## 505500123 05/30/2019

### PATENT ASSIGNMENT COVER SHEET

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SUBMISSION TYPE:		NEW ASSIGNMENT	NEW ASSIGNMENT	
NATURE OF CONVEYANCE:		ASSIGNMENT		
CONVEYING PARTY D	ΑΤΑ			
		Name	Execution Date	
WILLIAM A. MALKES			05/29/2019	
WILLIAM S. OVERSTREET			05/23/2019	
JEFFERY R. PRICE			05/23/2019	
MICHAEL J. TOURVILLI	E		05/23/2019	
RECEIVING PARTY DA	TA			
Name:	GRIDS	GRIDSMART TECHNOLOGIES, INC.		
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Postal Code:	37932	37932		
PROPERTY NUMBERS	Total: 1			
Property Type		Number		
Application Number:		16395878		
	I			
CORRESPONDENCE D	ATA			
Fax Number:		(303)571-4321		
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using a lax number, n			uccessful, it will be sent t via US Mail.	
Phone:	providea	<i>I; if that is unsuccessful, it will be sen</i> 404-815-6500		
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Phone: Email: Correspondent Name:	provideo	<b>I; if that is unsuccessful, it will be sen</b> 404-815-6500 prader@kilpatricktownsend.com KILPATRICK TOWNSEND & STOCKTO	t via US Mail.	
Phone: Email: Correspondent Name: Address Line 1:	provideo	<i>I; if that is unsuccessful, it will be sent</i> 404-815-6500 prader@kilpatricktownsend.com KILPATRICK TOWNSEND & STOCKTO 1100 PEACHTREE STREET, N.E.	t via US Mail.	
Phone: Email: Correspondent Name: Address Line 1: Address Line 2:	providea	<i>I; if that is unsuccessful, it will be sent</i> 404-815-6500 prader@kilpatricktownsend.com KILPATRICK TOWNSEND & STOCKTO 1100 PEACHTREE STREET, N.E. SUITE 2800	t via US Mail.	
Phone: Email: Correspondent Name: Address Line 1:	providea	<i>I; if that is unsuccessful, it will be sent</i> 404-815-6500 prader@kilpatricktownsend.com KILPATRICK TOWNSEND & STOCKTO 1100 PEACHTREE STREET, N.E.	t via US Mail.	
Phone: Email: Correspondent Name: Address Line 1: Address Line 2: Address Line 4:	provideo	<i>I; if that is unsuccessful, it will be sent</i> 404-815-6500 prader@kilpatricktownsend.com KILPATRICK TOWNSEND & STOCKTO 1100 PEACHTREE STREET, N.E. SUITE 2800	t via US Mail.	
Phone: Email: Correspondent Name: Address Line 1: Address Line 2: Address Line 4: ATTORNEY DOCKET NU	provideo	<i>I; if that is unsuccessful, it will be sent</i> 404-815-6500 prader@kilpatricktownsend.com KILPATRICK TOWNSEND & STOCKTO 1100 PEACHTREE STREET, N.E. SUITE 2800 ATLANTA, GEORGIA 30309	t via US Mail.	
Phone: Email: Correspondent Name: Address Line 1: Address Line 2: Address Line 4: ATTORNEY DOCKET NUNAME OF SUBMITTER:	provideo	<i>I; if that is unsuccessful, it will be sent</i> 404-815-6500 prader@kilpatricktownsend.com KILPATRICK TOWNSEND & STOCKTO 1100 PEACHTREE STREET, N.E. SUITE 2800 ATLANTA, GEORGIA 30309 077205-PD909NP-1138975	t via US Mail.	
Phone: Email: Correspondent Name: Address Line 1: Address Line 2:	provideo	I; if that is unsuccessful, it will be sent 404-815-6500 prader@kilpatricktownsend.com KILPATRICK TOWNSEND & STOCKTO 1100 PEACHTREE STREET, N.E. SUITE 2800 ATLANTA, GEORGIA 30309 077205-PD909NP-1138975 PAMELA RADER	t via US Mail.	
Phone: Email: Correspondent Name: Address Line 1: Address Line 2: Address Line 4: ATTORNEY DOCKET NU NAME OF SUBMITTER: SIGNATURE:	provideo	I; if that is unsuccessful, it will be sent 404-815-6500 prader@kilpatricktownsend.com KILPATRICK TOWNSEND & STOCKTO 1100 PEACHTREE STREET, N.E. SUITE 2800 ATLANTA, GEORGIA 30309 077205-PD909NP-1138975 PAMELA RADER /Pamela Rader/	t via US Mail. N LLP	

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#### COMBINED ASSIGNMENT AND DECLARATION OF PATENT APPLICATION

# Title of Invention: OPTIMIZING EMERGENCY SERVICES LOGISTICS USING DATA FROM A SMART TRAFFIC CONTROL SYSTEM

Application No. 16/395,878, filed on APRIL 26, 2019

#### ASSIGNMENT

WHEREAS, I, WILLIAM A. MALKES, residing at KNOXVILLE, TN; WILLIAM S. OVERSTREET, residing at KNOXVILLE, TN; JEFFERY R. PRICE, residing at KNOXVILLE, TN; and MICHAEL J. TOURVILLE, residing at LENOIR CITY, TN, are the original inventors or original joint inventors of the invention(s), hereinafter referred to as "Invention(s)," in the above identified and/or attached patent application, hereinafter identified as the "Application;"

WHEREAS, GRIDSMART Technologies, Inc., a corporation of the State of Delaware having a principle place of business at 10545 Hardin Valley Road, Knoxville, TN 37932, hereinafter referred to as "GRIDSMART," is desirous of acquiring an interest in the Invention(s) and Application; any United States, International, or foreign patent application directed to (at least in part) one or more of the Invention(s); and any United States or foreign Letters Patent and Registrations that may be granted and that is directed to (at least in part) one or more of the Invention(s);

For good and valuable consideration, the receipt of which is hereby acknowledged, we, the inventors, have assigned, and by these presents do assign GRIDSMART Technologies, Inc. all right, title, and interest in and to the entirety of the Invention(s) and Application; any United States, International, or foreign patent application directed to (at least in part) one or more of the Invention(s); and any United States or foreign Letters Patent and Registrations that may be granted and that is directed to (at least in part) one or more of the Invention(s).

Should the Application be filed as a provisional, non-provisional, or International patent application in the United States or in any other country, we agree that the assignment assigns all right, title and interest to the filed application, to all foreign counterparts (including patent, utility model, and industrial designs), and in and to any Letters Patent and Registrations which may hereafter be granted on any patent application claiming priority from the same in the United States and all countries throughout the world, and to claim the priority from the Application as provided by the Paris Convention.

The right, title, and interest is to be held and enjoyed by GRIDSMART Technologies, Inc. and GRIDSMART Technologies, Inc.'s successors and assigns as fully and exclusively as it would have been held and enjoyed by us had this Assignment not been made, for the full term of any Letters Patent and Registrations which may be granted thereon, or of any division, renewal, continuation in whole or in part, substitution, conversion, reissue, prolongation, or extension thereof.

We further agree that we will, without charge to us, but at GRIDSMART Technologies, Inc.'s expense, (a) cooperate with GRIDSMART Technologies, Inc. in the prosecution of U.S. Patent applications and foreign counterparts directed to (at least in part) one or more of the Invention(s) or Application and any improvements, (b) execute, verify, acknowledge, and deliver all such further papers, including patent applications and instruments of transfer, and (c) perform such other acts as GRIDSMART Technologies, Inc. lawfully may request to obtain or maintain Letters Patent and Registrations for (at least in part) one or more of the Invention(s) and improvements in any and all countries, and to vest title thereto in GRIDSMART Technologies, Inc., or GRIDSMART Technologies, Inc.'s successors and assigns. We waive any obligation of GRIDSMART Technologies, Inc. to file foreign counterparts on (at least in part) one or more of the Invention(s); file the attached application; or continue pursuit of prosecution of (at least in part) one or more of the Invention(s). We agree that GRIDSMART Technologies, Inc. can, in its sole discretion, choose in which countries to file foreign counterparts and can further choose the type of each application that is to be filed, unless we have previously informed GRIDSMART Technologies, Inc. in writing of any foreign counterparts we would like the option to pursue or prosecute.

Page 1 of 2

PATENT REEL: 049318 FRAME: 0375

#### DECLARATION

As an above-named inventor, I hereby declare that:

- This declaration is directed to the Invention(s) disclosed in the Application; any filed United States or foreign application that is directed to one or more of the Invention(s); and any applications related by priority to such filed United States or foreign application that may include claims or claim elements supported in the Application.
- The 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 or disclosed Invention(s) 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 5 years, or both.

IN TESTIMONY of both the Assignment and Declaration, I have signed my name on the date indicated.

Dated: 2019-05-29

Dated:

WILLIAM A. MALKES

WILLIAM S. OVERSTREET

Dated:

JEFFERY R. PRICE

Dated:

MICHAEL J. TOURVILLE

#### DECLARATION

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IN TESTIMONY of both the Assignment and Declaration, I have signed my name on the date indicated.

Dated:

Dated: \_\_\_\_\_

WILLIAM A. MALKES

WILLIAM S. OVERSTREET

JEFFERY R. PRICE

Dated:

Dated: \_\_\_\_\_

MICHAEL J. TOURVILLE

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IN TESTIMONY of both the Assignment and Declaration, I have signed my name on the date indicated.

Dated: \_\_\_\_\_

WILLIAM A. MALKES

Dated: \_\_\_\_\_

Dated: \_\_\_\_2019-05-23

WILLIAM S. OVERSTREET

HIM K. PRICO

JEFFERY R. PRICE

Dated: \_\_\_\_\_

MICHAEL J. TOURVILLE

#### DECLARATION

As an above-named inventor, I hereby declare that:

- This declaration is directed to the Invention(s) disclosed in the Application; any filed United States or foreign application that is directed to one or more of the Invention(s); and any applications related by priority to such filed United States or foreign application that may include claims or claim elements supported in the Application.
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IN TESTIMONY of both the Assignment and Declaration, I have signed my name on the date indicated.

Dated: \_\_\_\_\_

WILLIAM A. MALKES

Dated:

WILLIAM S. OVERSTREET

Dated: \_\_\_\_\_

Dated: \_\_\_\_\_

Marles.

JEFFERY R. PRICE

MICHAEL J. TOURVILLE

**RECORDED: 05/30/2019**