PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT5791882

| SUBMISSION TYPE: | NEW ASSIGNMENT |
|-----------------------|----------------|
| NATURE OF CONVEYANCE: | ASSIGNMENT |

CONVEYING PARTY DATA

| Name | Execution Date |
|-------------------|----------------|
| VALERY ZUBOVSKY | 07/21/2019 |
| DOMINIC E CAUDELL | 07/09/2019 |
| SUWAT PHRUKSAWAN | 07/18/2019 |

RECEIVING PARTY DATA

| Name: | CHARLES SCHWAB & CO., INC. |
|-----------------|----------------------------|
| Street Address: | 211 MAIN ST. |
| City: | SAN FRANCISCO |
| State/Country: | CALIFORNIA |
| Postal Code: | 94105 |

PROPERTY NUMBERS Total: 1

| Property Type | Number |
|---------------------|----------|
| Application Number: | 15400935 |

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.

Email: ceg@i-plaw.com

Correspondent Name: INNOVATION PARTNERS
Address Line 1: 540 UNIVERSITY AVE

Address Line 2: SUITE 300

Address Line 4: PALO ALTO, CALIFORNIA 94301

| ATTORNEY DOCKET NUMBER: | 1868 |
|-------------------------|-------------------------|
| NAME OF SUBMITTER: | CHARLES E. GOTLIEB |
| SIGNATURE: | /S Charles E. Gotlieb / |
| DATE SIGNED: | 10/28/2019 |

Total Attachments: 3

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PATENT 505745069 REEL: 050847 FRAME: 0145

ASSIGNMENT

For good and valuable consideration, receipt of which is hereby acknowledged, we, Suwat Phruksawan, Toby R. Kendall, Patrick C. McGraw, Dominic E. Caudell, Valery Zubovsky and Charles E. Gotlieb do hereby sell, assign and transfer unto Charles Schwab & Co., Inc., a Delaware corporation having its principal place of business at 211 Main St., San Francisco, CA 94105 (the "Assignee"), and its successors and assigns, the entire title, interest and right, including the right of priority, in, to and under an application for Letters Patent of the United States, attorney docket number 1868, entitled, "System and Method for Authenticating a User Via a Mobile Device to Provide a Web Service On A Different Computer System" filed by us with the United States Patent and Trademark Office on 1/6/2017, U.S. Serial Number 15/400,935 and the inventions and any of them therein set forth and described, and any and all Letters Patent of the United States and of countries foreign thereto which may be granted thereon or therefor or corresponding thereto;

and for the above consideration, upon request of the Assignee, its successors or assigns, we will promptly communicate any facts known to us respecting said application and the invention set forth therein, and will promptly execute and deliver without further compensation any power of attorney, assignment, application, whether original, continuation, divisional or reissue, or other papers which may be necessary or desirable fully to secure to the Assignee, its heirs, successors or assigns, the inventions and any of them described in said application and all patent rights therein, in the United States and in any country foreign thereto, and will promptly cooperate and assist in the prosecution of interference proceedings involving said inventions and in the adjudication and re-examination of said Letters Patent, provided the expenses which may be incurred by us in lending such cooperation and assistance be paid by the Assignee, its successors or assigns.

This Assignment may be executed in one or more counterparts, each of which will be deemed an original and all of which taken together shall constitute one assignment.

IN WITNESS WHEREOF, we hereunto set our hand and seal on the date set forth below.

| Dated: 7/18/19 | Jh. |
|----------------|--------------------|
| | Suwat Phruksawan |
| Dated: | |
| | Toby R. Kendall |
| Dated: | |
| | Patrick C. McGraw |
| Dated: | |
| | Dominic E. Caudell |
| Dated: | |
| | Valery Zubovsky |
| Dated: | |
| | Charles E. Gotlieb |

PATENT REEL: 050847 FRAME: 0146

ASSIGNMENT

For good and valuable consideration, receipt of which is hereby acknowledged, we, Suwat Phruksawan, Toby R. Kendall, Patrick C. McGraw, Dominic E. Caudell, Valery Zubovsky and Charles E. Gotlieb do hereby sell, assign and transfer unto Charles Schwab & Co., Inc., a Delaware corporation having its principal place of business at 211 Main St., San Francisco, CA 94105 (the "Assignee"), and its successors and assigns, the entire title, interest and right, including the right of priority, in, to and under an application for Letters Patent of the United States, attorney docket number 1868, entitled, "System and Method for Authenticating a User Via a Mobile Device to Provide a Web Service On A Different Computer System" filed by us with the United States Patent and Trademark Office on 1/6/2017, U.S. Serial Number 15/400,935 and the inventions and any of them therein set forth and described, and any and all Letters Patent of the United States and of countries foreign thereto which may be granted thereon or therefor or corresponding thereto;

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| | Suwat Phruksawan |
| Dated: | |
| | Toby R. Kendall |
| Dated: | |
| | Patrick C. McGraw |
| Dated: | |
| | Dominic E. Caudell |
| Dated: 07/21/2019 | Valury Zulery Zubovsky |
| | Valery Zubovsky |
| Dated: | |
| | Charles E. Gotlieb |

PATENT REEL: 050847 FRAME: 0147

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| | Suwat Phruksawan |
| Dated: | |
| | Toby R. Kendall |
| Dated: | |
| | Patrick C. McGraw |
| Dated: 114 9, 2019 | 1 |
| <i>/**</i> | Dominic E. Caudell |
| Dated: | |
| | Valery Zubovsky |
| Dated: | |
| | Charles E. Gotlieb |

Case 1868

PATENT REEL: 050847 FRAME: 0148