PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT6132239

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
RAVITANDON	05/28/2020
HUIYUE XU	05/29/2020
HIMANSHU GARG	05/29/2020

RECEIVING PARTY DATA

Name:	SYNIVERSE TECHNOLOGIES, LLC	
Street Address:	8125 HIGHWOODS PALM WAY	
City:	TAMPA	
State/Country:	FLORIDA	
Postal Code:	33647	

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	16887476

CORRESPONDENCE DATA

Fax Number: (800)726-1491

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: 8139258505

Email: patents@smithhopen.com SMITH & HOPEN, P.A. **Correspondent Name:** Address Line 1: 180 PINE AVENUE NORTH Address Line 4: OLDSMAR, FLORIDA 34677

ATTORNEY DOCKET NUMBER:	3106.116.PRC	
NAME OF SUBMITTER:	ANDRIY LYTVYN	
SIGNATURE:	/andriy lytvyn/	
DATE SIGNED:	06/02/2020	

Total Attachments: 9

source=Executed Assignment - Tandon#page1.tif source=Executed Assignment - Tandon#page2.tif source=Executed Assignment - Tandon#page3.tif source=Executed Assignment - Xu#page1.tif

> **PATENT REEL: 052807 FRAME: 0313** 506085523

source=Executed Assignment - Xu#page2.tif
source=Executed Assignment - Xu#page3.tif
source=Executed Assignment - Garg#page1.tif
source=Executed Assignment - Garg#page2.tif
source=Executed Assignment - Garg#page3.tif

PATENT REEL: 052807 FRAME: 0314

Practitioner's Reference No. 3106.116.PRC

PATENT

COMBINED ASSIGNMENT AND DECLARATION

(ORIGINAL, DESIGN, NATIONAL STAGE OF PCT, SUPPLEMENTAL, DIVISIONAL, CONTINUATION, OR C-I-P)

As a below named inventor, I hereby declare that:

TYPE OF DECLARATION

This declaration is for an original application.

TITLE OF INVENTION

METHODS AND SYSTEMS FOR LORAWAN TRAFFIC ROUTING AND CONTROL

SPECIFICATION IDENTIFICATION

The specification as attached hereto.

DECLARATION

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 hereby acknowledge 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.

ASSIGNMENT OF RIGHTS IN PATENT APPLICATION

Post Office Address of Assignor Assignor

Ravi Tandon 28, Rue d' Oetrange Sandweiler, L-5236

Luxembourg

Assignee Principal Place of Business of Assignee

Syniverse Technologies, LLC 8125 Highwoods Palm Way (a Delaware Limited Liability Company) Tampa, Florida 33647

(Combined Assignment and Declaration—page 1 of 3)

PATENT

WHEREAS, I, the above-identified Assignor, am an original inventor or an original joint inventor of a claimed invention in the above-identified U.S. patent application, hereinafter referred to as the "patent application";

And, whereas I desire to assign a 100% undivided interest in said patent application to the above-identified Assignee, and wherein said Assignee is desirous of acquiring the entire right, title and interest in the same:

Now, this indenture witnesseth, that for value received, the receipt and sufficiency whereof is hereby acknowledged;

I hereby assign, sell and transfer a 100% undivided interest in the entirety of the bundle of rights, title, and interest in and to said patent application, unto said Assignee, together with all claims for damages and profits by reason of any past infringement of said letters patent and the right to sue therefor, and together with the right to file said patent application or any division, continuation, or continuation-in-part thereof in the United States or any foreign jurisdiction under the Paris Convention or the Patent Cooperation Treaty, such interests, claims, and rights, to be held and enjoyed by the Assignee for its own use and for its successors and assigns, to the full end of the term for which a patent issuing from said patent application may be granted, and any reissues, renewals, or extensions thereof as may be granted, as fully and entirely as the same would have been held by Assignor had this Assignment and sale not been made;

And I further agree not to challenge, directly or indirectly, the patentability of said patent application or the validity of any patents that issue therefrom or are related thereto under all jurisdictions, including proceedings before the Patent Trial and Appeal Board;

And I further agree to execute all necessary and lawful future documents, including assignments in favor of Assignee, or its designees as Assignee or its Assignees may from time-to-time present to me in order to perfect title in said patent application;

And I further covenant that no assignment, sale, agreement, or encumbrance has been or will be made or entered into which would conflict with this assignment and sale;

And I further covenant that Assignee will, upon its request, be provided promptly with all pertinent facts and documents relating to said patent application as may be known and accessible to me and I will testify to the same in any interference or litigation related thereto and will promptly execute and deliver to Assignee or its legal representatives any and all papers, instruments, declarations, or affidavits required to apply for, obtain, maintain, and enforce said patent application or patent issuing therefrom which may be necessary or desirable to carry out the purposes hereof;

This Assignment may be executed in one or more counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument.

Upon being duly cautioned, I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true and further that false statements and the like so made are punishable by fine, imprisonment or both under Section 1001 of Title 18 of the United States Code, and that such willful, false statements may jeopardize the validity of the patent application and any patent issuing therefrom.

(Combined Assignment and Declaration—page 2 of 3)

SIGNATURE

Legal Name of Inventor-Assignor

Ravi Tandon

Signature of Inventor-Assignor

Docusigned by:

Rawi Tandon

48807F05172C486...

Date

May 28, 2020 | 5:05 PM EDT

(Combined Assignment and Declaration—page 3 of 3)

PATENT

Practitioner's Reference No. 3106.116.PRC

PATENT

COMBINED ASSIGNMENT AND DECLARATION

(ORIGINAL, DESIGN, NATIONAL STAGE OF PCT, SUPPLEMENTAL, DIVISIONAL, CONTINUATION, OR C-I-P)

As a below named inventor, I hereby declare that:

TYPE OF DECLARATION

This declaration is for an original application.

TITLE OF INVENTION

METHODS AND SYSTEMS FOR LORAWAN TRAFFIC ROUTING AND CONTROL

SPECIFICATION IDENTIFICATION

The specification as attached hereto.

Assignee

DECLARATION

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 hereby acknowledge 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.

ASSIGNMENT OF RIGHTS IN PATENT APPLICATION

<u>Assignor</u> <u>Post Office Address of Assignor</u>

Huiyue Xu 10442 Greendale Dr. Tampa, FL 33647

Syniverse Technologies, LLC 8125 Highwoods Palm Way (a Delaware Limited Liability Company) Tampa, Florida 33647

(Combined Assignment and Declaration—page 1 of 3)

Principal Place of Business of Assignee

PATENT

WHEREAS, I, the above-identified Assignor, am an original inventor or an original joint inventor of a claimed invention in the above-identified U.S. patent application, hereinafter referred to as the "patent application";

And, whereas I desire to assign a 100% undivided interest in said patent application to the above-identified Assignee, and wherein said Assignee is desirous of acquiring the entire right, title and interest in the same;

Now, this indenture witnesseth, that for value received, the receipt and sufficiency whereof is hereby acknowledged;

I hereby assign, sell and transfer a 100% undivided interest in the entirety of the bundle of rights, title, and interest in and to said patent application, unto said Assignee, together with all claims for damages and profits by reason of any past infringement of said letters patent and the right to sue therefor, and together with the right to file said patent application or any division, continuation, or continuation-in-part thereof in the United States or any foreign jurisdiction under the Paris Convention or the Patent Cooperation Treaty, such interests, claims, and rights, to be held and enjoyed by the Assignee for its own use and for its successors and assigns, to the full end of the term for which a patent issuing from said patent application may be granted, and any reissues, renewals, or extensions thereof as may be granted, as fully and entirely as the same would have been held by Assignor had this Assignment and sale not been made;

And I further agree not to challenge, directly or indirectly, the patentability of said patent application or the validity of any patents that issue therefrom or are related thereto under all jurisdictions, including proceedings before the Patent Trial and Appeal Board;

And I further agree to execute all necessary and lawful future documents, including assignments in favor of Assignee, or its designees as Assignee or its Assignees may from time-to-time present to me in order to perfect title in said patent application;

And I further covenant that no assignment, sale, agreement, or encumbrance has been or will be made or entered into which would conflict with this assignment and sale;

And I further covenant that Assignee will, upon its request, be provided promptly with all pertinent facts and documents relating to said patent application as may be known and accessible to me and I will testify to the same in any interference or litigation related thereto and will promptly execute and deliver to Assignee or its legal representatives any and all papers, instruments, declarations, or affidavits required to apply for, obtain, maintain, and enforce said patent application or patent issuing therefrom which may be necessary or desirable to carry out the purposes hereof;

This Assignment may be executed in one or more counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument.

Upon being duly cautioned, I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true and further that false statements and the like so made are punishable by fine, imprisonment or both under Section 1001 of Title 18 of the United States Code, and that such willful, false statements may jeopardize the validity of the patent application and any patent issuing therefrom.

(Combined Assignment and Declaration—page 2 of 3)

SIGNATURE

Legal Name of Inventor-Assignor Huiyue Xu

Signature of Inventor-Assignor

Date May 29, 2020 | 10:14 AM EDT

(Combined Assignment and Declaration—page 3 of 3)

PATENT

Practitioner's Reference No. 3106.116.PRC

PATENT

COMBINED ASSIGNMENT AND DECLARATION

(ORIGINAL, DESIGN, NATIONAL STAGE OF PCT, SUPPLEMENTAL, DIVISIONAL, CONTINUATION, OR C-I-P)

As a below named inventor, I hereby declare that:

TYPE OF DECLARATION

This declaration is for an original application.

TITLE OF INVENTION

METHODS AND SYSTEMS FOR LORAWAN TRAFFIC ROUTING AND CONTROL

SPECIFICATION IDENTIFICATION

The specification as attached hereto.

DECLARATION

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 hereby acknowledge 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.

ASSIGNMENT OF RIGHTS IN PATENT APPLICATION

<u>Assignor</u> <u>Post Office Address of Assignor</u>

Himanshu Garg Janta colony, Rampura phul

Bathinda, Punjab 151103

India

Assignee Principal Place of Business of Assignee

Syniverse Technologies, LLC (a Delaware Limited Liability Company)

8125 Highwoods Palm Way Tampa, Florida 33647

(Combined Assignment and Declaration—page 1 of 3)

PATENT

WHEREAS, I, the above-identified Assignor, am an original inventor or an original joint inventor of a claimed invention in the above-identified U.S. patent application, hereinafter referred to as the "patent application";

And, whereas I desire to assign a 100% undivided interest in said patent application to the above-identified Assignee, and wherein said Assignee is desirous of acquiring the entire right, title and interest in the same;

Now, this indenture witnesseth, that for value received, the receipt and sufficiency whereof is hereby acknowledged;

I hereby assign, sell and transfer a 100% undivided interest in the entirety of the bundle of rights, title, and interest in and to said patent application, unto said Assignee, together with all claims for damages and profits by reason of any past infringement of said letters patent and the right to sue therefor, and together with the right to file said patent application or any division, continuation, or continuation-in-part thereof in the United States or any foreign jurisdiction under the Paris Convention or the Patent Cooperation Treaty, such interests, claims, and rights, to be held and enjoyed by the Assignee for its own use and for its successors and assigns, to the full end of the term for which a patent issuing from said patent application may be granted, and any reissues, renewals, or extensions thereof as may be granted, as fully and entirely as the same would have been held by Assignor had this Assignment and sale not been made;

And I further agree not to challenge, directly or indirectly, the patentability of said patent application or the validity of any patents that issue therefrom or are related thereto under all jurisdictions, including proceedings before the Patent Trial and Appeal Board;

And I further agree to execute all necessary and lawful future documents, including assignments in favor of Assignee, or its designees as Assignee or its Assignees may from time-to-time present to me in order to perfect title in said patent application;

And I further covenant that no assignment, sale, agreement, or encumbrance has been or will be made or entered into which would conflict with this assignment and sale;

And I further covenant that Assignee will, upon its request, be provided promptly with all pertinent facts and documents relating to said patent application as may be known and accessible to me and I will testify to the same in any interference or litigation related thereto and will promptly execute and deliver to Assignee or its legal representatives any and all papers, instruments, declarations, or affidavits required to apply for, obtain, maintain, and enforce said patent application or patent issuing therefrom which may be necessary or desirable to carry out the purposes hereof;

This Assignment may be executed in one or more counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument.

Upon being duly cautioned, I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true and further that false statements and the like so made are punishable by fine, imprisonment or both under Section 1001 of Title 18 of the United States Code, and that such willful, false statements may jeopardize the validity of the patent application and any patent issuing therefrom.

(Combined Assignment and Declaration—page 2 of 3)

Date

SIGNATURE

Legal Name of Inventor-Assignor Himanshu Garg

Signature of Inventor-Assignor

May 29, 2020 | 1:05 AM PDT

(Combined Assignment and Declaration—page 3 of 3)

PATENT

RECORDED: 06/02/2020 REEL: 052807 FRAME: 0323