 1:100 INNOVATIVE WAY, SUITE 3410Address Line 4:NASHUA, NEW HAMPSHIRE 03062

ATTORNEY DOCKET NUMBER:	PWS-71850US02
NAME OF SUBMITTER:	BIJAN RAZZAGHI
SIGNATURE:	/bijan razzaghi/
DATE SIGNED:	01/18/2019

Total Attachments: 6

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PATENT REEL: 048059 FRAME: 0566

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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

"IUGW ARCHITECTURE,"

specified in the documents filed under U.S. Provisional App. No. 62/310,173 filed on March 18, 2016, as well as any documents filed claiming priority thereto, including U.S. App. No. 15/464,333 filed on March 20, 2017 and PCT App. No. PCT/US17/23265 filed on March 20, 2017.

DIV U.S. APP. No. 15/470, 430 4 2017-03-27 For one dollar (\$1.00) and other good and valuable consideration, the receipt and

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 <u>Parallel Wireless, Inc.</u>, a corporation, having a principal place of business at <u>100 Innovative Way</u>, <u>Suite 3410</u>, <u>Nashua</u>, <u>NH</u>, <u>03062</u> ("Assignee"), the entire right, title, and interest in and to:
 - 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:	7	Date: 11/19/2018
	Yang Cao	
Signature:		Date:
	Zeev Lubenski	
Signature:	· Kaitsi Agarraf	Date: 11-5-2018
Signature:	Kaitki Agarwal Prashanth Rao	Date: $11/5^{-1}/26(8)$
Signature:		Date:
	Rahul Atri	
Parallel Wi	ireless, Inc. Representative:	Date: 2018-11-19

ASSIGNMENT

(Patent Application)

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

U.S. App. No. 62/310,173 filed on March 18, 2016;

U.S. App. No. 15/464,333 filed on March 20, 2018;

"IUH PROXY," PCT App. No. PCT/US17/23265 filed on March 20, 2017 Added by BAR 2018-11-19

specified in the documents filed under U.S. App. No. TO BE ADDED WHEN KNOWN on TO BE ADDED WHEN KNOWN, as well as any documents filed claiming priority thereto, including TO BE ADDED WHEN KNOWN or otherwise specified in records, notes, or documents on file with Parallel Wireless, Inc. under the docket number identified above.

DIV. U.S. APP. No. 15/410, 430 filed 2017 - 03-27

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

- Hereby assign, transfer, convey, and sell and have assigned, transferred, conveyed, and sold to <u>Parallel Wireless Inc.</u>, a corporation, having a principal place of business at <u>One Tara Boulevard, Suite 404, Nashua, NH, 03062</u> ("Assignee"), the entire right, title, and interest in and to:
 - 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, 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, national phase, in any country;
 - 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, reexaminations, post-grant reviews, inter partes reviews, supplemental examinations and national phase, in any country) 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.

- 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.

Signed on the dates indicated beside our/my signature.

6. Authorize Assignee to insert above the application number and filing date of any of the above-described patent applications when known.

ASSIGNMENT (Patent Application)

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

U.S. App. No. 15/464,333 filed on March 20, 2018; "TUGW ARCHITECTURE," PCT App. No. PCT/US17/23265 filed on March 20, 2017 Added by BAR 2018-11-19

specified in the documents filed under U.S. App. No. 62/310,173 on March 18, 2016.

DIV APP No. 15470430 filed Z017-03-27

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

 Hereby assign, transfer, convey, and sell and have assigned, transferred, conveyed, and sold to <u>Parallel Wireless Inc.</u>, a corporation, having a principal place of business at <u>One Tara Boulevard, Suite 404, Nashua, NH, 03062</u> ("Assignee"), the entire right, title, and interest in and to:

> 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, 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, national phase, in any country;
- 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, reexaminations, post-grant reviews, inter partes reviews, supplemental examinations and national phase, in any country) 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 1/2 2016 3,0ct, 2016

ASSIGNMENT Attorney Docket No. PWS-71850US00 Page 2 of 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 Assignee to insert above the application number and filing date of any of the above-described patent applications when known.

Signed on the dates indicated beside our/my signature.

Signature: Date: 3, oct 2016

Rahul Atri

Parallel Wireless, Inc.

Signature: Date: October 6, 2016

Name: Michael Saji

Title: Director, I.P. and Corporate Counsel

PATENT REEL: 048059 FRAME: 0573

RECORDED: 01/18/2019