

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1
Stylesheet Version v1.2

EPAS ID: PAT5976327

| SUBMISSION TYPE: | CORRECTIVE ASSIGNMENT | | | | | | | | | | |
|---|---|----------------|---------------------|------------|------------|------------|---------------|------------|----------------|------------|--|
| NATURE OF CONVEYANCE: | Corrective Assignment to correct the SPELLING OF ASSIGNOR ZHIHAO GAO'S LAST NAME TO GAO previously recorded on Reel 049872 Frame 0825. Assignor(s) hereby confirms the ASSIGNMENT TO ASSIGNEE CAPITAL ONE SERVICES LLC. | | | | | | | | | | |
| CONVEYING PARTY DATA | | | | | | | | | | | |
| <table border="1"><thead><tr><th>Name</th><th>Execution Date</th></tr></thead><tbody><tr><td>DANIEL GUNN</td><td>07/17/2019</td></tr><tr><td>ZHIHAO GAO</td><td>02/20/2020</td></tr><tr><td>PULKIT GULATI</td><td>07/26/2019</td></tr><tr><td>WILLIAM CARTAR</td><td>07/22/2019</td></tr></tbody></table> | Name | Execution Date | DANIEL GUNN | 07/17/2019 | ZHIHAO GAO | 02/20/2020 | PULKIT GULATI | 07/26/2019 | WILLIAM CARTAR | 07/22/2019 | |
| Name | Execution Date | | | | | | | | | | |
| DANIEL GUNN | 07/17/2019 | | | | | | | | | | |
| ZHIHAO GAO | 02/20/2020 | | | | | | | | | | |
| PULKIT GULATI | 07/26/2019 | | | | | | | | | | |
| WILLIAM CARTAR | 07/22/2019 | | | | | | | | | | |
| RECEIVING PARTY DATA | | | | | | | | | | | |
| Name: | CAPITAL ONE SERVICES, LLC | | | | | | | | | | |
| Street Address: | 1680 CAPITAL ONE DRIVE | | | | | | | | | | |
| City: | MCLEAN | | | | | | | | | | |
| State/Country: | VIRGINIA | | | | | | | | | | |
| Postal Code: | 22102 | | | | | | | | | | |
| PROPERTY NUMBERS Total: 1 | | | | | | | | | | | |
| <table border="1"><thead><tr><th>Property Type</th><th>Number</th></tr></thead><tbody><tr><td>Application Number:</td><td>16523270</td></tr></tbody></table> | Property Type | Number | Application Number: | 16523270 | | | | | | | |
| Property Type | Number | | | | | | | | | | |
| Application Number: | 16523270 | | | | | | | | | | |
| CORRESPONDENCE DATA | | | | | | | | | | | |
| Fax Number: | (312)463-5001 | | | | | | | | | | |
| <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> | | | | | | | | | | | |
| Phone: | 3124635000 | | | | | | | | | | |
| Email: | bwptopat@bannerwitcoff.com, tlindquist@bannerwitcoff.com | | | | | | | | | | |
| Correspondent Name: | BANNER & WITCOFF, LTD. | | | | | | | | | | |
| Address Line 1: | 71 SOUTH WACKER DRIVE | | | | | | | | | | |
| Address Line 2: | SUITE 3600 | | | | | | | | | | |
| Address Line 4: | CHICAGO, ILLINOIS 60606 | | | | | | | | | | |
| ATTORNEY DOCKET NUMBER: | 009033.00008 | | | | | | | | | | |
| NAME OF SUBMITTER: | SAMUEL P RICHEY | | | | | | | | | | |
| SIGNATURE: | / Samuel P. Richey / | | | | | | | | | | |
| DATE SIGNED: | 02/21/2020 | | | | | | | | | | |

Total Attachments: 5

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COMBINED PATENT DECLARATION AND ASSIGNMENT

| | |
|----------------------------|--|
| TITLE OF INVENTION: | CONTROL SYSTEMS WITH INDEPENDENT DATA PROCESSING |
|----------------------------|--|

DECLARATION

As the below named inventor, I hereby declare that:

- This declaration is directed to:

☒ The attached application, or
☐ United States application or PCT international application number _____ filed on _____.
- The above-identified 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 invention 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 five (5) years, or both.

ASSIGNMENT

WHEREAS, I, the below named Inventor/Assignor, have invented the above invention, having the following application number and filing date:

U.S. Application No. 16/523,270, filed July 26, 2019.

If the above lines are blank, I hereby authorize the attorneys for Assignee to insert the filing date and application number immediately above after they become known and prior to recording this document.

WHEREAS, Capital One Services, LLC ("Assignee"), a Corporation having offices and a place of business at 1680 Capital One Drive, McLean, Virginia 22102, is desirous of acquiring the entire right, title and interest in and to the aforesaid inventions and in and to all applications and Letters Patent therefor granted in the United States of America, and in any and all countries foreign thereto:

NOW, THEREFORE, TO WHOM IT MAY CONCERN, be it known that, for good and valuable consideration, including salary and/or payment for the making of inventions, or employee benefits, the receipt and sufficiency of which is hereby acknowledged, I said Assignor, by these presents do sell, assign and transfer unto said Assignee, its successors, assigns and legal representatives, the full and exclusive right, title and interest for the territory of the United States of America and all countries foreign thereto, and throughout the world and in space, (including the right to apply for Letters Patent in foreign countries in its own name and to claim any priority rights for such foreign applications to which such applications are entitled under international conventions, treaties, or otherwise), in and to said inventions and in and to all applications and Letters Patent granted therefor, and all non-provisionals, divisionals, reissues, reexaminations, continuations, continuation-in-parts and extensions thereof, and in and to all copyrights, trademarks with their associated goodwill, trade secrets, confidential information, and compilations, necessary or useful to make, use, or sell the inventions.

I hereby authorize and request the Commissioner of Patents, and any official whose duty it is to issue patents, to issue all Letters Patent on said inventions or resulting therefrom to said Assignee, or its successors and assigns, as assignee of the entire right, title and interest. I represent and warrant that I have full right to agree to, execute, and deliver this assignment.

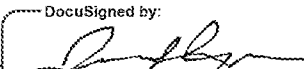
I agree that I will without further consideration, but at the expense of Assignee, communicate to said Assignee, or its successors, assigns, or nominees, any and all facts known to me regarding said inventions whenever requested, and that I will execute all non-provisional, divisional, reissue, reexamination, continuation and continuation-in-part applications, testify in any legal proceedings, sign all lawful papers, make all rightful oaths, and generally do everything reasonable for said Assignee, its successors, assigns, and nominees, to obtain and enforce proper patent protection for said inventions in all countries.

INVENTOR/ASSIGNOR:

Legal Name: Daniel Gunn

Address: c/o Capital One Services, LLC, 1680 Capital One Drive, McLean, Virginia 22102

Signature: _____ Date: 7/17/2019

DocuSigned by:  EF71D8138994494...

COMBINED PATENT DECLARATION AND ASSIGNMENT

| | |
|---|---|
| TITLE OF INVENTION: | CONTROL SYSTEMS WITH INDEPENDENT DATA PROCESSING |
| DECLARATION | |
| <p>As the below named inventor, I hereby declare that:</p> <ul style="list-style-type: none"> • This declaration is directed to: <div style="display: inline-block; vertical-align: top; margin-left: 20px;"> <input type="checkbox"/> The attached application, or <input checked="" type="checkbox"/> United States application or PCT international application number <u>16/523,270</u> filed on <u>July 26, 2019</u>. </div> • The above-identified 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 invention 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 five (5) years, or both. | |
| ASSIGNMENT | |
| <p>WHEREAS, I, the below named Inventor/Assignor, have invented the above invention, having the following application number and filing date:</p> <p style="text-align: center;">U.S. Application No. 16/523,270, filed July 26, 2019.</p> <p>If the above lines are blank, I hereby authorize the attorneys for Assignee to insert the filing date and application number immediately above after they become known and prior to recording this document.</p> <p>WHEREAS, Capital One Services, LLC ("Assignee"), a Corporation having offices and a place of business at 1680 Capital One Drive, McLean, Virginia 22102, is desirous of acquiring the entire right, title and interest in and to the aforesaid inventions and in and to all applications and Letters Patent therefor granted in the United States of America, and in any and all countries foreign thereto:</p> <p>NOW, THEREFORE, TO WHOM IT MAY CONCERN, be it known that, for good and valuable consideration, including salary and/or payment for the making of inventions, or employee benefits, the receipt and sufficiency of which is hereby acknowledged, I said Assignor, by these presents do sell, assign and transfer unto said Assignee, its successors, assigns and legal representatives, the full and exclusive right, title and interest for the territory of the United States of America and all countries foreign thereto, and throughout the world and in space, (including the right to apply for Letters Patent in foreign countries in its own name and to claim any priority rights for such foreign applications to which such applications are entitled under international conventions, treaties, or otherwise), in and to said inventions and in and to all applications and Letters Patent granted therefor, and all non-provisionals, divisionals, reissues, reexaminations, continuations, continuation-in-parts and extensions thereof, and in and to all copyrights, trademarks with their associated goodwill, trade secrets, confidential information, and compilations, necessary or useful to make, use, or sell the inventions.</p> <p>I hereby authorize and request the Commissioner of Patents, and any official whose duty it is to issue patents, to issue all Letters Patent on said inventions or resulting therefrom to said Assignee, or its successors and assigns, as assignee of the entire right, title and interest. I represent and warrant that I have full right to agree to, execute, and deliver this assignment.</p> <p>I agree that I will without further consideration, but at the expense of Assignee, communicate to said Assignee, or its successors, assigns, or nominees, any and all facts known to me regarding said inventions whenever requested, and that I will execute all non-provisional, divisional, reissue, reexamination, continuation and continuation-in-part applications, testify in any legal proceedings, sign all lawful papers, make all rightful oaths, and generally do everything reasonable for said Assignee, its successors, assigns, and nominees, to obtain and enforce proper patent protection for said inventions in all countries.</p> | |
| INVENTOR/ASSIGNOR: | |
| Legal Name: <u>Zhihao Gao</u> | |
| Address: <u>c/o Capital One Services, LLC, 1680 Capital One Drive, McLean, Virginia 22102</u> | |
| Signature: <u>Zhihao Gao</u> | Date: <u>Feb 20, 2020</u> |

COMBINED PATENT DECLARATION AND ASSIGNMENT

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☐ United States application or PCT international application number _____ filed on _____.
- The above-identified application was made or authorized to be made by me.
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I hereby authorize and request the Commissioner of Patents, and any official whose duty it is to issue patents, to issue all Letters Patent on said inventions or resulting therefrom to said Assignee, or its successors and assigns, as assignee of the entire right, title and interest. I represent and warrant that I have full right to agree to, execute, and deliver this assignment.

I agree that I will without further consideration, but at the expense of Assignee, communicate to said Assignee, or its successors, assigns, or nominees, any and all facts known to me regarding said inventions whenever requested, and that I will execute all non-provisional, divisional, reissue, reexamination, continuation and continuation-in-part applications, testify in any legal proceedings, sign all lawful papers, make all rightful oaths, and generally do everything reasonable for said Assignee, its successors, assigns, and nominees, to obtain and enforce proper patent protection for said inventions in all countries.

INVENTOR/ASSIGNOR:

Legal Name: Pulkit Gulati

Address: c/o Capital One Services, LLC, 1680 Capital One Drive, McLean, Virginia 22102

Signature: _____ DocuSigned by: Pulkit Gulati Date: 7/26/2019

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COMBINED PATENT DECLARATION AND ASSIGNMENT

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| | |
|---|------------------------|
| INVENTOR/ASSIGNOR: | |
| Legal Name: <u>William Cartar</u> | |
| Address: <u>c/o Capital One Services, LLC, 1680 Capital One Drive, McLean, Virginia 22102</u> | |
| Signature: _____ | Date: <u>7/22/2019</u> |

DocuSigned by:

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PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1
 Stylesheet Version v1.2

EPAS ID: PAT5638813

| | |
|---|--|
| SUBMISSION TYPE: | NEW ASSIGNMENT |
| NATURE OF CONVEYANCE: | ASSIGNMENT |
| CONVEYING PARTY DATA | |
| Name | Execution Date |
| DANIEL GUNN | 07/17/2019 |
| ZHIHAO GAU | 07/17/2019 |
| PULKIT GULATI | 07/26/2019 |
| WILLIAM CARTAR | 07/22/2019 |
| RECEIVING PARTY DATA | |
| Name: | CAPITAL ONE SERVICES, LLC |
| Street Address: | 1680 CAPITAL ONE DRIVE |
| City: | MCLEAN |
| State/Country: | VIRGINIA |
| Postal Code: | 22102 |
| PROPERTY NUMBERS Total: 1 | |
| Property Type | Number |
| Application Number: | 16523270 |
| CORRESPONDENCE DATA | |
| Fax Number: | (312)463-5001 |
| <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> | |
| Phone: | (202) 824-3000 |
| Email: | bwptopat@bannerwitcoff.com, tlindquist@bannerwitcoff.com |
| Correspondent Name: | BANNER & WITCOFF, LTD. |
| Address Line 1: | 71 SOUTH WACKER DRIVE |
| Address Line 2: | SUITE 3600 |
| Address Line 4: | CHICAGO, ILLINOIS 60606 |
| ATTORNEY DOCKET NUMBER: | 009033.00008 |
| NAME OF SUBMITTER: | SAMUEL P. RICHEY |
| SIGNATURE: | / Samuel P. Richey / |
| DATE SIGNED: | 07/26/2019 |
| This document serves as an Oath/Declaration (37 CFR 1.63). | |
| Total Attachments: 4 | |