

| |
|--------------------------------------|
| PATENT ASSIGNMENT COVER SHEET |
|--------------------------------------|

Electronic Version v1.1
 Stylesheet Version v1.2

EPAS ID: PAT5248064

| | |
|---|-------------------------|
| SUBMISSION TYPE: | NEW ASSIGNMENT |
| NATURE OF CONVEYANCE: | ASSIGNMENT |
| CONVEYING PARTY DATA | |
| Name | Execution Date |
| TUAN M. DANG | 07/26/2016 |
| SEAN SCOTT CORDONE | 08/23/2016 |
| JEFF BRUGGEMANN | 08/02/2016 |
| RECEIVING PARTY DATA | |
| Name: | GOGO LLC |
| Street Address: | 111 NORTH CANAL STREET |
| Internal Address: | SUITE 1500 |
| City: | CHICAGO |
| State/Country: | ILLINOIS |
| Postal Code: | 60606 |
| PROPERTY NUMBERS Total: 1 | |
| Property Type | Number |
| Application Number: | 16194741 |
| CORRESPONDENCE DATA | |
| Fax Number: | (312)474-0448 |
| <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: | 312-474-6300 |
| Email: | docket@marshallip.com |
| Correspondent Name: | LAURENCE B. DIETRICK |
| Address Line 1: | 233 S. WACKER DR. |
| Address Line 2: | 6300 WILLIS TOWER |
| Address Line 4: | CHICAGO, ILLINOIS 60606 |
| ATTORNEY DOCKET NUMBER: | 32045/50915-CON1 |
| NAME OF SUBMITTER: | LAURENCE B. DIETRICK |
| SIGNATURE: | /Laurence B. Dietrick/ |
| DATE SIGNED: | 11/21/2018 |
| Total Attachments: 6 | |
| source=50915-CON1 Executed Assignment#page1.tif | |
| source=50915-CON1 Executed Assignment#page2.tif | |

source=50915-CON1 Executed Assignment#page3.tif
source=50915-CON1 Executed Assignment#page4.tif
source=50915-CON1 Executed Assignment#page5.tif
source=50915-CON1 Executed Assignment#page6.tif

MARSHALL, GERSTEIN & BORUN LLP, 233 S. Wacker Drive, 6300 Willis Tower, Chicago, Illinois 60606-6357

ASSIGNMENT

NOW, THEREFORE, for good, valuable and legally sufficient consideration for each Assignor, the receipt of which is hereby acknowledged by all Assignors, said Assignors have sold, assigned, transferred and set over, and as demonstrated by this Assignment do sell, assign, transfer and set over unto GOGO LLC, 111 North Canal Street, Suite 1500, Chicago, Illinois 60606 and its successors and assigns ("Assignee"), the entire right, title and interest in and to the inventions of such undersigned disclosed in the applications listed in Schedule A, applications for Letters Patent, and any and all Letters Patent or Patents in the United States of America and all foreign countries which may be granted therefor or thereon, and in and to any and all related provisionals, nonprovisionals, divisionals, continuations and continuation-in-parts, etc. of any such application, or reissues, reexaminations, renewals and extensions of said Letters Patent or Patents; and the full right to claim for any such applications all benefits and priority rights under any applicable convention, treaty or legislation, and the right of Assignee to sue and obtain relief, including damages, profits and an injunction, for any infringement occurring before or after issuance of said Letters Patent or Patents; the same to be held and enjoyed for the sole and exclusive use and benefit of the Assignee, its successors and assigns, to the full end of the term or terms for which Letters Patent or Patents may be granted, as fully and entirely as the same would have been held and enjoyed by the Assignors had this Assignment not been made.

For good and valuable consideration, the receipt and sufficiency of which are hereby agreed, each of the undersigned agrees to assign and hereby assigns to the entire right, title, and interest in and to the inventions of such undersigned that are disclosed in the application listed above. Also assigned are (i) all rights in any and all other applications anywhere in the world that the undersigned may file and/or be named as an inventor of, solely or jointly, on said inventions, (ii) all rights in any and all patents that may be obtained on any of said applications, and (iii) all rights in any and all reissues, reexaminations, supplemental examinations, inter partes reviews, oppositions, post-grant reviews, supplementary protection certificates, and/or extensions thereof. The rights assigned include without limitation, the right to bring suit, the right to claim and retain all damages and/or seek other remedies for the past, present, and future infringement of any of the foregoing, and the right of priority (including without limitation the right to claim priority benefit of or to said patent applications.) Each of the undersigned request the Commissioner for Patents in the United States and similar authorities outside the United States to issue said patents to and in the name of Assignee.

Each of the undersigned states that each of the applications listed in Schedule A is or was made or authorized to be made by it. Each of the undersigned authorizes the attorneys of record in the applications listed in Schedule A to insert in this assignment the filing dates and application numbers of the applications listed in Schedule A when officially known. Each of the undersigned believes it to be the original inventor or a joint inventor with another undersigned of a claimed invention in each of the applications listed in Schedule A. The undersigned acknowledges that any willful false statement made by it in this paragraph is punishable under 18 U.S.C. §1001 by fine or imprisonment of not more than five years, or both.

Except in favor of Assignee, each of the undersigned warrants that: (i) it is the owner of all its rights, titles and interests herein assigned and has the right to make this unconditional and irrevocable assignment to Assignee without obtaining any approval or permission of a third party; and (ii) there are no outstanding encumbrances, liens, prior assignments, licenses, or other obligations or restrictions on the rights, titles and interests herein assigned. The undersigned authorized the applications listed in Schedule A to be made.

Upon the request of Assignee and at no expense to the undersigned, each of the undersigned hereby agrees to execute any and all applications on said inventions, including without limitation for the reissue, reexamination, supplementary protection certificate or extension thereof and any oath, declaration or affidavit relating thereto that said Assignee may deem necessary or expedient, and to cooperate to the best of the ability of the undersigned with and perform any and all affirmative acts requested by Assignee to prepare, file, prosecute, maintain, defend, enforce and vest in Assignee the rights, titles and interests assigned herein, including without limitation, preparing and executing statements and giving and producing evidence in support thereof, whereby said

rights, titles and interests will be held and enjoyed by said Assignee to the full end of the term for which said patents may be granted as fully and entirely as the same would have been held and enjoyed by the undersigned if this assignment had not been made.

On behalf of Assignee,

SAUMIL MEHTA

Name

VP & ASST. GENERAL COUNSEL

Title

hereby confirms Assignee's acceptance of all rights, privileges, title and interests conveyed by this assignment.


Signature

8-29-16
Date

WITNESS my hand this 26 day of July, 2016.

State of Illinois
County of Cook

MAR
Tuan M. Dang

On this 26th day of July, 2016, before me, a Notary Public in and for the County and State aforesaid, appeared Tuan M. Dang, to me personally known to be the same persons whose names are subscribed to the foregoing instrument, and acknowledged that they executed said instrument as their free and voluntary act and for the uses and purposes therein expressed.

WITNESS my hand and seal the same day and year last above given.

My Commission Expires:

MAR. 8, 2017

Nicole Lekas
Notary Public



WITNESS my hand this

23 day of August, 2016

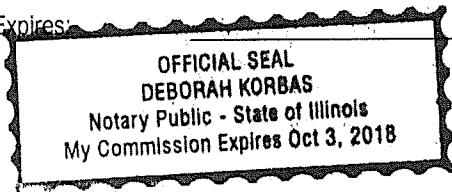
State of IL
County of Cook

Sean Scott Cordone
Sean Scott Cordone

On this 23rd day of August, 2016, before me, a Notary Public in and for the County and State aforesaid, appeared Sean Scott Cordone, to me personally known to be the same persons whose names are subscribed to the foregoing instrument, and acknowledged that they executed said instrument as their free and voluntary act and for the uses and purposes therein expressed.

WITNESS my hand and seal the same day and year last above given.

My Commission Expires:



Deborah Korbias
Notary Public

WITNESS my hand this 2nd day of August, 2016.

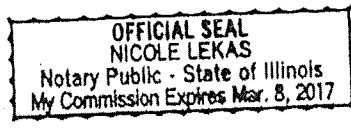
State of Illinois
County of Cook

Jeff Bruggemann
Jeff Bruggemann

On this 2nd day of August, 2016, before me, a Notary Public in and for the County and State aforesaid, appeared Jeff Bruggemann, to me personally known to be the same persons whose names are subscribed to the foregoing instrument, and acknowledged that they executed said instrument as their free and voluntary act and for the uses and purposes therein expressed.

WITNESS my hand and seal the same day and year last above given.

My Commission Expires: Mar. 8, 2017 Nicole Lekas
Notary Public



ASSIGNMENT
SCHEDULE A

| Application No. | Filing Date | Title | Docket Number |
|-----------------|-----------------|---|---------------|
| 62/357,570 | July 1, 2016 | DYNAMIC EFFECTIVE RADIATED POWER (ERP) ADJUSTMENT | 32045/50915P |
| 15/251,078 | August 30, 2016 | DYNAMIC EFFECTIVE RADIATED POWER (ERP) ADJUSTMENT | 32045/50915 |