### 506860714 09/09/2021

## PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT6907534

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

#### **CONVEYING PARTY DATA**

Name	Execution Date
GOGO LLC	08/31/2020

#### **RECEIVING PARTY DATA**

Name:	GOGO BUSINESS AVIATION LLC
Street Address:	105 EDGEVIEW DRIVE
City:	BROOMFIELD
State/Country:	COLORADO
Postal Code:	80021

#### **PROPERTY NUMBERS Total: 1**

Property Type	Number		
Application Number:	17470239		

#### **CORRESPONDENCE DATA**

**Fax Number:** (312)474-0448

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:** 312-474-6300

**Email:** docket@marshallip.com, kkrahn@marshallip.com

Correspondent Name: MARSHALL, GERSTEIN & BORUN LLP

Address Line 1: 233 S. WACKER DRIVE Address Line 2: 6300 WILLIS TOWER

Address Line 4: CHICAGO, ILLINOIS 60606-6357

ATTORNEY DOCKET NUMBER:	32045/47945-CON4
NAME OF SUBMITTER:	KARIN KRAHN
SIGNATURE:	/Karin Krahn/
DATE SIGNED:	09/09/2021

#### **Total Attachments: 14**

source=Assignment Gogo LLC to Gogo Business Aviation LLC#page1.tif source=Assignment Gogo LLC to Gogo Business Aviation LLC#page2.tif source=Assignment Gogo LLC to Gogo Business Aviation LLC#page3.tif source=Assignment Gogo LLC to Gogo Business Aviation LLC#page4.tif source=Assignment Gogo LLC to Gogo Business Aviation LLC#page5.tif

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## AMENDED AND RESTATED INTELLECTUAL PROPERTY ASSIGNMENT AGREEMENT

This Amended and Restated Intellectual Property Assignment Agreement (this "Agreement") is entered into on this 31st day of August, 2020, by and among Gogo LLC, a Delaware limited liability company ("Transferor"), and Gogo Business Aviation LLC, a Delaware limited liability company ("Transferee").

WHEREAS, Gogo, Transferor, Transferee, AC BidCo LLC, a Delaware limited liability company, Gogo Connectivity Ltd. (Canada), a British Columbia corporation, Gogo Inflight Internet Canada Ltd., a British Columbia unlimited liability company and a direct, wholly-owned subsidiary of Connectivity, Gogo ATG LLC, a Delaware limited liability company, Gogo CA Licenses LLC, a Delaware limited liability company, Gogo Intermediate Holdings LLC, a Delaware limited liability company and Gogo International Holdings LLC, a Delaware limited liability company, are parties to that Second Amended and Restated Reorganization Agreement, dated as of August 31, 2020 (the "Reorganization Agreement"), providing for the Reorganization Transactions among the Gogo Group, upon the terms and conditions set forth in the Reorganization Agreement;

WHEREAS, in an effort to maximize the value of Gogo's commercial aviation business (the "CA Business") and business aviation business (the "BA Business"), Gogo and its subsidiaries seek to align each business's operating assets, liabilities and employees with its respective operating entities by undertaking the Reorganization Transactions;

WHEREAS, following the execution of the Reorganization Transactions, the CA Business and the BA Business shall (i) be managed and operated through separate entities and (ii) continue to access certain shared services and assets as shall be reflected in intercompany transactions as described herein and in the Reorganization Agreement;

WHEREAS, by aligning Gogo's corporate structure, organization and documentation with its current business and operating practices, Gogo and its subsidiaries seek to (i) facilitate the pursuit of a potential sale of the CA Business (the "Potential Transaction") if a Potential Transaction is determined to be in the best interests of Gogo and its shareholders, (ii) maximize the value of each of the CA Business and the BA Business, and commensurately the overall Gogo corporate group, (iii) streamline ongoing operations of Gogo and its subsidiaries, and (iv) more clearly document and formalize, on fair, reasonable and arms-length terms, existing allocation and intercompany cooperation structures;

WHEREAS, in connection with the foregoing, the parties hereto entered into an Intellectual Property Assignment Agreement, dated as of July 31, 2020 (the "Existing IP Assignment Agreement");

WHEREAS, as of the Closing Date, pursuant to the Existing IP Assignment Agreement, Transferor conveyed, assigned, transferred and delivered to Transferee all of Transferor's right, title and interest in and to the Transferred IP (other than the Domain Names and the Additional Patents), and Transferee accepted the same;

WHEREAS, in order to effect the transfer of certain assets from the BA Business to the CA Business and from the CA Business to the BA Business, the parties hereto desire to amend and restate the Existing IP Assignment Agreement in its entirety by entering into this Agreement;

WHEREAS, pursuant to the Reorganization Agreement, Transferor has agreed to convey, assign, transfer and deliver to Transferee all of Transferor's right, title and interest in and to the Transferred IP, to the extent not conveyed, assigned, transferred and delivered the Transferee on the Closing Date (which, for the avoidance of doubt, such transfer shall include the Domain names and the Additional Patents);

WHEREAS, pursuant to the Reorganization Agreement, Transferee has agreed to accept the conveyance, assignment, transfer and delivery of Transferor's right, title and interest in and to the Transferred IP, to the extent not conveyed, assigned, transfer and delivered the Transferee on the Closing Date (which, for the avoidance of doubt, such transfer shall include the Domain Names and the Additional Patents); and

WHEREAS, to facilitate the separation of the CA Business and BA Business as of the Second Closing Date and the Reorganization Transactions, upon the terms and conditions set forth in this Agreement, the Parties desire by their execution of this Agreement to evidence their agreement with respect to certain obligations, as more fully set forth herein.

NOW, THEREFORE, in consideration of the mutual promises and covenants made herein and in the Reorganization Agreement and of the mutual benefits to be derived herefrom and therefrom, the parties agree as follows:

- 1. <u>Definitions</u>. All capitalized terms used and not otherwise defined herein shall have the meanings ascribed to such terms in the Reorganization Agreement.
- "Additional Patents" means the patents and patent applications set forth under the heading "Additional Patents" on Exhibit A hereto, including any patents and patent applications in any and all jurisdictions throughout the world.

"Ancillary IP Rights" means, with respect to any Intellectual Property, any and all of the following in any and all jurisdictions throughout the world: (a) all rights of priority therein in any country as may now or hereafter be granted to it by law, treaty or other international convention; (b) all rights to sue for, and pursue, collect and retain, damages, costs, injunctive relief, and other remedies, including the right to compromise, for any past, present, or future infringement, misappropriation or dilution of, or conflict with, such Intellectual Property; and (c) all rights to file for, apply for, prosecute and obtain in any and all jurisdictions throughout the world patents, trademarks, copyrights and registrations of such Intellectual Property and any other form of governmental grant or issuance.

"<u>Domain Names</u>" means all of the Internet domain names, URLs, personalized subdomains, social media usernames and other digital identifiers and indicia of origin used or held for use by Transferor, including those set forth under the heading "<u>Domain Names</u>" on Exhibit A hereto.

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"Intellectual Property" means, in any and all jurisdictions throughout the world, any (i) trademarks, service marks, trade names, trade dress, acronyms, tag-lines, slogans, logos and other indicia of origin, (ii) Internet domain names, URLs and personalized subdomains, (iii) social media usernames and other digital identifiers, (iv) copyrights and rights in copyrightable subject matter in published and unpublished works of authorship, (v) rights in software, (vi) all registrations and applications to register or renew the registration of any of the foregoing, (vii) patents and patent applications, including all reissues, divisions, renewals, extensions, provisionals, continuations and continuations-in-part thereof, (viii) rights in trade secrets, inventions, processes, designs, formulae, models, tools, algorithms, know-how, ideas, and confidential information and (ix) all other intellectual property rights.

"<u>Transferred IP</u>" means all Intellectual Property owned by Transferor that relates to the BA Business (including the Intellectual Property set forth on Exhibit A hereto).

### 2. <u>Assignment</u>.

- (a) On the Closing Date, Transferor hereby (a) conveys, assigns, transfers and delivers to Transferee all of Transferor's right, title and interest in and to the Transferred IP (other than the Domain Names and the Additional Patents) and all Ancillary IP Rights related thereto and the goodwill associated with the foregoing and symbolized thereby provided that, with respect to any United States intent-to-use trademark applications included in the Transferred IP (other than the Domain Names and the Additional Patents), the transfer of such applications accompanies, pursuant to the Reorganization Agreement, the transfer of the portion of Transferor's business to which the trademark pertains, and that business is ongoing and existing, and (b) waives any moral rights, including rights of attribution and integrity, arising from all or any part of such Transferred IP (other than the Domain Names and the Additional Patents), together with all claims for damages and other remedies asserted on the basis of moral rights, and Transferor hereby conveys, assigns, transfers and delivers to Transferee any and all waivers granted to Transferor of any such moral rights (to the extent transferable) (the "Closing Date Assignment").
- On the Second Closing Date, to the extent not conveyed, assigned, transferred or delivered to the Transferee as of the Closing Date, Transferor hereby (a) conveys, assigns, transfers and delivers to Transferee all of Transferor's right, title and interest in and to the Transferred IP (including the Domain names and the Additional Patents), and all Ancillary IP Rights related thereto and the goodwill associated with the foregoing and symbolized thereby provided that, with respect to any United States intent-to-use trademark applications included in the Transferred IP (including the Domain names and the Additional Patents), the transfer of such applications accompanies, pursuant to the Reorganization Agreement, the transfer of the portion of Transferor's business to which the trademark pertains, and that business is ongoing and existing, and (b) waives any moral rights, including rights of attribution and integrity, arising from all or any part of such Transferred IP (including the Domain names and the Additional Patents), together with all claims for damages and other remedies asserted on the basis of moral rights, and Transferor hereby conveys, assigns, transfers and delivers to Transferee any and all waivers granted to Transferor of any such moral rights (to the extent transferable) (the "Second Closing Assignment", and together with the Closing Date Assignment, the "Assignment").

- 3. Reorganization Agreement Controls. All terms and conditions of the transactions contemplated by the Reorganization Agreement are set forth in the Reorganization Agreement. To the extent that any provision of this Agreement is inconsistent or conflicts with the Reorganization Agreement, the provisions of the Reorganization Agreement shall control.
- 4. <u>Further Assurances</u>. Each party hereto agrees to execute and deliver, or cause to be executed and delivered, all such documents and instruments, and will take, or cause to be taken, all such further actions, in each case, as may be reasonably necessary, appropriate or desirable in connection with the Assignment, including any such documents and instruments to be executed and delivered in connection with making appropriate filings with the intellectual property offices of any applicable jurisdiction.
- 5. <u>Miscellaneous</u>. The terms and provisions of Sections 11 (Entire Agreement), 13 (Governing Law) and 14 (Counterparts; PDF Signatures) of the Reorganization Agreement are hereby incorporated herein by reference and apply, mutatis mutandis, to this Agreement.

[SIGNATURE PAGE FOLLOWS]

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1006170847v3

IN WITNESS WHEREOF, the parties hereto have executed this Agreement as of the date first written above.

## **TRANSFEROR**:

**GOGO LLC** 

Name: Marguerite M. Elias

Title: Executive Vice President, General

Counsel and Secretary

**TRANSFEREE**:

**GOGO BUSINESS AVIATION LLC** 

Name: Marguerite M. Elias

Title: Executive Vice President, General

Counsel and Secretary

[Signature Page to A&R IP Assignment Agreement] PATENT

**REEL: 057427 FRAME: 0843** 

## Exhibit A

Trad	lemarks
11au	Ciliality

See attached.

**Patents** 

See attached.

**Additional Patents** 

See attached.

Copyrights

# **Gogo LLC Copyright Registrations**

Country	Title	Author	Registration No.	Registration Date
US	Aircell cloud design	Gogo LLC	VA0001853407	12/13/2012
US	Gogo cloud design	Gogo LLC	VA0001853402	12/13/2012
China	Gogo logo	Gogo LLC	GUO ZUO DENG Z1-2017- F-00459725	05/27/2017

## **Domain Names**

See attached.

1006170847v3 **PATENT** 

**REEL: 057427 FRAME: 0844** 

Matter No.	Ctry Code	Ann. No.	Filed	Patent No.	Issue Date	Status
40000	US	10/241,723		7,689,752	3/30/2010	
40000A	US	12/707.070		8,140,732	3/20/2012	
40001	US	10/378,203		8,032,135	10/4/2011	
40001A	US	13/222,722		8,700,032	4/15/2014	
40013H	us	11/240,975		7,640,016	12/29/2009	
40019	us	11/590,379	10/31/2006		5/21/2013	
40020	us	11/590,146	10/31/2006		3/27/2012	
40021	us	11/590,709	10/31/2006		4/5/2011	
40022	us	12/021,125		8,078,163	12/13/2011	
40023	us	12/021,133		7,702,328	4/20/2010	
40024	us	12/021,169		8,068,829	11/29/2011	
40025	us	12/029,298		8,185,040	5/22/2012	
40026	us	12/182,834		8,060,083	11/15/2011	
40027-CON1	us	14/340,921		9,813,144	11/7/2017	
40027-CON2	us	15/717,662		10,200,111	2/5/2019	
40030	US	12/060,662		8,081,969	12/20/2011	
40031	us	12/060,674		8,081,968	12/20/2011	
40032	us	12/137,995		8,914,022	12/16/2014	
40034	us	13/009,579		8.457.627	6/4/2013	
40035	US	13/009,687	1/19/2011	8,452,276	5/28/2013	
40036	us	13/172,539		8,442,519	5/14/2013	
40039	us	13/544,742		8,934,893	1/13/2015	
40039-CON1	us	14/553,641	11/25/2014		3/15/2016	
40039-CON3	us	15/873,179		10,512,118	12/17/2019	
40039-CON4	us	16/665,905	10/28/2019			Published
40040	us	13/588,903	8/17/2012	9,825,910	11/21/2017	Issued
47060	us	13/675,190	11/13/2012		7/21/2015	
47060-CON1	us	15/853,106		10,129,133	11/13/2018	
47060-DIV1	US	14/797,461	7/13/2015	9,893,976	2/13/2018	Issued
47062	US	13/675,194	11/13/2012	9,087,193	7/21/2015	Issued
47062-DIV1	US	14/754,046	6/29/2015	9,971,889	5/15/2018	Issued
47062-DIV2	US	15/939,752	3/29/2018			Published
47063	US	13/675,200	11/13/2012	10,382,555	8/13/2019	Issued
47063-CON1	US	16/538,013	8/12/2019			Published
47064	US	13/799,869	3/13/2013	8,982,562	3/17/2015	Issued
47082	US	13/781,841	3/1/2013	9,147,065	9/29/2015	Issued
47323	US	14/177,863	2/11/2014	9,553,657	1/24/2017	Issued
47323-CON1	US	15/382,227	12/16/2016	10,680,315	6/9/2020	Issued
47323-CON2	US	15/412,666	1/23/2017	10,297,908	5/21/2019	Issued
47323-CON3	US	16/372,043	4/1/2019			Published
47323-CON4	US	16/868,321	5/6/2020			Published
47625	US	90/012,810	3/20/2013			Pending
47714	US	14/209,698	3/13/2014	9,608,321	3/28/2017	
47714-CON	US	15/468,808	3/24/2017			Allowed
47736	US	14/224,859		9,577,857	2/21/2017	
47803	US	14/320,966	7/1/2014	9,384,081	7/5/2016	
47804	US	14/320,970	7/1/2014	9,591,077	3/7/2017	
47918	US	14/912,834		9,490,892	11/8/2016	
47945	US	14/307,228		9,408,129	8/2/2016	
47945-CON1	US	15/223,511		10,014,930	7/3/2018	
47945-CON2	US	15/965,245		10,461,844	10/29/2019	
47945-CON3	US	16/585,508	9/27/2019			Published
47946	US	14/225,050		9,197,314	11/24/2015	
47946-CON1	US	14/876,542		9,634,753	4/25/2017	
47946-CON2	US	15/459,709		9,973,262	5/15/2018	
47946-CON3	us us	15/945,545 14/309,342		10,205,509 9,787,619	2/12/2019	
47947					10/10/2017	

48010 US 1 48010-CON1 US 1 48011-CON1 US 1 48011-CON1 US 1 48012-CON1 US 1 48040 US 1 48041-CON1 US 1 48041-CON1 US 1 48042-CON1 US 1 48046-CON1 US 1 48047-US 1 48047-US 1 48134-CON1 US 1 48138-CON1 US 1 48138-CON1 US 1 48138-CON1 US 1 48138-CON1 US 1 48139-CON1 US 1 48139-CON1 US 1 48139-CON1 US 1 50126-CON1 US 1 50126-CON1 US 1 50406-CON1 US 1 50406-CON1 US 1 50664-CON1 US 1 50820-CON1 US 1 50990-CON1 US 1	14/209,713 14/291,562 14/995,459 14/225,017 15/150,576 14/225,077 15/075,032 14/291,558 14/291,511 15/261,381 14/291,979 14/291,878 14/291,878 14/292,035 15/079,953 14/267,563 14/530,409 15/222,219 16/257,972 14/530,423 14/267,400 14/312,413 15/090,026 16/175,291 16/985,910 15/264,066 15/092,844 15/263,921 16/693,965	3/13/2014 5/30/2014 1/14/2016 3/25/2014 5/10/2016 3/25/2014 3/18/2016 5/30/2014 5/30/2014 5/30/2014 5/30/2014 5/30/2014 5/30/2014 3/24/2016 5/1/2014 10/31/2014 7/28/2019 10/31/2014 5/1/2014 6/23/2014 4/4/2016 10/30/2018 8/5/2020 9/13/2016	9,258,432 9,794,815 9,369,991 9,591,462 9,326,217 9,900,823 9,232,546 9,467,828 9,888,373 9,655,073 9,503,956 9,716,542 9,960,835 9,648,468 9,426,650 10,235,503  9,578,104 9,712,668 9,967,020 10,148,759   10,523,524 10,079,757	2/21/2017 7/18/2017 5/8/2018 12/4/2018	Issued
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48677 US 1 49947 US 1 49947-CON1 US 1 49947-CON2 US 1 50126 US 1 50281 US 1 50322 US 1 50322-CON1 US 1 50406 US 1 50406-CON1 US 1 50664 US 1 50820 US 1 50820-CON1 US 1 50851 US 1 50915-CON1 US 1 50915-CON1 US 1 50990-CON1 US 1 50990-CON2 US 1 50990-CON2 US 1 50990-CON2 US 1	14/312,413 15/090,026 16/175,291 16/985,910 15/264,066 15/092,844 15/263,921 16/693,965	6/23/2014 4/4/2016 10/30/2018 8/5/2020 9/13/2016 4/7/2016 9/13/2016	9,967,020 10,148,759  -10,523,524 10,079,757	5/8/2018 12/4/2018   12/31/2019 9/18/2018	Issued Issued Allowed Pending Issued
49947         US         1           49947-CON1         US         1           49947-CON2         US         1           50126         US         1           50281         US         1           50322         US         1           50322-CON1         US         1           50406         US         1           50406-CON1         US         1           50611         US         1           50664         US         1           50820         US         1           50820-CON1         US         1           50915         US         1           50915-CON1         US         1           50990         US         1           50990-CON1         US         1           50990-CON2         US         1           51525         US         1	15/090,026 16/175,291 16/985,910 15/264,066 15/092,844 15/263,921 16/693,965	4/4/2016 10/30/2018 8/5/2020 9/13/2016 4/7/2016 9/13/2016	10,148,759   10,523,524 10,079,757	12/4/2018   12/31/2019 9/18/2018	Issued Allowed Pending Issued
49947-CON1         US         1           49947-CON2         US         1           50126         US         1           50281         US         1           50322         US         1           50322-CON1         US         1           50406         US         1           50406-CON1         US         1           50611         US         1           50664         US         1           50820         US         1           50820-CON1         US         1           50915         US         1           50915-CON1         US         1           50990         US         1           50990-CON1         US         1           50990-CON2         US         1           51525         US         1	16/175,291 16/985,910 15/264,066 15/092,844 15/263,921 16/693,965	10/30/2018 8/5/2020 9/13/2016 4/7/2016 9/13/2016	  10,523,524 10,079,757	  12/31/2019 9/18/2018	Allowed Pending Issued
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50322 US 1 50322-CON1 US 1 50406 US 1 50406-CON1 US 1 50611 US 1 50664 US 1 50820 US 1 50820-CON1 US 1 50851 US 1 50915-CON1 US 1 50915-CON2 US 1 50990 US 1 50990-CON1 US 1 50990-CON2 US 1 50990-CON2 US 1	15/263,921 16/693,965	9/13/2016			Issued
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	15/675,381 15/844,020 16/195,248 16/537,890 16/746,015	1/17/2020	10,623,995	4/14/2020	Published
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52016-CON1 US 1	15/675,381 15/844,020 16/195,248 16/537,890 16/746,015	1/17/2020 12/15/2017 3/10/2020			

52737	lus	16/263,814	1/31/2019	10,608,760	3/31/2020	Issued
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47060	GB	13799149.3	11/12/2013	Z9ZU941	1/1/2020	Jissuea

47060-DIV1	Igв	17174246.3	11/12/2013	3232644	1/1/2020	Issued
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40036	TEP	12730774.2	6/26/2012	2727260	11/20/2019	Issued
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47918-DIV2	EP	19215743.6	8/14/2014			Published
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50851	EP	18735453.5	6/5/2018			Published
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		13799148.5 13801918.7		602013064659.7 602013046392.1	1/1/2020 11/7/2018	

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47947	DE	14808757.0	11/10/2014 602014014905.7	9/20/2017	
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40013E	CN	200480041374.2	11/23/2004 200480041374.2	1/20/2016	
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40022	CN	200880125769.9	11/18/2008 200880125769.9	1/6/2016	
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.5577	1011	1201100012077.1	11/10/2014   1201400012044.1	2/12/2019	

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