

## PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1  
Stylesheet Version v1.2

EPAS ID: PAT4121755

|                              |                |
|------------------------------|----------------|
| <b>SUBMISSION TYPE:</b>      | NEW ASSIGNMENT |
| <b>NATURE OF CONVEYANCE:</b> | ASSIGNMENT     |
| <b>SEQUENCE:</b>             | 2              |

## CONVEYING PARTY DATA

| Name        | Execution Date |
|-------------|----------------|
| CITADEL LLC | 10/17/2016     |

## RECEIVING PARTY DATA

|                        |                           |
|------------------------|---------------------------|
| <b>Name:</b>           | KCG IP HOLDINGS LLC       |
| <b>Street Address:</b> | 131 SOUTH DEARBORN STREET |
| <b>City:</b>           | CHICAGO                   |
| <b>State/Country:</b>  | ILLINOIS                  |
| <b>Postal Code:</b>    | 60603                     |

## PROPERTY NUMBERS Total: 15

| Property Type       | Number       |
|---------------------|--------------|
| Patent Number:      | 8719179      |
| Application Number: | 14748206     |
| Application Number: | 14225405     |
| Application Number: | 14532972     |
| Application Number: | 13557812     |
| Application Number: | 13739381     |
| Application Number: | 13652749     |
| Application Number: | 13568493     |
| Application Number: | 62150267     |
| Application Number: | 14843927     |
| Application Number: | 14843933     |
| Application Number: | 62213574     |
| Application Number: | 62214882     |
| Application Number: | 62237498     |
| PCT Number:         | US2013038702 |

## CORRESPONDENCE DATA

Fax Number: (212)446-4900

*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.*

PATENT

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**Correspondent Name:** SUSAN ZABLOCKI  
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**Address Line 2:** 601 LEXINGTON AVENUE  
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**NAME OF SUBMITTER:** SUSAN ZABLOCKI

**SIGNATURE:** /susan zablocki/

**DATE SIGNED:** 10/31/2016

**Total Attachments: 3**

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**CONFIRMATORY PATENT ASSIGNMENT**

**THIS CONFIRMATORY PATENT ASSIGNMENT** (this "Assignment") is made and entered into as of October 17, 2016 ("Effective Date"), by and between CITADEL LLC, a Delaware limited liability company ("Assignor"), and KCG IP Holdings LLC, Delaware limited liability company ("Assignee").

**WHEREAS**, Assignor and Assignee are parties to that certain Transfer and Assignment and Assumption Agreement (the "Agreement") of even date herewith, pursuant to which Assignee purchased the IP Assets (as defined in the Purchase Agreement) from Assignor; and

**WHEREAS**, pursuant to the Agreement, Assignor wishes to assign to Assignee, and Assignee wishes to acquire from Assignor, all of Assignor's right, title and interest in and to all patents, patent applications and patent disclosures, and all renewals, reissues, reexaminations, divisionals, continuations, continuations-in-part and extensions thereof, and all foreign equivalents thereof, including, without limitation, the subject matter of all claims which may be obtained therefrom, for the United States and for all foreign countries, including, without limitation, the patent applications set forth on Schedule A attached hereto (collectively, the "Patents").

**NOW, THEREFORE**, for good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, Assignor hereby sells, assigns, transfers and sets over to Assignee its entire right, title and interest in and to the Patents, for Assignee's own use and enjoyment, and for the use and enjoyment of its successors, assigns or other legal representatives, as fully and entirely as the same would have been held and enjoyed by Assignor if this Assignment had not been made, together with all income, royalties, damages or payments due or payable as of the Effective Date or thereafter, including, without limitation, all claims for damages by reason of past, present or future infringement or other unauthorized use of the Patents, with the right to sue for and collect the same, for Assignee's own use and enjoyment, and for the use and enjoyment of its successors, assigns, or other legal representatives.

Assignor authorizes and requests the United States Commissioner of Patents and Trademarks, and the corresponding entity or agency in any applicable foreign country, to record Assignee as assignee and owner of the Patents, and to issue any and all letters patent of the United States with respect thereto to Assignee, as assignee of the entire right, title and interest in, to and under the same, for the sole use and enjoyment of Assignee, its successors, assigns or other legal representatives.

This Assignment may be signed in counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument.

\* \* \* \* \*

**IN WITNESS WHEREOF**, Assignor and Assignee have caused this Assignment to be executed by their duly authorized representatives as of the Effective Date.

**CITADEL LLC**

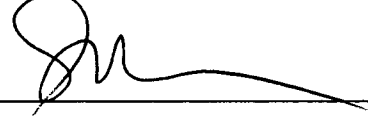


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Name: Michael Weiner

Title: Authorized Signatory

**KCG IP HOLDGINS LLC**



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Name: Gerald A. Beeson

Title: Authorized Representative

[Citadel Confirmatory Patent Assignment]

**SCHEDULE A**

| <b>Title</b>   | <b>Application Number</b> | <b>Application Date</b> | <b>Patent Number</b> | <b>Status</b> |
|--|---------------------------|-------------------------|----------------------|---------------|
| RECRUITING SERVICE GRAPHICAL USER INTERFACE  | 13493791                  | 06-11-2012              | 8,719,179            | Issued        |
| RECRUITING SERVICE GRAPHICAL USER INTERFACE  | 14/748,206                | 06-23-2015              |                      | Pending       |
| RECRUITING SERVICE GRAPHICAL USER INTERFACE  | PCT/US2013/038702         | 04-29-2013              |                      | Pending       |
| RECRUITING SERVICE GRAPHICAL USER INTERFACE  | 14/225,405                | 03-25-2014              |                      | Pending       |
| METHOD AND APPARATUS FOR ENHANCING JOB RECRUITING  | 14/532,972                | 11-04-2014              |                      | Pending       |
| METHOD AND APPARATUS FOR ENHANCING JOB RECRUITING  | 13/557,812                | 07-25-2012              |                      | Abandoned     |
| SOCIAL MEDIA DATA FILTERING FOR ELECTRONIC JOB RECRUITING  | 13/739,381                | 01-11-2013              |                      | Pending       |
| METHOD, APPARATUS AND COMPUTER PROGRAM PRODUCT TO GENERATE PSYCHOLOGICAL, EMOTIONAL, AND PERSONALITY INFORMATION FOR ELECTRONIC JOB RECRUITING | 13/652,749                | 10-16-2012              |                      | Pending       |
| METHOD AND APPARATUS FOR ELECTRONIC JOB RECRUITING   | 13/568,493                | 08-07-2012              |                      | Pending       |
| CAPTURING CANDIDATE PROFILES   | 62/150,267                | 04-20-2015              |                      | Pending       |
| CAPTURING CANDIDATE PROFILES   | 14/843,927                | 09-02-2015              |                      | Pending       |
| CAPTURING CANDIDATE PROFILES   | 14/843,933                | 09-02-2015              |                      | Pending       |
| PREDICTING CANDIDATE READINESS TO CHANGE JOBS  | 62/213,574                | 09-02-2015              |                      | Pending       |
| PREDICTING CANDIDATE READINESS TO CHANGE JOBS  | 62/214,882                | 09-04-2015              |                      | Pending       |
| DYNAMIC TOOL FOR CREATING JOB POSTS AND RECRUITING CANDIDATES  | 62/237,498                | 10-05-2015              |                      | Pending       |
| RECRUITMENT ENHANCEMENT SYSTEM   | PCTUS1338702              | 04-29-2013              |                      | Pending       |