

## PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1  
 Stylesheet Version v1.2

EPAS ID: PAT4691373

<b>SUBMISSION TYPE:</b>	NEW ASSIGNMENT
<b>NATURE OF CONVEYANCE:</b>	ASSIGNMENT
<b>CONVEYING PARTY DATA</b>	
<b>Name</b>	<b>Execution Date</b>
UMAMAHESWAR KAKINADA	11/10/2017
DON GUNASEKARA	11/10/2017
AHMED BENCHEIKH	11/10/2017
SHANE NEWBERG	11/10/2017
<b>RECEIVING PARTY DATA</b>	
<b>Name:</b>	CHARTER COMMUNICATIONS OPERATING, LLC
<b>Street Address:</b>	12405 POWERSCOURT DRIVE
<b>City:</b>	ST LOUIS
<b>State/Country:</b>	MISSOURI
<b>Postal Code:</b>	63131
<b>PROPERTY NUMBERS Total: 1</b>	
<b>Property Type</b>	<b>Number</b>
<b>Application Number:</b>	15814133
<b>CORRESPONDENCE DATA</b>	
<b>Fax Number:</b>	(858)675-1674
<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>	
<b>Phone:</b>	858.675.1670
<b>Email:</b>	docket@gazpat.com
<b>Correspondent Name:</b>	GAZDZINSKI & ASSOCIATES, PC
<b>Address Line 1:</b>	16644 WEST BERNARDO DRIVE
<b>Address Line 2:</b>	SUITE 201
<b>Address Line 4:</b>	SAN DIEGO, CALIFORNIA 92127
<b>ATTORNEY DOCKET NUMBER:</b>	TWAR.232A
<b>NAME OF SUBMITTER:</b>	ROBERT F. GAZDZINSKI
<b>SIGNATURE:</b>	/Robert F. Gazdzinski/
<b>DATE SIGNED:</b>	11/15/2017
<b>Total Attachments: 5</b>	
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**COMBINED DECLARATION AND ASSIGNMENT FOR PATENT APPLICATIONS**

Title of Invention: **METHODS AND APPARATUS FOR UTILIZATION OF QUASI-LICENSED WIRELESS SPECTRUM FOR IOT (INTERNET-OF-THINGS) SERVICES**

As a below named inventor (hereinafter designated as the undersigned), I hereby declare that:

This declaration is directed to the application attached hereto. If the application is not attached hereto, the application is as identified by the attorney docket number as set forth above and/or the following:

U.S. Application Serial No.: To be assigned; or

PCT International Application No.: \_\_\_\_\_

Filed on: herewith.

The above-identified application was made or authorized to be made by me. I believe that I am the original inventor or an original joint inventor of a claimed invention in the application. I have reviewed and understand the contents of the above-identified application, including the claims. I acknowledge the duty to disclose information which is material to patentability as defined in Title 37, Code of Federal Regulations § 1.56.

WHEREAS, the undersigned has invented certain new and useful improvements described in the application identified.

WHEREAS, **CHARTER COMMUNICATIONS OPERATING, LLC**, (hereinafter "ASSIGNEE"), with its principal place of business at 12405 Powerscourt Drive, St. Louis, MO 63131, United States of America,, its heirs, successors, legal representatives and assigns (hereinafter designated as the Assignee) is desirous of acquiring the entire right, title and interest in and to said invention and in and to any Letters Patent(s) that may be granted therefor in the United States of America and in any foreign countries.

NOW, THEREFORE, for good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, the undersigned has sold, assigned and transferred, and by these presents does (do) sell, assign and transfer unto said Assignee the full and exclusive right to the said invention in the United States of America, its territories, dependencies and possessions and the entire right, title and interest in and to any and all Letters Patent(s) which may be granted therefor in the United States of America, its territories, dependencies and possessions, and if the box above is designated, in any and all foreign countries; and to any and all divisions, reissues, re-examinations, continuations, conversions and extensions thereof, and provisional applications to which priority is claimed therefrom, for the full term or terms for which the same may be granted.

The undersigned agrees to execute all papers necessary in connection with this application and any continuing, divisional, conversion, re-exam, provisional, or reissue applications thereof and also to execute separate assignments in connection with such applications as the Assignee may deem necessary or expedient.

The undersigned agrees to execute all papers necessary in connection with any interference which may be declared concerning this application or continuation, division, conversion, re-exam, provisional, or reissue thereof or Letters Patent(s) or reissue patent issued thereon and to cooperate with the Assignee in every way possible in obtaining and producing evidence and proceeding with such interference.

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**GAZDZINSKI & ASSOCIATES, PC**

16644 West Bernardo Drive, Suite 201, San Diego, CA 92127

Telephone: (858) 675-1670 - Facsimile: (858) 675-1674 - Email: [docket@gazpat.com](mailto:docket@gazpat.com)

**PATENT**

**REEL: 044139 FRAME: 0305**

**COMBINED DECLARATION AND ASSIGNMENT FOR PATENT APPLICATIONS**

The undersigned agrees to execute all papers and documents and to perform any act which may be necessary in connection with claims or provisions of the International Convention for the Protection of Industrial Property or similar agreements.

The undersigned agrees to perform all affirmative acts which may be necessary to obtain a grant of (a) valid United States of America patent(s) or a grant of (a) valid United States of America and any foreign patent(s) to the Assignee and to vest all rights therein hereby conveyed to said Assignee as fully and entirely as the same would have been held by the undersigned if this Assignment and sale had not been made.

The undersigned hereby authorizes and requests the Patent and Trademark Office Officials in the United States of America and in any foreign countries to issue any and all Letters Patent(s) resulting from said application or any continuing, divisional conversion or reissue applications thereof to the said Assignee, as Assignee of the entire interest, and hereby covenants that he has the full right to convey the entire interest herein assigned, and that he has not executed, and will not execute, any agreement in conflict herewith.

The undersigned hereby grants the law firm of GAZDZINSKI & ASSOCIATES, PC, Customer No. 27299, the power to insert any further identification which may be necessary or desirable in order to comply with the rules of the U.S. Patent and Trademark Office.

The undersigned hereby covenants that no assignment, sale, agreement or encumbrance has been or will be made or entered into which would conflict with this assignment.

The undersigned hereby acknowledges that any willful false statement made in this declaration is punishable under 18 U.S.C. § 1001 by fine or imprisonment of not more than five (5) years, or both.


In witness whereof, executed by the undersigned on the date opposite the undersigned name.

**LEGAL NAME OF INVENTOR**Inventor's Name: **UMAMAHESWAR KAKINADA**Date: 11-10-2017Signature: **Witness**

Printed Name

CURT WONG

Signature



Date

**Witness**

Printed Name

JOHNNY OKAFOR

Signature



Date

11/10/2017

An application data sheet (PTO/AIA/14 or equivalent), including naming the entire inventive entity, must accompany this form. Use a separate form for each inventor; or check the box below and complete the attached page(s) to list additional inventors.

☒ Additional inventors are being named on the one (1) supplemental sheet(s) attached hereto.

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Telephone: (858) 675-1670 - Facsimile: (858) 675-1674 - Email: [docket@gazpat.com](mailto:docket@gazpat.com)**PATENT****REEL: 044139 FRAME: 0306**

**SUPPLEMENTAL SHEET FOR DECLARATION AND ASSIGNMENT**

LEGAL NAME OF JOINT INVENTOR, IF ANY

Inventor's Name: **DON GUNASEKARA**Date: Nov. 10<sup>th</sup> 2017Signature: Don. GunasekaraWitnessPrinted Name CHULAN GUNASEKARASignature [Signature]Date Nov. 10, 2017WitnessPrinted Name Tissa AbeyagunasekeraSignature [Signature]Date 11/10/2017

LEGAL NAME OF JOINT INVENTOR, IF ANY

Inventor's Name: **AHMED BENCHEIKH**

Date: \_\_\_\_\_

Signature: \_\_\_\_\_

Witness

Printed Name \_\_\_\_\_

Signature \_\_\_\_\_

Date \_\_\_\_\_

Witness

Printed Name \_\_\_\_\_

Signature \_\_\_\_\_

Date \_\_\_\_\_

LEGAL NAME OF JOINT INVENTOR, IF ANY

Inventor's Name: **SHANE NEWBERG**

Date: \_\_\_\_\_

Signature: \_\_\_\_\_

Witness

Printed Name \_\_\_\_\_

Signature \_\_\_\_\_

Date \_\_\_\_\_

Witness

Printed Name \_\_\_\_\_

Signature \_\_\_\_\_

Date \_\_\_\_\_

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Telephone: (858) 675-1670 - Facsimile: (858) 675-1674 - Email: [docket@gazpat.com](mailto:docket@gazpat.com)**PATENT****REEL: 044139 FRAME: 0307**

**SUPPLEMENTAL SHEET FOR DECLARATION AND ASSIGNMENT**

LEGAL NAME OF JOINT INVENTOR, IF ANY

Inventor's Name: **DON GUNASEKARA**

Date: \_\_\_\_\_

Signature: \_\_\_\_\_

Witness

Printed Name \_\_\_\_\_

Signature \_\_\_\_\_

Date \_\_\_\_\_

Witness

Printed Name \_\_\_\_\_

Signature \_\_\_\_\_

Date \_\_\_\_\_

LEGAL NAME OF JOINT INVENTOR, IF ANY

Inventor's Name: **AHMED BENCHEIKH**Date: 11/10/2017Signature:  \_\_\_\_\_WitnessPrinted Name Shane NewbergSignature [Signature]Date 11/10/2017WitnessPrinted Name SURESH SARVEPALLISignature [Signature]Date 11/10/2017

LEGAL NAME OF JOINT INVENTOR, IF ANY

Inventor's Name: **SHANE NEWBERG**

Date: \_\_\_\_\_

Signature: \_\_\_\_\_

Witness

Printed Name \_\_\_\_\_

Signature \_\_\_\_\_

Date \_\_\_\_\_

Witness

Printed Name \_\_\_\_\_

Signature \_\_\_\_\_

Date \_\_\_\_\_

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Telephone: (858) 675-1670 - Facsimile: (858) 675-1674 - Email: [docket@gazpat.com](mailto:docket@gazpat.com)**PATENT****REEL: 044139 FRAME: 0308**

**SUPPLEMENTAL SHEET FOR DECLARATION AND ASSIGNMENT**

LEGAL NAME OF JOINT INVENTOR, IF ANY

Inventor's Name: **DON GUNASEKARA**

Date: \_\_\_\_\_

Signature: \_\_\_\_\_

Witness

Printed Name \_\_\_\_\_

Signature \_\_\_\_\_

Date \_\_\_\_\_

Witness

Printed Name \_\_\_\_\_

Signature \_\_\_\_\_

Date \_\_\_\_\_

LEGAL NAME OF JOINT INVENTOR, IF ANY

Inventor's Name: **AHMED BENCHEIKH**

Date: \_\_\_\_\_

Signature: \_\_\_\_\_

Witness

Printed Name \_\_\_\_\_

Signature \_\_\_\_\_

Date \_\_\_\_\_

Witness

Printed Name \_\_\_\_\_

Signature \_\_\_\_\_

Date \_\_\_\_\_

LEGAL NAME OF JOINT INVENTOR, IF ANY

Inventor's Name: **SHANE NEWBERG**Date: 12/10/2017

Signature: \_\_\_\_\_

WitnessPrinted Name CURT WONGSignature [Signature]Date NOV 10 2017WitnessPrinted Name Christopher TeagueSignature [Signature]Date 11/10/17**GAZDZINSKI & ASSOCIATES, PC**

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Telephone: (858) 675-1670 - Facsimile: (858) 675-1674 - Email: [doctet@gazpat.com](mailto:doctet@gazpat.com)**PATENT****RECORDED: 11/15/2017****REEL: 044139 FRAME: 0309**