PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT7364128

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	SECURITY INTEREST

CONVEYING PARTY DATA

Name	Execution Date
TRAFFIC TECHNOLOGY SERVICES, INC.	06/03/2022

RECEIVING PARTY DATA

Name:	KAPSCH TRAFFICCOM AG	
Street Address:	AM EUROPLATZ 2	
City:	VIENNA	
State/Country:	AUSTRIA	
Postal Code:	1120	

PROPERTY NUMBERS Total: 12

Property Type	Number
Patent Number:	9928738
Patent Number:	10192436
Patent Number:	10008113
Patent Number:	10140862
Patent Number:	9396657
Patent Number:	10878693
Patent Number:	11113957
Patent Number:	10559201
Patent Number:	10733883
Patent Number:	10937313
Application Number:	17173096
Application Number:	16818401

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: 3128637141

Email:kristen.lange@goldbergkohn.comCorrespondent Name:KRISTEN N. LANGE, PARALEGALAddress Line 1:C/O GOLDBERG KOHN LTD.

Address Line 2: 55 E. MONROE STREET, SUITE 3300

- PATENT REEL: 060095 FRAME: 0637

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Address Line 4:	CHICAGO, ILLINOIS 60603	
ATTORNEY DOCKET NUMBER:	6656.021	
NAME OF SUBMITTER:	KRISTEN N. LANGE	
SIGNATURE:	/kristenlange/	
DATE SIGNED:	06/03/2022	
	This document serves as an Oath/Declaration (37 CFR 1.63).	

Total Attachments: 3

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> PATENT REEL: 060095 FRAME: 0638

PATENT SECURITY AGREEMENT

WHEREAS, Traffic Technology Services, Inc., a Delaware corporation (the "Assignor") holds all right, title and interest in the letter patents, design patents and utility patents listed on the annexed Schedule 1, which patents are issued or applied for in the United States Patent and Trademark Office (the "Patents");

WHEREAS, the Assignor, has entered into a Loan Agreement, dated June 3, 2022 (the "Loan Agreement"), in favor of Kapsch TrafficCom AG (the "Assignee"); and

WHEREAS, pursuant to the Loan Agreement, the Assignor has granted to the Assignee a security interest in the Patents, for the full and prompt payment in cash and performance of the Assignor's obligations under the Loan Agreement, which security interest shall include all proceeds thereof, including, without limitation, any and all causes of action which may exist by reason of infringement thereof and any and all damages arising from past, present and future violations thereof (collectively, the "Collateral").

NOW, THEREFORE, in furtherance of the grant of security provided for in the Loan Agreement, for good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the Assignor does hereby pledge, convey, sell, assign, transfer and set over unto the Assignee and grants to the Assignee a continuing security interest in the Collateral to secure the prompt payment, performance and observance of the Assignor's obligations under the Loan Agreement.

The Assignor does hereby further acknowledge and affirm that the rights and remedies of the Assignee with respect to the Collateral are more fully set forth in the Loan Agreement, the terms and provisions of which are hereby incorporated herein by reference as if fully set forth herein.

[signature page follows]

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PATENT REEL: 060095 FRAME: 0639 IN WITNESS WHEREOF, the Assignor has caused this Assignment to be duly executed by its officer thereunto duly authorized as of June 3, 2022.

TRAFFIC TECHNOLOGY SERVICES, INC.

Name: THOMAS REQUEE

Title: CEO

SCHEDULE 1

Patents

- Bauer, Thomas, Jingtao Ma, Kyle Hatcher, Paul Pellekoorne, Frank Offermann. Red light violation warning system based on predictive traffic signal state data. USPTO 9,928,738; 10,192,436.
- Ova, Kiel, Thomas Bauer, Jingtao Ma, Kyle Hatcher. Hybrid distributed prediction of traffic signal state changes. USPTO 10,008,113; 10,140,862.
- Bauer, Thomas, Jingtao Ma, Kyle Hatcher. Prediction of traffic signal state changes. USPTO 9,396,657.
- Ma, Jingtao, Thomas Bauer, Kyle Hatcher, Alex Marineau. Traffic signal state prediction correction and real-time probe data validation. USPTO 10,878,693.
- Ova, Kiel, Venkata Subbarao Nallamothu, Keith Riniker, Thomas Bauer, Jingtao Ma, System and method for providing real-time and predictive speed, traffic signal timing, station dwell time, and departure window information to transit vehicle, USPTO 11,113,957.
- Bauer, Thomas, Jingtao Ma. Using connected vehicle data to optimize traffic signal timing plans, USPTO 10,559,201.
- Bauer Thomas, Jingtao Ma, Jack Pribble. Configurable virtual traffic detection system under predictive signal states. USPTO 10,733,883.
- Ma, Jingtao, Thomas Bauer. Individualized dilemma zone warning using artificial detections. USPTO 10,937,313.

Patent Applications

- Bauer, Thomas, Jingtao Ma, Justin Neill, Jonah Pincetich, Brandon Sams. Deriving traffic signal timing plans from connected vehicle trajectory data, pending. USPTO Application Number 17/173096 filed on February 10, 2021.
- Bauer, Thomas, Jingtao Ma. Time synchronization using power system synchrophasor measurements, pending. USPTO Application number 16/818401 filed on March 13, 2020.

PATENT REEL: 060095 FRAME: 0641

RECORDED: 06/03/2022