

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1
 Stylesheet Version v1.2

EPAS ID: PAT5648039

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	SECURITY INTEREST

CONVEYING PARTY DATA

Name	Execution Date
ATC TECHNOLOGIES, LLC	07/31/2019

RECEIVING PARTY DATA

Name:	JEFFERIES FINANCE LLC
Street Address:	520 MADISON AVENUE
Internal Address:	19TH FLOOR
City:	NEW YORK
State/Country:	NEW YORK
Postal Code:	10022

PROPERTY NUMBERS Total: 13

Property Type	Number
Patent Number:	10110288
Application Number:	15954001
Application Number:	62667940
Application Number:	15982980
Application Number:	62676542
Application Number:	15997603
Application Number:	15995778
Application Number:	62701242
Application Number:	15998431
Application Number:	16117901
Application Number:	16146661
Application Number:	16189651
Application Number:	16206606

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: 800-494-5225

Email: ipteam@cogencyglobal.com

Correspondent Name: STEWART WALSH
Address Line 1: 1025 VERMONT AVE NW, STE 1130
Address Line 2: COGENCY GLOBAL INC.
Address Line 4: WASHINGTON, D.C. 20005

ATTORNEY DOCKET NUMBER: 1114077 PAT 2L

NAME OF SUBMITTER: MACKENZIE KORF

SIGNATURE: /Mackenzie Korf/

DATE SIGNED: 08/01/2019

Total Attachments: 5

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PATENT SECURITY AGREEMENT

Patent Security Agreement, dated as of July 31, 2019, by ATC TECHNOLOGIES, LLC (the “Pledgor”), in favor of JEFFERIES FINANCE LLC, in its capacity as Collateral Agent under the Security Agreement referred to below (in such capacity, the “Collateral Agent”).

WITNESSETH:

WHEREAS, the Pledgor is a party to a U.S. Security Agreement dated as of December 7, 2015 (as amended, amended and restated, supplemented or otherwise modified from time to time, the “Security Agreement”) in favor of the Collateral Agent pursuant to which the Pledgor is required to execute and deliver this Patent Security Agreement;

NOW, THEREFORE, in consideration of the premises and as consideration for the Loans previously made, the Pledgor hereby agrees with the Collateral Agent as follows:

SECTION 1. Defined Terms. Unless otherwise defined herein, terms defined in the Security Agreement and used herein have the meaning given to them in the Security Agreement or the Credit Agreement referred to in the Security Agreement.

SECTION 2. Grant of Security Interest in Patent Collateral. The Pledgor hereby pledges and grants to the Collateral Agent for the benefit of the Secured Parties a lien on and security interest in and to all of its right, title and interest in, to and under all the following Pledged Collateral of the Pledgor:

- (a) Patents of the Pledgor listed on Schedule I attached hereto; and
- (b) all Proceeds of any and all of the foregoing (other than Excluded Property).

SECTION 3. Security Agreement. The security interest granted pursuant to this Patent Security Agreement is granted in conjunction with the security interest granted to the Collateral Agent pursuant to the Security Agreement and the Pledgor hereby acknowledges and affirms that the rights and remedies of the Collateral Agent with respect to the security interest in the Patents made and granted hereby are more fully set forth in the Security Agreement, the terms and provisions of which are incorporated by reference herein as if fully set forth herein. In the event that any provision of this Patent Security Agreement is deemed to conflict with the Security Agreement, the provisions of the Security Agreement shall control unless the Collateral Agent shall otherwise determine.

SECTION 4. Termination. Upon the payment in full of the Secured Obligations and termination of the Security Agreement, the Collateral Agent shall execute, acknowledge, and deliver to the Pledgor an instrument in writing in recordable form releasing the collateral pledge, grant, assignment, lien and security interest in the Patents under this Patent Security Agreement.

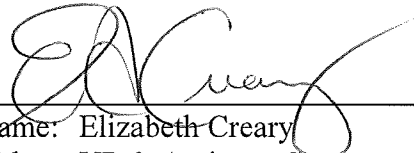
SECTION 5. Counterparts. This Patent Security Agreement may be executed in any number of counterparts, all of which shall constitute one and the same instrument, and any party hereto may execute this Patent Security Agreement by signing and delivering one or more counterparts.

[Signature page follows]

IN WITNESS WHEREOF, the Pledgor has caused this Patent Security Agreement to be executed and delivered by its duly authorized officer as of the date first set forth above.

Very truly yours,

ATC TECHNOLOGIES, LLC,
as the Pledgor

By: 
Name: Elizabeth Creary
Title: VP & Assistant Secretary

Accepted and Agreed:

JEFFERIES FINANCE LLC,
as Collateral Agent

By: _____
Name:
Title:

IN WITNESS WHEREOF, the Pledgor has caused this Patent Security Agreement to be executed and delivered by its duly authorized officer as of the date first set forth above.

Very truly yours,

ATC TECHNOLOGIES, LLC,
as the Pledgor

By: _____
Name: Elizabeth Creary
Title: VP & Assistant Secretary

Accepted and Agreed:

JEFFERIES FINANCE LLC,
as Collateral Agent

By: Paul Chisholm
Name: Paul Chisholm
Title: Managing Director

SCHEDULE I
to
PATENT SECURITY AGREEMENT
PATENT REGISTRATIONS AND PATENT APPLICATIONS

UNITED STATES PATENTS:

Title	Owner¹	Patent No.	Issue Date
Frequency Division Duplex (FDD) Return Link Transmit Diversity Systems, Methods and Devices Using Forward Link Side Information	ATC Technologies, LLC	10110288	10/23/2018

UNITED STATES PATENT APPLICATIONS:

Title	Owner	Application No.	Filing Date
Unmanned Aerial Systems	ATC Technologies, LLC	15/954,001	04/16/2018
Devices, Systems, and Methods for Uplink Synchronization in Time Division Multiple Access Satellite Network	ATC Technologies, LLC	62/667,940	05/07/2018
Bidding Method for Resource Sharing	ATC Technologies, LLC	15/982,980	05/17/2018
Methods and Systems of Self-Organizing Satellite-Terrestrial Networks	ATC Technologies, LLC	62/676,542	05/25/2018
Wireless Communication System with Dynamic Spectrum Sharing	ATC Technologies, LLC	15/997,603	06/04/2018
Methods and Systems for Channel Access in Dynamic Spectrum Sharing	ATC Technologies, LLC	15/995,778	06/01/2018
Landing Unmanned Aerial Vehicles (UAVs) with Collaborative Information Sharing	ATC Technologies, LLC	62/701,242	07/20/2018
Multipath TCP over Dual Networks	ATC Technologies, LLC	15/998,431	08/16/2018
Dynamic Speed Control	ATC Technologies, LLC	16/117,901	08/30/2018
Systems and Methods for Locating and Resolving Base Station Interference with a Third-Party Communication Device	ATC Technologies, LLC	16/146,661	09/28/2018
Localized Content Delivery Platform	ATC Technologies, LLC	16/189,651	11/13/2018
Wireless Communication Systems with Code-division Multiple Access and Interference Avoidance	ATC Technologies, LLC	16/206,606	11/30/2018

¹ Note: All patents registered in the name of, and all patent applications initiated by, Ligado Networks LLC have been assigned to ATC Technologies, LLC, a wholly owned subsidiary of Ligado Networks LLC.