

## PATENT ASSIGNMENT COVER SHEET

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<b>SUBMISSION TYPE:</b>	NEW ASSIGNMENT		
<b>NATURE OF CONVEYANCE:</b>	ASSIGNMENT		
<b>CONVEYING PARTY DATA</b>			
	<b>Name</b>	<b>Execution Date</b>	
	TOM SERRES	08/12/2019	
	BETTINA WARBURG	08/09/2019	
	CHARLES L HAMMEL IV	08/13/2019	
<b>RECEIVING PARTY DATA</b>			
<b>Name:</b>	PITT OHIO EXPRESS LLC		
<b>Street Address:</b>	15 27TH STREET		
<b>City:</b>	PITTSBURGH		
<b>State/Country:</b>	PENNSYLVANIA		
<b>Postal Code:</b>	15222		
<b>PROPERTY NUMBERS Total: 1</b>			
<b>Property Type</b>	<b>Number</b>		
<b>Application Number:</b>	16428886		
<b>CORRESPONDENCE DATA</b>			
<b>Fax Number:</b>			
<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>			
<b>Phone:</b>	6175773963		
<b>Email:</b>	win@caldwellip.com		
<b>Correspondent Name:</b>	CALDWELL INTELLECTUAL PROPERTY LAW		
<b>Address Line 1:</b>	100 HIGH STREET SUITE 1105		
<b>Address Line 2:</b>	SUITE 1105		
<b>Address Line 4:</b>	BOSTON, MASSACHUSETTS 02110		
<b>ATTORNEY DOCKET NUMBER:</b>	1046-001USU1		
<b>NAME OF SUBMITTER:</b>	KEEGAN CALDWELL		
<b>SIGNATURE:</b>	/Keegan Caldwell/		
<b>DATE SIGNED:</b>	08/28/2019		
<b>Total Attachments: 3</b>			
source=1046-001USU1_AssignmentTomSerres_08092019_#page1.tif			
source=1046-001USU1_BettinaWarburgAssignment_08092019#page1.tif			
source=1046-001USU1_ChuckHammelIVAssignment_08092019#page1.tif			

**ASSIGNMENT**

Whereas, I, **Tom Serres**, residing in Concord, MA, have invented one or more new and useful inventions and have filed therefore United States Nonprovisional Patent Application Serial No. 16/428,886, filed on 05/31/2019, entitled "SYSTEMS AND METHODS FOR DISTRIBUTED, CRYPTOGRAPHICALLY SECURED SHIPMENT DATA VALIDATION," (hereinafter, "Application(s)");

And whereas, PITT OHIO Express, a Pennsylvania Limited Liability Company, having a place of business at 15 27th Street, Pittsburgh, PA 15222 (hereinafter called "Assignee"), desires to acquire the entire right, title and interest in the Application(s) and all inventions disclosed therein, and to any United States and foreign patents to be obtained therefor, and to any United States, international, and foreign patent applications to be filed thereon;

Now therefore, for good and valuable consideration, receipt whereof is hereby acknowledged, I, the above-named inventor hereby sell, assign, and transfer to Assignee, its successors and assigns, and confirm any previous assignments made by me for, the entire right, title and interest in the Application(s) and inventions therein disclosed for the United States and foreign countries, and all rights of priority resulting from the filing of the Application(s), and I hereby agree that Assignee may file one or more international applications and apply for foreign Letters Patent on said inventions; and I request the Commissioner for Patents of the United States Patent and Trademark Office and the authorized official in each respective foreign patent office to issue any Letters Patent granted upon the inventions set forth in the Application(s) to Assignee; and I will execute all papers necessary in connection with the United States, international, and foreign applications when called upon to do so by Assignee.

I, the above-named, hereby covenant that no assignment, sale, agreement, or encumbrance has been or will be made or entered into which would conflict with this Assignment.

Executed as of 08/12/2019  
Date

Tom Serres  
**Tom Serres**

**ASSIGNMENT**

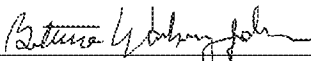
Whereas, I, **Bettina Warburg**, residing in Concord, MA, have invented one or more new and useful inventions and have filed therefore United States Nonprovisional Patent Application Serial No. 16/428,886, filed on 05/31/2019, entitled "SYSTEMS AND METHODS FOR DISTRIBUTED, CRYPTOGRAPHICALLY SECURED SHIPMENT DATA VALIDATION," (hereinafter, "Application(s)");

And whereas, PITT OHIO Express, a Pennsylvania Limited Liability Company, having a place of business at 15 27th Street, Pittsburgh, PA 15222 (hereinafter called "Assignee"), desires to acquire the entire right, title and interest in the Application(s) and all inventions disclosed therein, and to any United States and foreign patents to be obtained therefor, and to any United States, international, and foreign patent applications to be filed thereon;

Now therefore, for good and valuable consideration, receipt whereof is hereby acknowledged, I, the above-named inventor hereby sell, assign, and transfer to Assignee, its successors and assigns, and confirm any previous assignments made by me for, the entire right, title and interest in the Application(s) and inventions therein disclosed for the United States and foreign countries, and all rights of priority resulting from the filing of the Application(s), and I hereby agree that Assignee may file one or more international applications and apply for foreign Letters Patent on said inventions; and I request the Commissioner for Patents of the United States Patent and Trademark Office and the authorized official in each respective foreign patent office to issue any Letters Patent granted upon the inventions set forth in the Application(s) to Assignee; and I will execute all papers necessary in connection with the United States, international, and foreign applications when called upon to do so by Assignee.

I, the above-named, hereby covenant that no assignment, sale, agreement, or encumbrance has been or will be made or entered into which would conflict with this Assignment.

Executed as of 08/09/2019  
Date

  
**Bettina Warburg**

**ASSIGNMENT**

Whereas, I, **Chuck Hammel IV**, residing in Gibsonia, PA, have invented one or more new and useful inventions and have filed therefore United States Nonprovisional Patent Application Serial No. 16/428,886, filed on 05/31/2019, entitled "SYSTEMS AND METHODS FOR DISTRIBUTED, CRYPTOGRAPHICALLY SECURED SHIPMENT DATA VALIDATION," (hereinafter, "Application(s)");

And whereas, PITT OHIO Express, a Pennsylvania Limited Liability Company, having a place of business at 15 27th Street, Pittsburgh, PA 15222 (hereinafter called "Assignee"), desires to acquire the entire right, title and interest in the Application(s) and all inventions disclosed therein, and to any United States and foreign patents to be obtained therefor, and to any United States, international, and foreign patent applications to be filed thereon;

Now therefore, for good and valuable consideration, receipt whereof is hereby acknowledged, I, the above-named inventor hereby sell, assign, and transfer to Assignee, its successors and assigns, and confirm any previous assignments made by me for, the entire right, title and interest in the Application(s) and inventions therein disclosed for the United States and foreign countries, and all rights of priority resulting from the filing of the Application(s), and I hereby agree that Assignee may file one or more international applications and apply for foreign Letters Patent on said inventions; and I request the Commissioner for Patents of the United States Patent and Trademark Office and the authorized official in each respective foreign patent office to issue any Letters Patent granted upon the inventions set forth in the Application(s) to Assignee; and I will execute all papers necessary in connection with the United States, international, and foreign applications when called upon to do so by Assignee.

I, the above-named, hereby covenant that no assignment, sale, agreement, or encumbrance has been or will be made or entered into which would conflict with this Assignment.

Executed as of 08/13/2019 Charles L Hammel IV  
Date **Chuck Hammel IV**