



| APPLICATION NO.   |      | ISSUE DATE | PATENT NO. | ATTORNEY DOCKET NO. | CONFIRMATION NO. |  |
|-------------------|------|------------|------------|---------------------|------------------|--|
| 11/634,014        |      | 03/05/2013 | 8392311    | 60967-0020C         | 3344             |  |
| 86513             | 7590 | 02/13/2013 |            |                     |                  |  |
| Ward & Zinna, LLC |      |            |            |                     |                  |  |

382 Springfield Avenue Suite 300 Summit, NJ 07901

# **ISSUE NOTIFICATION**

The projected patent number and issue date are specified above.

## Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment is 1305 day(s). Any patent to issue from the above-identified application will include an indication of the adjustment on the front page.

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Application Assistance Unit (AAU) of the Office of Data Management (ODM) at (571)-272-4200.

APPLICANT(s) (Please see PAIR WEB site http://pair.uspto.gov for additional applicants):

Richard B. Olsen, Zurich, SWITZERLAND; Michael Stumm, Toronto, CANADA;

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#### PART B - FEE(S) TRANSMITTAL

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or Fax (571)-273-2885

| INSTRUCTIONS: This<br>appropriate. All further<br>indicated unless correct<br>maintenance fee actifics | correspondence includin<br>ed bylow or directed oth  | or transmitting the 1885<br>g the Patent, advance o<br>servise in Block 1, by ( | UE FEE and PUBLICATI<br>where and notification of n<br>a) specifying a new corres   | ON FEE (if requirements)<br>administration for w<br>pondence address:                             | red). Blocks 1 through 5 s<br>ift be mailed to the current<br>andArr (b) indicating a sep   | fould be completed where<br>correspondence address as<br>arate "FEE ADDRESS" for          |
|--|--|---|---|---|---|---|
| 88313<br>Ward & Zinna<br>382 Springfiled<br>Suite 300<br>Sommit, NJ 079                                | Avenue   |   | Fee<br>pap<br>have  | s) Transmittal. Thi<br>rs. Each additional<br>rits own certificate<br>Cert                        | mailing can only be used for<br>a certificate cannot be used for<br>paper, such as an assignme<br>of mailing or transmission.<br><b>ificate of Mailing or Trans</b><br>is Per(v) Transmittal is being<br>ith sufficient postage for fic<br>Stop ISSUE FEE, address<br>(O (571) 273-2885, on the d | or any other accompanying<br>at or formal drawing, must<br>mission                        |
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|  |  |   |   |   |   | (Signature)   |
| ,  |  |   | L   |   |   | (380)   |
| APPLECATION NO.  | FEINO DATE   |   | SERVINAMED INVENTOR   |   | ATTORNEY DOCKETINO.   | CONFERMATION NO.  |
| 112634,014   | 12/04/2006   |   | Richard B. Olsen  |   | 60967-0020C   | 3344  |
| TTTTEAC PARTURE  | CURBENCY TRADIN  | a ar ar san an ruais  | o, nou ma trance  |   |   |   |
| APPLN: TYPE  | SMALL EXTLY  | ISSUE PEEDUE  | POBLICATION PEEDER:   | PREV. PAID ISSUE  | LEBE TOTAL EEE(s) DUE   | DATEDRE   |
| nonprovisional   | NO   | \$1770  | \$300   | \$0   | \$2070  | 02/04/2013  |
| EXAS   | nnez.  | ART UNIT  | CLASS-SUBCLASS  |   |   |   |
| 31.4; H2   | VIEM M   | 3691  | 795-037009  | <b>`</b>  |   |   |
| CFR 1.363).<br>Change of corresp<br>Address form PTO/S   | ience address or indication<br>windence address (or Cha<br>B/122) attached.<br>Bication (or "Fee Address"<br>32 or more recent) attachs  | nge of Correspondence   | <ol> <li>For printing on the p</li> <li>(1) the names of up to or agents OR, alternativ</li> <li>(2) the name of a single registered attendey or a 2 registered patent alto hsied, no name will be</li> </ol> | 3 registered patent<br>rely,<br>c firm (having as a<br>gent) and the name<br>more or agents. If i | member a 2  | & Zinna, LLC  |
| PLEASE NOTE: Un<br>recordation as set for<br>(A) NAME OF ASSI<br>Oanda C                               | less an assigned is identi<br>thin 37 CPR 3.11. Comp<br>GNEE<br>Corporation  | fied helow, no assignce<br>letion of this form is NC                            | (8) RESIDENCE: (CITY<br>Canada  | item. If an assigne<br>assignment.<br>and STATE OR C  |   | ocument has been filed for<br>aup entity 🖓 Government                                     |
| 4a. The following fer(s)<br>XI Issue Fee<br>D Publication Fee (?<br>Advance Order - 1                  | are submitted:<br>Vo small entity discount p<br># of Copies  | ormitted)   | A check is enclosed<br>Payment by credit car  | d. Form PTO-2038  | y previously paid issue fee<br>is attached.<br>we the required fee(5), any de<br>r2.3.0.4.2.0 (enclose a  |   |
| 🖵 a. Applicant claim   | <b>uns</b> (from status indicates<br>as SMALL ENTITY statu   | is. See 37 CFR 1.27.  | D b. Applicant is no long   | ger claiming SMAL   | L ENTITY status. See 37 C   | PR 1.27(g)(2).  |
| NOTE: The Issue Fee an interest as shown by the  | id Publication Fee (if required states) in the second of the United States of the United States and the States of the United States of the United States of the United States of the Sta | ifred) will not be accepte<br>tes Patent and Trademar                           | ed from anyone other than t<br>k Office.  | to applicant; a regiu   | stered attorney or agent; or fl   | ne assignes or other party in   |
|  | /Francis E   |   |   | Date Febr   | ruary 4, 2013   |   |
|  | Francis H  |   |   |   | . 24,615  |   |
| This collection of inform<br>an application. Confiden<br>submitting the complete                       | milon is required by 37 C<br>diality is governed by 35<br>d application form to the  | FR 1.311. The informati<br>U.S.C. 122 and 37 CFR<br>USPTO, Time will vary       | on is required to obtain or r<br>1.14. This collection is est<br>y depending upon the indiv   | etain a benefit by th<br>imated to take 12 n<br>idual case. Any col                               | te public which is to file (an<br>ainutes to complete, includin<br>mments on the amount of it   | t by the USP R3 to process)<br>to gathering, preparing, and<br>me you require to complete |

this form and/or suggestions for reducing this builder, should be sent to the Chief Information Officer, U.S. Patent and Trademark Officer, U.S. Department of Commerce, P.O. Box 1450, Alexandria, Virginia 22313-1450, DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450.

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| Electronic Patent Application Fee Transmittal |  |          |          |        |                         |  |
|---|--|----------|----------|--------|-------------------------|--|
| Application Number:                           | 116  | 534014   |          |        |                         |  |
| Filing Date:                                  | 04-  | Dec-2006 |          |        |                         |  |
| Title of Invention:                           | CURRENCY TRADING SYSTEM, METHODS, AND SOFTWARE |          |          |        |                         |  |
| First Named Inventor/Applicant Name:          | Richard B. Olsen                               |          |          |        |                         |  |
| Filer:  | Frank Morris/Jamie Reinhardt                   |          |          |        |                         |  |
| Attorney Docket Number:                       | 60967-0020C                                    |          |          |        |                         |  |
| Filed as Large Entity                         |  |          |          |        |                         |  |
| Utility under 35 USC 111(a) Filing Fees       |  |          |          |        |                         |  |
| Description                                   |  | Fee Code | Quantity | Amount | Sub-Total in<br>USD(\$) |  |
| Basic Filing:                                 |  |          |          |        |                         |  |
| Pages:  |  |          |          |        |                         |  |
| Claims:                                       |  |          |          |        |                         |  |
| Miscellaneous-Filing:                         |  |          |          |        |                         |  |
| Petition:                                     |  |          |          |        |                         |  |
| Patent-Appeals-and-Interference:              |  |          |          |        |                         |  |
| Post-Allowance-and-Post-Issuance:             |  |          |          |        |                         |  |
| Utility Appl issue fee                        |  | 1501     | 1        | 1770   | 1770                    |  |
| Publ. Fee- early, voluntary, or normal        |  | 1504     | 1        | 300    | 300                     |  |

| Fee Code           | Quantity | Amount | Sub-Total in<br>USD(\$) |  |  |  |
|--------------------|----------|--------|-------------------------|--|--|--|
| Extension-of-Time: |          |        |                         |  |  |  |
| Miscellaneous:     |          |        |                         |  |  |  |
| Total in USD (\$)  |          |        |                         |  |  |  |
|                    |          |        |                         |  |  |  |

| Electronic Ac                        | Electronic Acknowledgement Receipt             |  |  |  |  |
|--------------------------------------|--|--|--|--|--|
| EFS ID:                              | 14862574                                       |  |  |  |  |
| Application Number:                  | 11634014                                       |  |  |  |  |
| International Application Number:    |  |  |  |  |  |
| Confirmation Number:                 | 3344   |  |  |  |  |
| Title of Invention:                  | CURRENCY TRADING SYSTEM, METHODS, AND SOFTWARE |  |  |  |  |
| First Named Inventor/Applicant Name: | Richard B. Olsen                               |  |  |  |  |
| Customer Number:                     | 86513  |  |  |  |  |
| Filer:                               | Frank Morris/Jamie Reinhardt                   |  |  |  |  |
| Filer Authorized By:                 | Frank Morris                                   |  |  |  |  |
| Attorney Docket Number:              | 60967-0020C                                    |  |  |  |  |
| Receipt Date:                        | 04-FEB-2013                                    |  |  |  |  |
| Filing Date:                         | 04-DEC-2006                                    |  |  |  |  |
| Time Stamp:                          | 11:12:59                                       |  |  |  |  |
| Application Type:                    | Utility under 35 USC 111(a)                    |  |  |  |  |

# Payment information:

| Submitted with Payment   | yes   |  |  |  |  |
|--|---|--|--|--|--|
| Payment Type   | Deposit Account   |  |  |  |  |
| Payment was successfully received in RAM   | \$2070  |  |  |  |  |
| RAM confirmation Number  | 10945   |  |  |  |  |
| Deposit Account  | 230420  |  |  |  |  |
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| Document<br>Number   | Document Description        | File Name                   | File Size(Bytes)/<br>Message Digest          | Multi<br>Part /.zip | Pages<br>(if appl.) |  |
| 1  | lssue Fee Payment (PTO-85B) | 2013_2_4_AsFiledIssueFeePym | 325440                                       | no                  | 1                   |  |
|  |                             | t609670020C.pdf             | acba435fb21c40b3e1947505acfb8aa8ecb1<br>3445 |                     |                     |  |
| Warnings:  |                             |                             |  |                     |                     |  |
| Information:   |                             |                             |  |                     |                     |  |
| 2  | Fee Worksheet (SB06)        | 32137                       | no   | 2                   |                     |  |
| 2  |                             | fee-info.pdf                | 2d406127fc458348374a4a3faf46f5f73556d<br>b9f | 110                 | 2                   |  |
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| This Acknowledgement Receipt evidences receipt on the noted date by the USPTO of the indicated documents, characterized by the applicant, and including page counts, where applicable. It serves as evidence of receipt similar to a Post Card, as described in MPEP 503.          New Applications Under 35 U.S.C. 111         If a new application is being filed and the application includes the necessary components for a filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application.         National Stage of an International Application under 35 U.S.C. 371         If a timely submission to enter the national stage of an international application is compliant with the conditions of 35         U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course.         New International Application Filed with the USPTO as a Receiving Office         If a new international application is being filed and the international application includes the necessary components for an international application Number an international application on PCT/RO/105 will be issued in due course, subject to prescriptions concerning national Filing Date (See PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (See PCT Article 11 and MPEP 1810), a Notification of the International Application Number an international Filing Date (See PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, su |                             |                             |  |                     |                     |  |

UNITED STATES PATENT AND TRADEMARK OFFICE



UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

# NOTICE OF ALLOWANCE AND FEE(S) DUE

86513 7590 Ward & Zinna, LLC 382 Springfiled Avenue Suite 300 Summit, NJ 07901 EXAMINER
ALI, HATEM M
ART UNIT PAPER NUMBER

3691

DATE MAILED: 12/03/2012

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 11/634,014      | 12/04/2006  | Richard B. Olsen     | 60967-0020C         | 3344             |

TITLE OF INVENTION: CURRENCY TRADING SYSTEM, METHODS, AND SOFTWARE

12/03/2012

| APPLN. TYPE    | SMALL ENTITY | ISSUE FEE DUE | PUBLICATION FEE DUE | PREV. PAID ISSUE FEE | TOTAL FEE(S) DUE | DATE DUE   |
|----------------|--------------|---------------|---------------------|----------------------|------------------|------------|
| nonprovisional | NO           | \$1770        | \$300               | \$O                  | \$2070           | 03/04/2013 |

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. <u>PROSECUTION ON THE MERITS IS CLOSED</u>. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN <u>THREE MONTHS</u> FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. <u>THIS STATUTORY PERIOD CANNOT BE EXTENDED</u>. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

#### HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

| If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:  | If the SMALL ENTITY is shown as NO:  |
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| A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.  | A. Pay TOTAL FEE(S) DUE shown above, or  |
| B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or | B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FEE shown above. |

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

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| appropriate. All further   | correspondence includin<br>ed below or directed oth  | ig the Patent, advance                                 | orders and notification of  | maintenance fees wi   | Il be mailed to the curre  | should be completed where<br>ent correspondence address as<br>eparate "FEE ADDRESS" for  |
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| CURRENT CORRESPOND   | ENCE ADDRESS (Note: Use Blo<br>7590 12/03/   |  | Fe  | e(s) Transmittal. This  | certificate cannot be use  | for domestic mailings of the d for any other accompanying ment or formal drawing, must 1.  |
| Ward & Zinna,<br>382 Springfiled<br>Suite 300<br>Summit, NJ 0790 | Avenue   |  | I h<br>Sta<br>adu<br>tra  | Certi<br>ereby certify that this<br>ttes Postal Service wi<br>dressed to the Mail<br>nsmitted to the USPT   | ificate of Mailing or Tra<br>s Fee(s) Transmittal is be<br>th sufficient postage for<br>Stop ISSUE FEE addre<br>O (571) 273-2885, on the | <b>nsmission</b><br>ing deposited with the United<br>first class mail in an envelope<br>ss above, or being facsimile<br>date indicated below.                                  |
| ,  |  |  |   |   |  | (Depositor's name)   |
|  |  |  |   |   |  | (Signature)  |
|  |  |  |   |   |  | (Date)   |
| APPLICATION NO.  | FILING DATE  |  | FIRST NAMED INVENTO   | R   | ATTORNEY DOCKET NO.  | CONFIRMATION NO.   |
| 11/634,014   | 12/04/2006   |  | Richard B. Olsen  |   | 60967-0020C  | 3344   |
| TITLE OF INVENTION   | : CURRENCY TRADIN  | G SYSTEM, METHOI                                       | DS, AND SOFTWARE  |   |  |  |
| APPLN. TYPE  | SMALL ENTITY   | ISSUE FEE DUE  | PUBLICATION FEE DUE   | PREV. PAID ISSUE  | FEE TOTAL FEE(S) D   | UE DATE DUE  |
| nonprovisional   | NO   | \$1770   | \$300   | \$0   | \$2070   | 03/04/2013   |
| EXAM   | INER   | ART UNIT   | CLASS-SUBCLASS  | ]   |  |  |
| ALI, HA  | TEM M  | 3691   | 705-037000  | _   |  |  |
| "Fee Address" ind  | ondence address (or Cha:<br>3/122) attached.<br>ication (or "Fee Address'<br>2 or more recent) attache | nge of Correspondence                                  | <ol> <li>For printing on the</li> <li>the names of up t<br/>or agents OR, alternat</li> <li>the name of a sing<br/>registered attorney or<br/>2 registered patent att<br/>listed, no name will b</li> </ol> | o 3 registered patent<br>ively,<br>gle firm (having as a :<br>agent) and the name<br>orneys or agents. If n | attorneys 1<br>member a 2  |  |
| PLEASE NOTE: Unl<br>recordation as set fort<br>(A) NAME OF ASSIG | less an assignee is identi<br>h in 37 CFR 3.11. Comp<br>GNEE   | ified below, no assigned<br>bletion of this form is NO | OT a substitute for filing an (B) RESIDENCE: (CIT   | patent. If an assigne<br>hassignment.<br>Y and STATE OR CO  | DUNTRY)  | e document has been filed for  |
| Please check the appropri-                                       | iate assignee category or  | categories (will not be                                | printed on the patent):   | Individual L Co   | poration or other private  | group entity 🖵 Government  |
|  | are submitted:<br>To small entity discount p<br>t of Copies  | permitted)   | <ul> <li>4b. Payment of Fee(s): (Pld</li> <li>A check is enclosed.</li> <li>Payment by credit ca</li> <li>The Director is hereboverpayment, to Depoverpayment, to Depoverpayment.</li> </ul>                | urd. Form PTO-2038 :  | is attached.   |  |
| 5. Change in Entity Stat   | <b>tus</b> (from status indicated<br>s SMALL ENTITY statu  | ,  |   |   | L ENTITY status. See 37  |  |
| NOTE: The Issue Fee and<br>interest as shown by the r            |  |  |   | the applicant; a regis  | tered attorney or agent; or  | r the assignee or other party in   |
| Authorized Signature   |  |  |   | Date  |  |  |
| Typed or printed name  | e  |  |   | Registration No   | Э  |  |
| Alexandria, Virginia 223   | 13-1450.   | NOT SEND FEES OK                                       | ion is required to obtain or<br>R 1.14. This collection is e<br>ry depending upon the indi-<br>the Chief Information Offic<br>COMPLETED FORMS T<br>respond to a collection of ir                            | O THIS ADDRESS.   | SEND IO: Commission  | and by the USPTO to process)<br>ding gathering, preparing, and<br>time you require to complete<br>epartment of Commerce, P.O.<br>er for Patents, P.O. Box 1450,<br>rol number. |

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|---------------------------------------|-----------------|-------------------------|--|------------------|
| APPLICATION NO.                       | FILING DATE     | FIRST NAMED INVENTOR    | ATTORNEY DOCKET NO.  | CONFIRMATION NO. |
| 11/634,014                            | 12/04/2006      | Richard B. Olsen        | 60967-0020C  | 3344             |
| 86513 75                              | 90 12/03/2012   |                         | EXAM   | IINER            |
| Ward & Zinna, L<br>382 Springfiled Av |                 |                         | ALI, HA  | ATEM M           |
| Suite 300                             |                 |                         | ART UNIT   | PAPER NUMBER     |
| Summit, NJ 07901                      |                 |                         | 3691   |                  |
|                                       |                 |                         | DATE MAILED: 12/03/201   | 2                |

## Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 516 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 516 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

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The Privacy Act of 1974 (P.L. 93-579) requires that you be given certain information in connection with your submission of the attached form related to a patent application or patent. Accordingly, pursuant to the requirements of the Act, please be advised that: (1) the general authority for the collection of this information is 35 U.S.C. 2(b)(2); (2) furnishing of the information solicited is voluntary; and (3) the principal purpose for which the information is used by the U.S. Patent and Trademark Office is to process and/or examine your submission related to a patent application or patent. If you do not furnish the requested information, the U.S. Patent and Trademark Office may not be able to process and/or examine your submission, which may result in termination of proceedings or abandonment of the application or expiration of the patent.

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- 1. The information on this form will be treated confidentially to the extent allowed under the Freedom of Information Act (5 U.S.C. 552) and the Privacy Act (5 U.S.C 552a). Records from this system of records may be disclosed to the Department of Justice to determine whether disclosure of these records is required by the Freedom of Information Act.
- 2. A record from this system of records may be disclosed, as a routine use, in the course of presenting evidence to a court, magistrate, or administrative tribunal, including disclosures to opposing counsel in the course of settlement negotiations.
- 3. A record in this system of records may be disclosed, as a routine use, to a Member of Congress submitting a request involving an individual, to whom the record pertains, when the individual has requested assistance from the Member with respect to the subject matter of the record.
- 4. A record in this system of records may be disclosed, as a routine use, to a contractor of the Agency having need for the information in order to perform a contract. Recipients of information shall be required to comply with the requirements of the Privacy Act of 1974, as amended, pursuant to 5 U.S.C. 552a(m).
- 5. A record related to an International Application filed under the Patent Cooperation Treaty in this system of records may be disclosed, as a routine use, to the International Bureau of the World Intellectual Property Organization, pursuant to the Patent Cooperation Treaty.
- 6. A record in this system of records may be disclosed, as a routine use, to another federal agency for purposes of National Security review (35 U.S.C. 181) and for review pursuant to the Atomic Energy Act (42 U.S.C. 218(c)).
- 7. A record from this system of records may be disclosed, as a routine use, to the Administrator, General Services, or his/her designee, during an inspection of records conducted by GSA as part of that agency's responsibility to recommend improvements in records management practices and programs, under authority of 44 U.S.C. 2904 and 2906. Such disclosure shall be made in accordance with the GSA regulations governing inspection of records for this purpose, and any other relevant (i.e., GSA or Commerce) directive. Such disclosure shall not be used to make determinations about individuals.
- 8. A record from this system of records may be disclosed, as a routine use, to the public after either publication of the application pursuant to 35 U.S.C. 122(b) or issuance of a patent pursuant to 35 U.S.C. 151. Further, a record may be disclosed, subject to the limitations of 37 CFR 1.14, as a routine use, to the public if the record was filed in an application which became abandoned or in which the proceedings were terminated and which application is referenced by either a published application, an application open to public inspection or an issued patent.
- 9. A record from this system of records may be disclosed, as a routine use, to a Federal, State, or local law enforcement agency, if the USPTO becomes aware of a violation or potential violation of law or regulation.

|  | Application No.   | Applicant/a)  |   |  |  |  |  |  |
|--|---|---|---|--|--|--|--|--|
|  | Application No.   | Applicant(s)  |   |  |  |  |  |  |
| Notice of Allowability   | 11/634,014<br>Examiner  | OLSEN ET AL.  |   |  |  |  |  |  |
|  |   |   |   |  |  |  |  |  |
|  | HATEM M. ALI  | 3691  |   |  |  |  |  |  |
| The MAILING DATE of this communication ap<br>All claims being allowable, PROSECUTION ON THE MERITS<br>herewith (or previously mailed), a Notice of Allowance (PTOL-8<br>NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT<br>of the Office or upon petition by the applicant. See 37 CFR 1.3   | IS (OR REMAINS) CLOSED in<br>5) or other appropriate comm<br><b>RIGHTS.</b> This application is s                         | n this application. If not included<br>unication will be mailed in due course. <b>T</b> |   |  |  |  |  |  |
| 1. $\square$ This communication is responsive to <u>12/04/2006 and 09/</u>   | <u>06/2012</u> .  |   |   |  |  |  |  |  |
| <ol> <li>An election was made by the applicant in response to a return the restriction requirement and election have been incorporation.</li> </ol>  |   | during the interview on;  |   |  |  |  |  |  |
| 3. ⊠ The allowed claim(s) is/are <u>35-41</u> .  |   |   |   |  |  |  |  |  |
| <ul> <li>4. ☐ Acknowledgment is made of a claim for foreign priority ur</li> <li>a) ☐ All b) ☐ Some* c) ☐ None of the:</li> <li>1. ☐ Certified copies of the priority documents hat</li> <li>2. ☐ Certified copies of the priority documents hat</li> <li>3. ☐ Copies of the certified copies of the priority documents hat</li> <li>a. ☐ Copies of the certified copies of the priority documents hat</li> <li>b. ☐ Copies of the certified copies of the priority documents hat</li> <li>certified copies of the certified copies of the priority documents hat</li> <li>certified copies of the certified copies of the priority documents hat</li> <li>certified copies of the certified copies of the priority documents hat</li> <li>certified copies not received:</li> </ul> | ave been received.<br>ave been received in Application<br>documents have been receive<br>E" of this communication to file | n No<br>d in this national stage application from t                                     |   |  |  |  |  |  |
| noted below. Failure to timely comply will result in ABANDOI<br>THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.<br>5. A SUBSTITUTE OATH OR DECLARATION must be sub  | mitted. Note the attached EXA   |   | = |  |  |  |  |  |
| INFORMAL PATENT APPLICATION (PTO-152) which g  |   | r declaration is deficient.   |   |  |  |  |  |  |
| <ol> <li>CORRECTED DRAWINGS ( as "replacement sheets") m</li> <li>(a) ☐ including changes required by the Notice of Draftsport</li> </ol>  |   | v (PTO-948) attached  |   |  |  |  |  |  |
| 1) hereto or 2) to Paper No./Mail Date   | •   |   |   |  |  |  |  |  |
| (b) ☐ including changes required by the attached Examine<br>Paper No./Mail Date  |   | in the Office action of   |   |  |  |  |  |  |
| Identifying indicia such as the application number (see 37 CFF<br>each sheet. Replacement sheet(s) should be labeled as such i   |   |   |   |  |  |  |  |  |
| 7. DEPOSIT OF and/or INFORMATION about the deposit o<br>attached Examiner's comment regarding REQUIREMENT  |   |   |   |  |  |  |  |  |
| Attachment(s)       1. ☑ Notice of References Cited (PTO-892)       5. ☐ Notice of Informal Patent Application         2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)       6. ☐ Interview Summary (PTO-413), Paper No./Mail Date         3. ☐ Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date       7. ☐ Examiner's Amendment/Comment         4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material       8. ☑ Examiner's Statement of Reasons for Allowance         9. ☐ Other   |   |   |   |  |  |  |  |  |
| /HANI M KAZIMI/<br>Primary Examiner, Art Unit 3691   |   |   |   |  |  |  |  |  |

## **DETAILED ACTION**

**1.** This communication is in response to application filed on 12/04/2006 and RCE filed on 04/20/2012.

2. **Allowable** Subject Matter:

Claims 35-41 have been allowed.

3. The following is an **examiner's statement** of reasons for the indication of allowance:

Independent **claims** 35 and 41 and their dependent claims 36-40 respectively are allowed because the closest prior art of record and references of **Potter** et al (5,787,402) in views of **Buchalter** (US H2064 H) in any combination did not teach or render obvious to one of ordinary skill in the art a method of trading currencies over a computer network connecting a trading system server and at least one trading client system, comprising the steps of:

(i) at the trading system server, determining and dynamically maintaining a plurality of current exchange rates, each current exchange rate relating to a pair of currencies and including a first price to buy a first currency of the pair with respect to a second currency of the pair and a second price to sell the first currency of the pair with respect to the second currency of the pair;

(ii) transmitting data from the trading system server to a trading client system, the transmitted data representing at least one current exchange rate at the time of the

transmission; (iii) at the trading client system, displaying the first and second prices for each received current exchange rate to a user;

(iv) at the trading client system, accepting input from the user identifying a pair of currencies the user desires to trade, an amount of at least one currency of the pair desired to be traded and a requested trade price at which it is desired to effect the trade;

(v) transmitting the accepted input from the trading client system to the trading system server

(vi) at the trading system server, comparing the requested trade price to the respective first price or second price of the corresponding current exchange rate at that time and, if the respective first price or second price of the corresponding current exchange rate at that time is equal to or better than the requested trade price, effecting the trade at the corresponding respective current exchange rate first price or second price and if the corresponding current exchange rate is worse than the requested trade price, refusing the trade; and

(vii) transmitting from the trading system server to the trading client system an indication of whether the trade was refused or transacted and, if transacted, an indication of the price the trade was transacted at.

4. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably

Page 3

accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to HATEM ALI whose telephone number is (571)270-3021 and FAX (571) 270-4021 [Cc to Examiner]. The examiner can normally be reached on 8.00 to 6.30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, ALEXANDER KALINOWSKI can be reached on 571-272-6771. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

HATEM ALI Examiner Art Unit 3691

/HANI M KAZIMI/

Primary Examiner, Art Unit 3691

| Notice of References Cited       Indext Notice       Reexamination OLSEN ET AL.         Examiner       Art Unit       Page 1 of 1 |                            |                         |          |             |  |  |  |  |
|---|----------------------------|-------------------------|----------|-------------|--|--|--|--|
| Notice of References Cited     Reexamination       11/634,014     OLSEN ET AL.       Examiner     Art Unit                        |                            | HATEM M. ALI            | 3691     | Page 1 of 1 |  |  |  |  |
| 11/634,014 Reexamination<br>OLSEN ET AL.  | Notice of References Cited | Examiner                | Art Unit |             |  |  |  |  |
|   |                            | 11/634,014              |          |             |  |  |  |  |
| Application/Control No. Applicant(s)/Patent Under   |                            | Application/Control No. |          | ent Under   |  |  |  |  |

#### **U.S. PATENT DOCUMENTS**

| * |   | Document Number<br>Country Code-Number-Kind Code | Date<br>MM-YYYY | Name                | Classification |
|---|---|--|-----------------|---------------------|----------------|
| * | А | US-5,787,402                                     | 07-1998         | Potter et al.       | 705/37         |
| * | В | US-H0,002,064 H                                  | 05-2003         | Buchalter, Lawrence | 705/37         |
|   | С | US-  |                 |                     |                |
|   | D | US-  |                 |                     |                |
|   | ш | US-  |                 |                     |                |
|   | F | US-  |                 |                     |                |
|   | G | US-  |                 |                     |                |
|   | н | US-  |                 |                     |                |
|   | — | US-  |                 |                     |                |
|   | J | US-  |                 |                     |                |
|   | К | US-  |                 |                     |                |
|   | L | US-  |                 |                     |                |
|   | М | US-  |                 |                     |                |

### FOREIGN PATENT DOCUMENTS

| * |   | Document Number<br>Country Code-Number-Kind Code | Date<br>MM-YYYY | Country | Name | Classification |
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|   | R |  |                 |         |      |                |
|   | s |  |                 |         |      |                |
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|   | NON-PATENT DOCUMENTS |  |  |  |  |  |  |  |  |
|---|----------------------|--|--|--|--|--|--|--|--|
| * |                      | Include as applicable: Author, Title Date, Publisher, Edition or Volume, Pertinent Pages)  |  |  |  |  |  |  |  |
|   | U                    | Cagan, Penny. Financial risk management sources: A walk on the wild side; EContent 22.6 (Dec 1999): 16-25  |  |  |  |  |  |  |  |
|   | ×                    | BY Darren McDermott; Corporate Performance 1999 Review: 1 <sup>st</sup> quarterLatest Pro; Wall Street Journal [New York, N.Y] 03<br>May 1999: C1. |  |  |  |  |  |  |  |
|   | w                    | Turton, Jonathon. It is time rethink your netting; Corporate Finance 175 (Jun 1999): 32-34   |  |  |  |  |  |  |  |
|   | x                    | s reference is not being furnished with this Office action. (See MPER & 707.05(a).)  |  |  |  |  |  |  |  |

\*A copy of this reference is not being furnished with this Office action. (See MPEP § 707.05(a).) Dates in MM-YYYY format are publication dates. Classifications may be US or foreign.

|              | Application/Control No. | Applicant(s)/Patent Under<br>Reexamination |
|--------------|-------------------------|--|
| Search Notes | 11634014                | OLSEN ET AL.                               |
|              | Examiner                | Art Unit                                   |
|              | HATEM ALI               | 3691                                       |

|       | SEARCHED |         |          |
|-------|----------|---------|----------|
| Class | Subclass | Date    | Examiner |
| 705   | 37       | 3/18/10 | HA       |

| SEARCH NOTES                               |           |          |  |  |  |  |  |  |
|--|-----------|----------|--|--|--|--|--|--|
| Search Notes                               | Date      | Examiner |  |  |  |  |  |  |
| Searched EAST                              | 3/18/10   | HA       |  |  |  |  |  |  |
| Searched EAST                              | 11/5/10   | HA       |  |  |  |  |  |  |
| Searched EAST and checked owners/assignees | 9/29/2012 | HA       |  |  |  |  |  |  |

| INTERFERENCE SEARCH |          |           |          |  |  |  |  |  |
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| Class               | Subclass | Date      | Examiner |  |  |  |  |  |
| 705                 | 35 , 37  | 9/29/2012 | НА       |  |  |  |  |  |

|          |              |          |       |              | Application/Control No. |          |       |         |          | Applicant(s)/Patent Under<br>Reexamination |   |       |      |        |  |  |
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| In       | dex of (     | Clain    | າຣ    | .            | 634014                  |          |       |         |          | OLSEN ET AL.                               |   |       |      |        |  |  |
|          |              |          |       | Ex           | aminer                  |          |       |         | Art Unit |  |   |       |      |        |  |  |
|          |              |          |       | Н            | ATEM ALI                |          |       |         | 3691     |  |   |       |      |        |  |  |
| ✓ F      | Rejected     |          | -     | Can          | celled                  |          | N     | Non-E   | Ele      | lected A Appeal                            |   |       |      |        |  |  |
| = /      | Allowed      |          | ÷     | Res          | tricted                 |          | Ι     | Interfe | ere      | ence                                       |   | 0     | Obje | ected  |  |  |
| 🛛 Claims | renumbered   | in the s | ame o | rder as pr   | esented by a            | applica  | ant   |         |          | СРА  |   | ] T.C | ). □ | R.1.47 |  |  |
|          | AIM          |          |       | •            | -                       | <u> </u> |       | DATE    |          |  |   |       |      |        |  |  |
| Final    | Original     | 03/21/5  | 20101 | 1/05/2010    | 07/28/2011              | 09/28    | /2012 |         |          |  | 1 |       |      | T      |  |  |
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|          | 2            | -        |       | -            | -                       | -        |       |         |          |  |   |       |      |        |  |  |
|          | 3            | -        |       | -            | -                       | -        |       |         |          |  |   |       |      |        |  |  |
|          | 4            | -        |       | -            | -                       | -        |       |         |          |  |   |       |      |        |  |  |
|          | 5            | -        |       | -            | -                       | -        |       |         |          |  |   |       |      |        |  |  |
|          | 6            | -        |       | -            | -                       | -        |       |         |          |  |   |       |      |        |  |  |
|          | 7            | -        |       | -            | -                       | -        |       |         |          |  |   |       |      |        |  |  |
|          | 8            | -        |       | -            | -                       | -        |       |         |          |  |   |       |      |        |  |  |
|          | 9            | -        |       | -            | -                       | -        |       |         |          |  |   |       |      |        |  |  |
|          | 10           | -        |       | -            | -                       | -        |       |         |          |  |   |       |      |        |  |  |
|          | 11           | -        |       | -            | -                       | -        |       |         |          |  |   |       |      |        |  |  |
|          | 12<br>13     | -        |       | -            | -                       | -        |       |         |          |  |   |       |      |        |  |  |
|          | 13           | · ·      |       | ·<br>✓       | -                       | -        |       |         |          |  |   |       |      |        |  |  |
|          | 15           | ✓        |       | ✓            | -                       | -        |       |         |          |  |   |       |      |        |  |  |
|          | 16           | ✓        |       | √            | -                       | -        |       |         |          |  |   |       |      |        |  |  |
|          | 17           | √        |       | ~            | -                       | -        |       |         |          |  |   |       |      |        |  |  |
|          | 18           | √        |       | $\checkmark$ | -                       | -        |       |         |          |  |   |       |      |        |  |  |
|          | 19           | √        |       | $\checkmark$ | -                       | -        |       |         |          |  |   |       |      |        |  |  |
|          | 20           | √        |       | $\checkmark$ | -                       | -        |       |         |          |  |   |       |      |        |  |  |
|          | 21           | ✓        |       | -            | -                       | -        |       |         |          |  |   |       |      |        |  |  |
|          | 22           | √        |       | -            | -                       | -        |       |         |          |  |   |       |      |        |  |  |
|          | 23           | ✓        |       | -            | -                       | -        |       |         |          |  |   |       |      |        |  |  |
|          | 24           | ✓        |       | -            | -                       | -        |       |         |          |  |   |       |      |        |  |  |
|          | 25           | ✓<br>✓   |       | -            | -                       | -        |       |         |          |  |   |       |      |        |  |  |
|          | 26<br>27     | v<br>√   |       | -            | -                       | -        |       |         |          |  |   |       |      |        |  |  |
|          | 27           | ▼<br>▼   |       | -            | -                       | -        |       |         |          |  |   |       |      |        |  |  |
|          | 28           | · ·      |       | -            | -                       | -        |       |         |          |  |   |       |      |        |  |  |
|          | 30           | · ·      |       | -            | -                       | -        |       |         |          |  |   |       |      | +      |  |  |
|          | 31           | ✓        |       | -            | -                       | -        |       |         |          |  |   |       |      |        |  |  |
|          | 32           | ✓        |       | -            | -                       | -        |       |         |          |  |   |       |      |        |  |  |
|          | 33           | ✓        |       | -            | -                       | -        |       |         |          |  |   |       |      |        |  |  |
|          | 34           | √        |       | -            | -                       | -        |       |         |          |  | İ |       |      |        |  |  |
|          | 35           | ✓        |       | √            | √                       | =        | -     |         |          |  |   |       |      |        |  |  |
|          | 36           | ✓        |       | $\checkmark$ | √                       | =        | =     |         |          |  | [ |       |      |        |  |  |

Part of Paper No. : 20120928

|                 |          |            |                       |        | Α           |                        |         |       |                  |              | Applicant(s)/Patent Under<br>Reexamination |    |       |       |     |        |  |
|-----------------|----------|------------|-----------------------|--------|-------------|------------------------|---------|-------|------------------|--------------|--|----|-------|-------|-----|--------|--|
| Index of Claims |          |            |                       | 11     | 11634014 0  |                        |         |       |                  | OLSEN ET AL. |  |    |       |       |     |        |  |
|                 |          |            |                       |        | Ex          | aminer                 |         |       |                  |              | Art Un                                     | it |       |       |     |        |  |
|                 |          |            |                       |        | Н           | ATEM ALI               |         |       |                  |              | 3691                                       |    |       |       |     |        |  |
| ✓               | R        | ejected    |                       | -      | Can         | celled                 |         | N     | Non-             | Ele          | cted                                       |    | Α     |       | Арр | peal   |  |
| =               | 4        | llowed     |                       | ÷      | Res         | Restricted I Interfere |         |       | rence O Objected |              |  |    |       | ected |     |        |  |
|                 | Claims ı | renumbered | in the s              | ame    | order as pr | esented by a           | applica | ant   |                  |              | СРА  | C  | ] T.D | ).    |     | R.1.47 |  |
|                 | CLA      | MIM        |                       |        |             |                        |         |       | DATE             |              |  |    |       |       |     |        |  |
| F               | inal     | Original   |                       | :010   |             | 07/28/2011             | 09/28   | /2012 |                  |              |  |    |       |       |     |        |  |
|                 |          |            | <ul> <li>✓</li> </ul> | ✓      | =           | =                      |         |       |                  |              |  |    |       |       |     |        |  |
|                 |          |            |                       | ✓      | =           | =                      |         | _     |                  |              |  |    |       |       |     |        |  |
|                 |          |            | ✓                     | ✓<br>✓ | =           |                        |         |       |                  |              |  |    |       |       |     |        |  |
|                 |          |            |                       | <br>✓  | ✓<br>✓      | =                      |         |       |                  |              |  |    |       |       |     |        |  |
| 41 🗸            |          |            |                       |        | ×           | <u> </u>               | =       | -     |                  |              |  |    |       |       |     |        |  |

|                      | Application/Control No. | Applicant(s)/Patent Under Reexamination |
|----------------------|-------------------------|---|
| Issue Classification | 11634014                | OLSEN ET AL.                            |
|                      | Examiner                | Art Unit                                |
|                      | HATEM M ALI             | 3691                                    |

|                    |       | ORIGI      | NAL     |           |     |   |   |   |   | INTERNATIONAL        | CLA | ss          | FIC | ΑΤΙ | ON |
|--------------------|-------|------------|---------|-----------|-----|---|---|---|---|----------------------|-----|-------------|-----|-----|----|
|                    | CLASS |            | 5       | SUBCLASS  |     |   |   |   | С | LAIMED               |     | NON-CLAIMED |     |     |    |
| 705                |       |            | 37      |           |     | G | 0 | 6 | Q | 40 / 00 (2012.01.01) |     |             |     |     |    |
| CROSS REFERENCE(S) |       |            |         |           |     |   |   |   |   |                      |     |             |     |     |    |
| CLASS              | SUB   | CLASS (ONE | SUBCLAS | S PER BLO | CK) |   |   |   |   |                      |     |             |     |     |    |
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|                    |       |            |         |           |     |   |   |   |   |                      |     |             |     |     |    |
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|                    |       |            |         |           |     |   |   |   |   |                      |     |             |     |     |    |
|                    |       |            |         |           |     |   |   |   |   |                      |     |             |     |     |    |
|                    |       |            |         |           |     |   |   |   |   |                      |     |             |     |     |    |
|                    |       |            |         |           |     |   |   |   |   |                      |     |             |     |     |    |
|                    |       |            |         |           |     |   |   |   |   |                      |     |             |     |     |    |

| $\boxtimes$ | Claims renumbered in the same order as presented by applicant |       |          |       |          |       | applicant |       | □ CPA □ T.D. □ R.1.47 |       |          |       | 47       |       |         |
|-------------|---|-------|----------|-------|----------|-------|-----------|-------|-----------------------|-------|----------|-------|----------|-------|---------|
| Final       | Original  | Final | Original | Final | Original | Final | Original  | Final | Original              | Final | Original | Final | Original | Final | Origina |
|             | 1   |       | 17       |       | 33       |       |           |       |                       |       |          |       |          |       |         |
|             | 2   |       | 18       |       | 34       |       |           |       |                       |       |          |       |          |       |         |
|             | 3   |       | 19       | 1     | 35       |       |           |       |                       |       |          |       |          |       |         |
|             | 4   |       | 20       | 2     | 36       |       |           |       |                       |       |          |       |          |       |         |
|             | 5   |       | 21       | 3     | 37       |       |           |       |                       |       |          |       |          |       |         |
|             | 6   |       | 22       | 4     | 38       |       |           |       |                       |       |          |       |          |       |         |
|             | 7   |       | 23       | 5     | 39       |       |           |       |                       |       |          |       |          |       |         |
|             | 8   |       | 24       | 6     | 40       |       |           |       |                       |       |          |       |          |       |         |
|             | 9   |       | 25       | 7     | 41       |       |           |       |                       |       |          |       |          |       |         |
|             | 10  |       | 26       |       |          |       |           |       |                       |       |          |       |          |       |         |
|             | 11  |       | 27       |       |          |       |           |       |                       |       |          |       |          |       |         |
|             | 12  |       | 28       |       |          |       |           |       |                       |       |          |       |          |       |         |
|             | 13  |       | 29       |       |          |       |           |       |                       |       |          |       |          |       |         |
|             | 14  |       | 30       |       |          |       |           |       |                       |       |          |       |          |       |         |
|             | 15  |       | 31       |       |          |       |           |       |                       |       |          |       |          |       |         |
|             | 16  |       | 32       |       |          |       |           |       |                       |       |          |       |          |       |         |

| /HATEM M ALI/<br>Examiner.Art Unit 3691           | 09/28/12   | Total Claims Allowed:<br>7 |                   |  |
|---|------------|----------------------------|-------------------|--|
| (Assistant Examiner)                              | (Date)     |                            |                   |  |
| /HANI M KAZIMI/<br>Primary Examiner.Art Unit 3691 | 10/01/2012 | O.G. Print Claim(s)        | O.G. Print Figure |  |
| (Primary Examiner)                                | (Date)     | 1                          | 1                 |  |

U.S. Patent and Trademark Office

Part of Paper No. 20120928

## EAST Search History

## EAST Search History (Prior Art)

| Ref<br># | Hits | Search Query   | DBs   | Default<br>Operator | Plurals | Time<br>Stamp       |
|----------|------|--|---|---------------------|---------|---------------------|
| S1       | 3068 | 705/35.ccls.   | US-PGPUB;<br>USPAT; EPO;<br>JPO   | OR                  | ON      | 2007/09/27<br>13:34 |
| S4       | 16   | S1 and index and value and patent<br>and portfolio and market adj<br>segment and share and growth  | US-PGPUB;<br>USPAT;<br>USOCR; FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR                  | ON      | 2007/10/10<br>15:16 |
| S5       | 5    | index adj value and patent and<br>portfolio and market adj segment<br>and share and growth   | US-PGPUB;<br>USPAT;<br>USOCR; FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR                  | ON      | 2007/10/10<br>12:15 |
| S12      | 2    | "6,175,824".pn.  | US-PGPUB;<br>USPAT;<br>USOCR; FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR                  | ON      | 2007/10/10<br>12:16 |
| S19      | 138  | patent and portfolio and relative and<br>impact and trade and index and<br>value and market with(size growth<br>share) not @ad>"20040206"                              | US-PGPUB;<br>USPAT;<br>USOCR; FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR                  | ON      | 2007/10/10<br>12:22 |
| S20      | 154  | patent and portfolio and relative and<br>impact and trade and index and<br>value and market with(size growth<br>rate share) not @ad>"20040206"                         | US-PGPUB;<br>USPAT;<br>USOCR; FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR                  | ON      | 2007/10/10<br>12:22 |
| S21      | 8    | patent adj portfolio and relative and<br>impact and trade and index and<br>value and market with(size growth<br>rate share) not @ad>"20040206"                         | US-PGPUB;<br>USPAT;<br>USOCR; FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR                  | ON      | 2007/10/10<br>15:00 |
| S22      | 8    | patent adj portfolio and relative and<br>impact and trade and index and<br>value and market with(size growth<br>rate share) not @ad>"20040206"<br>and database and R&D | US-PGPUB;<br>USPAT;<br>USOCR; FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR                  | ON      | 2007/10/11<br>17:20 |
| S23      | 3076 | 705/35.ccls.   | US-PGPUB;<br>USPAT;<br>USOCR; FPRS;<br>EPO; JPO;<br>DERWENT;            | OR                  | ON      | 2007/10/10<br>15:17 |

|     |      |   | IBM_TDB   |    |    |                     |
|-----|------|---|---|----|----|---------------------|
| S24 | 1    | S22 and S23   | US-PGPUB;<br>USPAT;<br>USOCR; FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2007/10/10<br>15:17 |
| S25 | 8    | patent adj portfolio and relative and<br>impact and trade and index and<br>value and market with(size growth<br>rate share) not @ad>"20040206"<br>and database and R&D  | US-PGPUB;<br>USPAT;<br>USOCR; FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2007/10/11<br>17:26 |
| S26 | 8    | patent with portfolio and relative and<br>impact and trade and index and<br>value and market with(size growth<br>rate share) not @ad>"20040206"<br>and database and R&D | US-PGPUB;<br>USPAT;<br>USOCR; FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2007/10/11<br>17:27 |
| S27 | 17   | patent and portfolio and relative and<br>impact and trade and index and<br>value and market with(size growth<br>rate share) not @ad>"20040206"<br>and database and R&D  | US-PGPUB;<br>USPAT;<br>USOCR; FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2007/10/11<br>18:45 |
| S28 | 2    | "6556992".pn.   | US-PGPUB;<br>USPAT;<br>USOCR; FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2007/10/11<br>18:46 |
| S29 | 17   | "6263314"   | US-PGPUB;<br>USPAT;<br>USOCR; FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2007/10/11<br>18:47 |
| S30 | 2    | "6263314".pn.   | US-PGPUB;<br>USPAT;<br>USOCR; FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2007/10/11<br>18:54 |
| S31 | 2    | "6175824".pn.   | US-PGPUB;<br>USPAT;<br>USOCR; FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2007/10/11<br>18:55 |
| S32 | 3269 | 705/37.ccls.  | US-PGPUB;<br>USPAT;<br>USOCR; FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2007/10/15<br>15:24 |
| S33 | 9    | S32 and currenc\$ and server<br>with(transaction rate front-end) and<br>pricing adj engine and database   | US-PGPUB;<br>USPAT;<br>USOCR; FPRS;<br>EPO; JPO;<br>DERWENT;            | OR | ON | 2007/10/15<br>16:01 |

|     |    |  | IBM_TDB   |    |    |                     |
|-----|----|--|---|----|----|---------------------|
| S34 | 10 | ("20010044771"   "20010049651"  <br>"20010056398"   "20020023053"  <br>"20020087455"   "20030115128"  <br>"20030159109"   "5787402"  <br>"5916307"   "6199046").PN.                                  | US-PGPUB;<br>USPAT;<br>USOCR  | OR | ON | 2007/10/15<br>15:34 |
| S35 | 25 | currenc\$ and server with(transaction<br>rate front-end) and pricing adj<br>engine and database  | US-PGPUB;<br>USPAT;<br>USOCR; FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2007/10/15<br>17:00 |
| S36 | 4  | currenc\$ and server and (transaction<br>rate front-end) and pricing adj<br>engine and database not<br>@ad>"20010308"  | US-PGPUB;<br>USPAT;<br>USOCR; FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2007/10/15<br>16:15 |
| S38 | 2  | currenc\$ and server with (transaction<br>or rate or front-end) and pricing adj<br>engine and database not<br>@ad>"20010308"   | US-PGPUB;<br>USPAT;<br>USOCR; FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2007/10/15<br>16:24 |
| S39 | 1  | currency adj trading and network<br>and server and(transaction or rate or<br>front-end) and pricing adj engine<br>and database not @ad>"20010308"  | US-PGPUB;<br>USPAT;<br>USOCR; FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2007/10/15<br>16:55 |
| S40 | 10 | ("20010044771"   "20010049651"  <br>"20010056398"   "20020023053"  <br>"20020087455"   "20030115128"  <br>"20030159109"   "5787402"  <br>"5916307"   "6199046").PN. OR<br>("7146336").URPN.          | US-PGPUB;<br>USPAT;<br>USOCR  | OR | ON | 2007/10/15<br>17:05 |
| S41 | 12 | ("20010044771"   "20010049651"  <br>"20010056398"   "20020023053"  <br>"20020087455"   "20030115128"  <br>"20030159109"   "5787402"  <br>"5916307"   "6199046").PN. OR<br>("7146336")".URPN.and" S37 | US-PGPUB;<br>USPAT;<br>USOCR  | OR | ON | 2007/10/15<br>17:07 |
| S42 | 78 | Trading adj currency   | US-PGPUB;<br>USPAT;<br>USOCR  | OR | ON | 2007/10/15<br>17:08 |
| S43 | 39 | Trading adj currency and computer<br>adj network   | US-PGPUB;<br>USPAT;<br>USOCR  | OR | ON | 2007/10/15<br>17:08 |
| S44 | 12 | Trading adj currency and computer<br>adj network not @ad> "20010308"   | US-PGPUB;<br>USPAT;<br>USOCR  | OR | ON | 2007/10/15<br>17:11 |
| S45 | 7  | Trading adj currency and computer<br>adj network not @ad> "20010308"<br>and transaction and server and (rate<br>transaction front-end)   | US-PGPUB;<br>USPAT;<br>USOCR  | OR | ON | 2007/10/15<br>17:13 |
| S46 | 2  | Trading adj currency and computer<br>adj network not @ad> "20010308"<br>and transaction and server and (rate<br>transaction front-end) and pricing<br>and engine                                     | US-PGPUB;<br>USPAT;<br>USOCR  | OR | ON | 2007/10/15<br>17:15 |

|     | £      | 4   | •••••••••••••••••••••••••••••••••••••••                       | ••••••• |    | ·                   |
|-----|--------|---|---|---------|----|---------------------|
| S47 | 11     | currency adj trading and computer<br>adj network not @ad> "20010308"<br>and transaction and server and (rate<br>transaction front-end) and pricing<br>and engine        | US-PGPUB;<br>USPAT;<br>USOCR                                  | OR      | ON | 2007/10/15<br>17:32 |
| S48 | 13     | currency adj trading and online not<br>@ad> "20010308" and transaction<br>and server and (rate transaction<br>front-end) and pricing and engine                         | US-PGPUB;<br>USPAT;<br>USOCR                                  | OR      | ON | 2007/10/15<br>18:00 |
| S49 | 14     | currency adj trading and online not<br>@ad> "20010308" and transaction<br>and server and (rate transaction<br>front-end) and engine and (pricing<br>hedging)            | US-PGPUB;<br>USPAT;<br>USOCR                                  | OR      | ON | 2007/10/15<br>18:52 |
| S50 | 625085 | currency adj trading and online not<br>@ad> "20010308" and transaction<br>and server and (rate transaction<br>front-end) and pricing (engine<br>hedging)                | US-PGPUB;<br>USPAT;<br>USOCR                                  | OR      | ON | 2007/10/15<br>18:52 |
| S51 | 1      | currency adj trading and online not<br>@ad> "20010308" and transaction<br>and server and (rate transaction<br>front-end) and pricing with(engine<br>hedging)            | US-PGPUB;<br>USPAT;<br>USOCR                                  | OR      | ON | 2007/10/15<br>19:01 |
| S52 | 14     | currency adj trading and online not<br>@ad> "20010308" and transaction<br>and server and (rate transaction<br>front-end) and pricing and(engine<br>hedging)             | US-PGPUB;<br>USPAT;<br>USOCR                                  | OR      | ON | 2007/10/15<br>18:53 |
| S53 | 1      | currency adj trading and online not<br>@ad> "20010308" and transaction<br>and server and (rate transaction<br>front-end) and pricing with(engine<br>hedging) and module | US-PGPUB;<br>USPAT;<br>USOCR                                  | OR      | ON | 2007/10/15<br>19:02 |
| S54 | 23     | display adj curve with rate and<br>(currency rate indicatot boundary<br>upper lper)   | US-PGPUB;<br>USPAT; FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR      | ON | 2010/03/21<br>21:18 |
| S55 | 13     | display adj curve with rate and<br>(currency rate indicatot boundary<br>upper Iper)and @ad<"20010101"   | US-PGPUB;<br>USPAT; FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR      | ON | 2010/03/21<br>21:19 |
| S56 | 11     | curve and trade adj order and<br>(currency rate indicator boundary<br>upper lower trade order)and<br>@ad<"20010101"   | US-PGPUB;<br>USPAT; FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR      | ON | 2010/03/21<br>21:33 |
| S57 | 4      | compar\$ with trade adj price and<br>@ad<"20010101"   | US-PGPUB;<br>USPAT; FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR      | ON | 2010/11/05<br>12:34 |
| S58 | 4      | compar\$ with trade adj price and<br>(current exchange rate) and<br>@ad<"20010101"  | US-PGPUB;<br>USPAT; FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR      | ON | 2010/11/05<br>12:41 |

| S59 | 14 | currency adj trading and online and | US-PGPUB; | OR | ON | 2012/09/29 |
|-----|----|-------------------------------------|-----------|----|----|------------|
|     |    | @ad< "20010308" and transaction     | USPAT;    |    |    | 08:42      |
|     |    | and server and (rate transaction    | USOCR     |    |    |            |
|     |    | front-end) and pricing and (engine  |           |    |    |            |
|     |    | hedging)                            |           |    |    |            |

## EAST Search History (Interference)

| Ref<br># | Hits | Search Query   | DBs            | Default<br>Operator | Plurals | Time<br>Stamp       |
|----------|------|--|----------------|---------------------|---------|---------------------|
| L1       |      | currency adj trading and online and @ad<<br>"20010308" and transaction and server and<br>(rate transaction front-end) and pricing<br>and(engine hedging) | USPAT;<br>UPAD | OR                  | 1 3     | 2012/09/29<br>08:47 |
| S60      |      | display adj curve with rate and (currency rate<br>indicatot boundary upper lper)and<br>@ad<"20010101"  | USPAT;<br>UPAD | OR                  |         | 2012/09/29<br>08:40 |
| S61      |      | display adj curve with currency adj rate and<br>(currency rate indicatot boundary upper<br>Iper)and @ad<"20010101"                                       | USPAT;<br>UPAD | OR                  | 10.1    | 2012/09/29<br>08:40 |

### 9/29/2012 8:49:19 AM

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## REPLY UNDER 37 C.F.R.1.116 – EXPEDITED PROCEDURE TECHNOLOGY CENTER 3600

## Electronically filed January 4, 2012 IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Application of: Olsen et al. .

Confirmation No.: 3344

Examiner: Ali, Hatem M.

Serial No. 11/634,014

Art Unit: 3691

Filing Date: December 4, 2006

Attorney Docket No: 60967-0020C

Title: CURRENCY TRADING SYSTEM, METHODS AND SOFTWARE

## **RESPONSE TO FINAL OFFICE ACTION OF AUGUST 2, 2011**

Mail Stop AF Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Sir:

#### REMARKS

In the final office action of November 9, 2010, claims 35 – 41 were rejected under 35 U.S.C. 103(a) as unpatentable over Potter et al. (USP 5,787,402) in view of Buchalter (US H2064 H).

The rejection of claims 35 - 41 as obvious over Potter in view of Buchalter is respectfully traversed.

As described in the Background section on the first page of the application, in the traditional on-line currency market, a currency trade is accomplished in three steps. First, a trader specifies to a dealer the currency pair and the amount he would like to trade but does not specify whether he is buying or selling. Next, the dealer provides a bid and an ask price not knowing whether the trader will buy, sell or reject the offer; and gives the trader several seconds to respond. And the trader then responds to the dealer either rejecting the offer or indicating whether he is buying or selling.

This method of trading is also described at col. 9 lines 21 – 52 of the primary reference, Potter.

OK to ENTER /H A/ 11/09/12

| Application Number   | Application/Control No. |            | Applicant(s)/Patent under<br>Reexamination |          |  |
|----------------------|-------------------------|------------|--|----------|--|
|                      | 11/634,014              |            | OLSEN ET AL.                               |          |  |
| Document Code - DISQ |                         | Internal D | ocument – DC                               | NOT MAIL |  |

| TERMINAL<br>DISCLAIMER       |   |  |
|------------------------------|---|--|
| Date Filed : October 1, 2012 | This patent is subject<br>to a Terminal<br>Disclaimer |  |

Approved/Disapproved by:

Henry D. jefferson

U.S. Patent and Trademark Office

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PAGE 03/03

# OCT 0 1 2012

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| TERMINAL DISCLAIMER TO OBVIATE A DOUBLE PATE<br>REJECTION OVER A "PRIOR" PATENT  | NTING  | Docket Number (Option<br>60967-0020C   |   |
| In re Application of: Olsen et al.   |  |  |   |
| Application No.: 11/634,014  | 19/02/2012   | APEREZAN 88888822  | 230420 11 3401  |
| Filed: December 4, 2006  | 01 FC:1814   | 16 <b>0.0</b> 8 DA   |   |
| For: CURRENCY TRADING SYSTEM, METHODS AND SOFTWARE   |  |  |   |
| except as provided below, the terminal part of the statutory term of any patent grant<br>the expiration date of the full statutory term of prior patent No. 7,146,336<br>by any terminal disclaimer. The owner hereby agrees that any patent so granted on<br>during such period that it and the prior patent are commonly owned. This agreemen<br>and is binding upon the grantee, its successors or assigns.   | ed on the instant ap<br>_ as the term of sa<br>the instant applicat<br>nt rums with any pat      | id prior patent is present<br>on shall be enforceable<br>ant granted on the instar       | extend beyond<br>htty shortened<br>only for and<br>ht application |
| In making the above disclaimer, the owner does not disclaim the terminal part of the<br>would extend to the expiration date of the full statutory term of the prior patent, "as t<br>terminal disclaimer," in the event that said prior patent later.<br>expires for failure to pay a maintenance fee;<br>is held unenforceable;<br>is found invalid by a court of competent jurisdiction;   | he term of said pric   | granted on the instant a<br>r patent is presently shi                                    | optication that<br>briteried by any                               |
| is statutority disclaimed in whole or terminally disclaimed under 37 CFR 1.3 has all claims canceled by a reexamination certificate; is reissued; or is in any manner terminated prior to the expiration of its full statutory term a  |  | ed by any terminal disch   | almer.  |
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| I hereby declare that all statements made herein of my own knowledge are<br>bellef are belleved to be true; and further that these statements were made with the k<br>made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18<br>statements may jeopardize the validity of the application or any patent issued thereon   | nowledge that will<br>of the United State  | ul faise statements and  | the like so   |
| 2. The undersigned is an attorney or agent of record. Reg. No. 24,615  |  |  |   |
| Fra & M.   | '  |  |   |
| Signature  |  | September<br>Da  | r 28, 2012<br>ate   |
|  |  |  |   |
| Francis E.<br>Typed or prir  |  |  |   |
|  |  |  |   |
|  |  | 908-277-3333<br>Telephone Numi   |   |
| Terminal disclaimer fee under 37 CFR 1,20(d) included.   |  | •  |   |
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| *Statement under 37 CFR 3.73(b) is required if terminal disclaimer is signed by the as Form PTO/SB/96 may be used for making this certification. See MPEP § 324.   |  |  |   |
| This collection of information is required by 37 CFR 1.321. The information is required to obtain or<br>to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.<br>Including gethering, preparing, and submitting the completed application form to the USPTO. The<br>on the amount of time you require to complete this form and/or suggestions for reducing this burn<br>and Trademark Office, U.S. Dopartment of Commerce, P.O. Box 1450, Alexandria, VA 22313-144<br>ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450. | 14. This collection is<br>the will vary depending<br>ien, should be sent to<br>50. DO NOT SEND F | estimated to take 12 minute<br>upon the individual case.<br>the Chief information Office | as to complete,<br>Any comments<br>zz. U.S. Patent                |

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# PAGE 3/3 \* RCVD AT 10/1/2012 5:44:19 PM [Eastern Daylight Time] \* SVR:W-PTOFAX-002/43 \* DNIS:2738300 \* CSID:9082776373 \* DURATION (mm-ss):01-03

OCT 0 1 2012

PAGE 01/03

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# OCT 0 1 2012

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Application of: Olsen et al.

Serial No. 11/634,014

Filing Date: December 4, 2006

Art Unit: 3691

Confirmation No.: 3344

Examiner: Ali, Hatem M.

Title: CURRENCY TRADING SYSTEM, METHODS AND SOFTWARE

Attorney Docket No: 60967-0020C

#### **RESPONSE TO REQUIREMENT FOR TERMINAL DISCLAIMER**

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Date: October 1 2012

Sir:

This is in response to the requirement made by phone on September 28, 2012 that applicants disclaim the terminal part of the statutory term of any patent granted on the present application that would extend beyond the expiration date of the full statutory term of parent patent 7,146,336. The terminal disclaimer is attached hereto.

The Commissioner is authorized to charge the fee of \$160.00 for the terminal disclaimer to Ward & Zinna, LLC Deposit Account No. 23-0420. Aside from the fee for a terminal disclaimer, no additional fee is believed to be due for filing this response. However, if any additional fee is due, please charge such fee to Ward & Zinna, LLC Deposit Account No. 23-0420.

Respectfully submitted,

S Maria

Francis E. Morris Reg. No. 24,615 Ward & Zinna, LLC Customer No. 086513 (908) 277-3333

1

PAGE 2/3 \* RCVD AT 10/1/2012 5:44:19 PM [Eastern Daylight Time] \* SVR:W-PTOFAX-002/43 \* DNIS:2738300 \* CSID:9082776373 \* DURATION (mm-ss):01-03

### IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

| Application of: Olsen et al                                |                  | Confirmation No.: 3344          |
|--|------------------|---------------------------------|
| Serial No.   | 11/634,014       | Art Unit: 3691                  |
| Filing Date:   | December 4, 2006 | Examiner: Ali, Hatem M.         |
| Title: CURRENCY TRADING<br>SYSTEM, METHODS AND<br>SOFTWARE |                  | Attorney Docket No: 60967-0020C |

# SECOND SUPPLEMENTAL RESPONSE TO FINAL OFFICE ACTION OF AUGUST 2, 2011

Mail Stop AF Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Sir:

#### REMARKS

In the response filed on September 4, 2012 in this matter, applicants submitted an unsigned Declaration under 37 C.F.R. §1.131 and stated that the Declaration was being circulated for signatures. The Declaration has now been signed and is being submitted herewith. To avoid duplication of papers, the Exhibits to the Declaration submitted on September4, 2012 have not been resubmitted.

The Declaration is the same as that submitted on September 4, 2012 except that paragraph 2 has been revised to state that Richard B. Olsen left the Board of Directors of OANDA Corporation in early September, 2012.

Date: September 21, 2011

espectfully submitted,

Francis E. Morris Reg. No. 24,615 Ward & Zinna, LLC Customer No. 086513 (908) 277-3333

#### IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

| Application of: Olsen et al                                |                  | Confirmation No.: 3344          |
|--|------------------|---------------------------------|
| Serial No.   | 11/634,014       | Art Unit: 3691                  |
| Filing Date:   | December 4, 2006 | Examiner: Ali, Hatem M.         |
| Title: CURRENCY TRADING<br>SYSTEM, METHODS AND<br>SOFTWARE |                  | Attorney Docket No: 60967-0020C |

#### DECLARATION UNDER 37 C.F.R. §1.131

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

WE, Richard B. Olsen and Michael Stumm, declare and state that:

- 1. We are the inventors of the above-identified patent application.
- 2. We are the co-founders of OANDA Corporation, the assignce of the above-identified patent application, and members of its Board of Directors until early September, 2012 in the case of Richard B. Olsen and until present in the case of Michael Stumm.
- 3. We conceived the invention that is recited in the above-identified patent application prior to November 28, 2000.
- 4. Evidence of this conception is set forth in the document OANDA Forexchange Currency Trading System User Interface Reference Manual, which was prepared on or before October 9, 2000. This document is attached as Exhibit A. For ease of reference, the pages of Exhibit A have been numbered by hand from 1 to 16.
- As its name indicates, Exhibit A is the reference manual for the user interface (or "Trading Station") for our currency trading system. At the time Exhibit A was

prepared on or before October 9, 2000, considerable work had been done in developing and implementing our currency trading system. As stated in the first paragraph on page 1, the interface "is used for all interaction with the trading system." The interface is shown in Figure 1 on page 3. As can be seen, the interface includes several action buttons on the left-hand side, some pull-down menus across the top, several tables that are displayed in the middle, an account summary, various currency rates, and a graph. The tables include Open Trades as shown in Figure 1 and as listed at the bottom of page 6 as well as Open Positions, Open Orders , and Transaction History, as listed at the bottom of page 6 and described at pages 7 to 10. In addition, a buy/sell window shown on page 12 is available as a pop-up upon activating the buy/sell button. The buy/sell window is used by the trading client to make trade requests.

- 6. The trading system determines and maintains current exchange rates for a plurality of currency pairs including a first price to buy and a second price to sell. These rates are transmitted to the Trading Station where they are displayed in the Current Rates table. Seven such pairs, each with first and second prices, are shown in the interface of Figure 1. As noted at the bottom of page 10, "the currency pairs [are] supported by the Trading System. They are updated in real time, approximately every 5 seconds."
- 7. If the trading client wishes to buy or sell a currency, he activates the buy/sell button which causes the buy/sell window depicted on page 12 to pop-up. Alternatively, the window can be activated by other actions set forth on page 12. The buy/sell window allows the trading client to select an action (buy/sell), a currency pair, the number of units and a requested trade price. As stated in the middle of page 13, "[t]he *rate field*

is set by the Trading Station and corresponds to the most recent exchange rate for the selected currency pair." To issue the order, the submit button must be selected as stated on page 13. This causes the order to be transmitted to the trading system.

- 8. If the order is a market order, the trading system compares the current exchange rate at that time with the requested trade price and executes the order if the current price is equal to or better than the requested price. As stated at the bottom of page 13, the current exchange rate is the "most current exchange rate maintained at the OANDA servers and not necessarily the rate displayed in the Buy/Sell window." Otherwise the trading system does not execute the trade. The trading system then reports to the trading client whether the order was successful using the acknowledgement window shown on page 13. As also indicated on page 13, the Open Trades table, the Open Position table and the Transaction History table displayed on the Trading Station are all updated to reflect the new trade.
- 9. If the order is an entry order, as described under *Rate* on page 14, the trading system compares the current exchange rate with the rate specified in the rate window and executes the trade "as soon as the exchange rate for the selected currency pair crosses the given value; that is, for buy's if the rate goes above this value, and for sell's if the rate goes below the given value." As described under *Duration* on page 14, the value in the duration window specifies how long the entry order remains effective. It can be indefinitely, until the end of the day or for an hour.
- 10. We began efforts to reduce the invention to practice well before October 9, 2000 and continued such efforts until the invention was operational.

- 11. Evidence of these efforts is set forth in the document "OANDA FX Trading Game User Interface Reference Manual". This document is attached as Exhibit B. Records available to us indicate that work was performed on the document that is Exhibit B on November 29, 2000 because that is the date it was "last modified.".
- 12. As its name indicates, Exhibit B is the reference manual for the user interface (or "Trading Station") for our FX trading game. As stated in the first paragraph on page 1, the interface "is used for all interaction with the FX trading game." The interface is shown in Figure 1 on page 3. As can be seen, the interface is the same as that for our trading system. The content of the reference manual of Exhibit B is substantially the same as the content of the reference manual of Exhibit A except for some editorial changes, the description of some additional functionality for the mouse and the completion of the listing of durations on page 9. Thus, the FX trading game as described in Exhibit B had the same functionality as the currency trading system as described in Exhibit A except that it was a game.
- 13. The FX trading game was operational no later than January 30, 2001 as indicated by the web-site image of OANDA.com reproduced as Exhibit C. OANDA.com is a web-site that was operated by OANDA Corporation at that time and still is. The image of Exhibit C was obtained earlier this year from the Wayback Machine operated by Internet Archive. The image is dated Jan 30 2001 in the upper right-hand corner. The availability of the FX Trading Game is indicated by its appearance under the heading of "Products" in the first column of this image, The FX Trading Game is also identified in the second column under the heading "Forex Trading."

- 14. The FX currency trading system was operational no later than March 3, 2001 as indicated by the web-site images of OANDA.com reproduced as Exhibit D. These images were obtained earlier this year from the Wayback Machine operated by Internet Archive. The images are dated Mar 3 and 4 2001 in the upper right-hand corner. The Mar 3 2001 page provides instructions for opening a trading account for FX Trade. The Mar 4 2001 page sets out the registration form for opening a currency trading account.
- 15. We hereby declare that all statements made herein of our knowledge are true and that all statements made on information and belief are believed to be true, and that these statements are made with knowledge that willful false statements and the like so made are punishable by fine or imprisonment. or both. Under Section 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application, and any patent issuing thereon, or any patent to which this declaration is directed.

13/9/12 Date:

Richard B. Olsen

Date Sept. 11, 2012

Michael Stumm

- 14. The FX currency trading system was operational no later than March 3, 2001 as indicated by the web-site images of OANDA.com reproduced as Exhibit D. These images were obtained earlier this year from the Wayback Machine operated by Internet Archive. The images are dated Mar 3 and 4 2001 in the upper right-hand corner. The Mar 3 2001 page provides instructions for opening a trading account for FX Trade. The Mar 4 2001 page sets out the registration form for opening a currency trading account.
- 15. We hereby declare that all statements made herein of our knowledge are true and that all statements made on information and belief are believed to be true, and that these statements are made with knowledge that willful false statements and the like so made are punishable by fine or imprisonment. or both. Under Section 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application, and any patent issuing thereon, or any patent to which this declaration is directed.

Date:\_\_\_\_\_

Date Sept. 11, 2012

Richard B. Olsen

Michael Stumm

| Electronic A                         | cknowledgement Receipt                         |
|--------------------------------------|--|
| EFS ID:                              | 13811699                                       |
| Application Number:                  | 11634014                                       |
| International Application Number:    |  |
| Confirmation Number:                 | 3344   |
| Title of Invention:                  | Currency trading system, methods, and software |
| First Named Inventor/Applicant Name: | Richard B. Olsen                               |
| Customer Number:                     | 86513  |
| Filer:                               | Frank Morris                                   |
| Filer Authorized By:                 |  |
| Attorney Docket Number:              | 60967-0020C                                    |
| Receipt Date:                        | 21-SEP-2012                                    |
| Filing Date:                         | 04-DEC-2006                                    |
| Time Stamp:                          | 17:59:22                                       |
| Application Type:                    | Utility under 35 USC 111(a)                    |

## Payment information:

| Submitted wit      | th Payment                  | no                                | no   |                     |                     |
|--------------------|-----------------------------|-----------------------------------|--|---------------------|---------------------|
| File Listing       | g:                          |                                   |  |                     |                     |
| Document<br>Number | <b>Document Description</b> | File Name                         | File Size(Bytes)/<br>Message Digest          | Multi<br>Part /.zip | Pages<br>(if appl.) |
| 1                  |                             | 60967-0020Csuppresp092112.<br>pdf | 268516                                       | yes                 | 7                   |
|                    |                             | ραι                               | 7e758c7f8769e93efffd87c3c183f86ede52c<br>c8d |                     |                     |

|  | Multipart Description/PDF files in .zip description  |  |  |  |  |  |  |
|--|--|--|--|--|--|--|--|
|  | Document Description   | Start  | End  |  |  |  |  |
|  | Supplemental Response or Supplemental Amendment  | 1  | 1  |  |  |  |  |
|  | Rule 130, 131 or 132 Affidavits  | 2  | 7  |  |  |  |  |
| Warnings:  |  |  |  |  |  |  |  |
| Information  | :  |  |  |  |  |  |  |
|  | Total Files Size (in bytes):   | 268  | 3516   |  |  |  |  |
| characterize   | vledgement Receipt evidences receipt on the noted date by the USP1<br>ed by the applicant, and including page counts, where applicable. It s<br>s described in MPEP 503.   |  |  |  |  |  |  |
| characterize<br>Post Card, a<br><u>New Applica</u><br>If a new app<br>1.53(b)-(d) a  | vledgement Receipt evidences receipt on the noted date by the USP1<br>ed by the applicant, and including page counts, where applicable. It s   | erves as evidence o<br>ponents for a filing  | of receipt similar to go of receipt similar to go of the second sec |  |  |  |  |
| characterize<br>Post Card, a<br><u>New Applica</u><br>If a new app<br>1.53(b)-(d) a<br>Acknowled <u>c</u><br><u>National Sta</u>                                 | vledgement Receipt evidences receipt on the noted date by the USPT<br>ed by the applicant, and including page counts, where applicable. It s<br>s described in MPEP 503.<br><u>ations Under 35 U.S.C. 111</u><br>lication is being filed and the application includes the necessary com<br>and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due cou<br>gement Receipt will establish the filing date of the application.<br>age of an International Application under 35 U.S.C. 371 | erves as evidence o<br>ponents for a filing<br>urse and the date sh  | of receipt similar to<br>g date (see 37 CFR<br>nown on this  |  |  |  |  |
| characterize<br>Post Card, a<br><u>New Applica</u><br>f a new app<br>I.53(b)-(d) a<br>Acknowled <u>g</u><br><u>National Sta</u><br>f a timely su<br>J.S.C. 371 a | vledgement Receipt evidences receipt on the noted date by the USP1<br>ed by the applicant, and including page counts, where applicable. It s<br>s described in MPEP 503.<br><u>ations Under 35 U.S.C. 111</u><br>lication is being filed and the application includes the necessary com<br>and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due cou<br>gement Receipt will establish the filing date of the application.  | erves as evidence o<br>ponents for a filing<br>irse and the date sh<br>is compliant with tl<br>acceptance of the a | of receipt similar to a<br>g date (see 37 CFR<br>hown on this<br>he conditions of 35<br>application as a   |  |  |  |  |

an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.

PTO/SB/30 (07-09)

|     | Approve              | d for use th | rough 07/31 | /2012. C | MB 0651-0031 | Í. |
|-----|----------------------|--------------|-------------|----------|--------------|----|
| .s. | Patent and Trademark | Office; U.S  | S. DEPARTI  | MENT O   | F COMMERCE   | ŝ  |

|   | Approved for use through 07/31/2012. ONB 0631-00.   |
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| Under the Paperwork Reduction Act of 1995, no persons are requ  | ired to respond to a collection of ir  | formation unless it c  | contains a valid OMB control number  |
|---|--|--|--|
| Request   | Application Number   | 11/634,014   |  |
| for<br>Continued Examination (RCE)  | Filing Date  | December 4   | 1, 2006  |
| Transmittal   | First Named Inventor   | Richard B.   | Disen  |
| Address to:<br>Mail Stop RCE  | Art Unit   | 3691   |  |
| Commissioner for Patents<br>P.O. Box 1450   | Examiner Name  | Hatem M. A   | li   |
| Alexandria, VA 22313-1450   | Attorney Docket Num  | ber 60967-0020   | D  |
| <ul> <li>This is a Request for Continued Examination (RCE)<br/>Request for Continued Examination (RCE) practice under 37 C<br/>1995, or to any design application. See Instruction Sheet for RC</li> <li>Submission required under 37 CFR 1.114 No<br/>amendments enclosed with the RCE will be entered in the<br/>applicant does not wish to have any previously filed uner<br/>applicant (c)</li> </ul> | FR 1.114 does not apply to ar<br><u>CEs (not to be submitted to the</u><br>te: If the RCE is proper, any p<br>te order in which they were file | y utility or plant a<br>USPTO) on page<br>reviously filed une<br>d unless applican   | pplication filed prior to June 8,<br>e 2.<br>entered amendments and<br>t instructs otherwise. If |
| amendment(s).  a.  Previously submitted. If a final Office action is considered as a submission even if this box is  i.  Consider the arguments in the Appeal B  li.  Other   | not checked.<br>rief or Reply Brief previously f   |  | ,<br>,   |
| <ul> <li>b.  Suspension of action on the above-identified period of months. (Period of suspenses b</li></ul>  | iv. Other  | ation Disclosure S<br>37 CFR 1.103(c)<br>e under 37 CFR 1.1  | for a  |
| 3. Fees The RCE fee under 37 CFR 1.17(e) is require<br>a. ✓ Deposit Account No. 23-0420   | ne following fees, any underpa   |  | credit any overpayments, to  |
| i. X RCE fee required under 37 CFR 1.17(e)  |  |  |  |
| ii. 🖌 Extension of time fee (37 CFR 1.136 and 1   | .17)   |  |  |
| iii Other b Check in the amount of \$   |  |  |  |
| c. Payment by credit card (Form PTO-2038 endose   | enclos   | 50   |  |
| WARNING: Information on this form may become public. Cr   | ,  | 1 not be included  | 1 on this form. Provide credit   |
| card information and authorization on PTO-2038.   |  |  |  |
| Signature Signature   | NT, ATTORNEY, OR AGENT   | and the second s |  |
| Name (Print/Type) Francis E. Morris   |  | Date<br>Registration No.   | September 4, 2012<br>24,615  |
|   | F MAILING OR TRANSMISSI  | -  |  |
| I hereby certify that this correspondence is being deposited with the Unite<br>addressed to: Mail Stop RCE, Commissioner for Patents, P. O. Box 1450<br>Office on the date shown below.<br>Signature  | ed States Postal Service with suffic   | ient postage as first  | class mail in an envelope<br>o the U.S. Patent and Trademark                                     |
| Name (Print/Type)   |  | ate  |  |
| This collection of information is required by 37 CFR 1.114. The informati   | on is required to obtain or retain a   | benefit by the public  | which is to file (and by the USPT)<br>ed to take 12 minutes to complete                          |

Including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Ale xandria, VA 22313-1450. DO NOT SE ND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Mail Stop RCE, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450. If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

Electronically Filed September 4, 2012

#### IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Application of: Olsen et al. .

Serial No. 11/634,014

Filing Date: December 4, 2006

Title: CURRENCY TRADING SYSTEM, METHODS AND SOFTWARE Confirmation No.: 3344

Art Unit: 3691

Examiner: Ali, Hatem M.

Attorney Docket No: 60967-0020C

#### SUPPLEMENTAL RESPONSE TO FINAL OFFICE ACTION OF AUGUST 2, 2011

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Sir:

#### REMARKS

In the office action of November 9, 2010, claims 35 - 41 were rejected under 35 U.S.C. 103(a) as unpatentable over Potter et al. (USP 5,787,402) in view of Buchalter (US H2064 H).

The Buchalter reference was filed on November 28, 2000. Applicants are submitting herewith their Declaration under 37 C.F.R. §1.131 (referred to hereafter as "Inventors' Declaration") establishing their conception of the claimed invention prior to November 28, 2000 and diligence until reduction to practice in January 2001. As a result, Buchalter is not available as a reference and the rejection of claims 35 - 41 on Potter and Buchalter should be withdrawn.

The Inventors' Declaration that accompanies this response is unsigned. The declaration is being circulated for the inventors' signatures and will be supplied when it is executed.

Claim 35 recites the steps of "determining and dynamically maintaining a plurality of current exchange rates" at a trading system server, transmitting at least one rate to a trading client server, displaying the rate to a user, accepting input from the user including a requested trade price, transmitting the input to the trading system server, comparing the requested trade price with the appropriate exchange rate at that time at the trading system server, making the trade if the rate at that time is better than the requested trade price, and reporting the results.

Each of these steps is disclosed in the document "OANDA Forexchange Currency Trading System User interface Reference Manual" October 9, 2000) that is attached as Exhibit A to the Inventors' Declaration and in the document "OANDA FX Trading Game User Interface Reference Manual" which is attached as Exhibit B. The system described in Exhibit B was operational no later than January 30, 2001 as indicated by Exhibit C. The system described in Exhibit A was operational no later than March 3 as indicated by Exhibit D.

More particularly, the Reference Manuals attached as Exhibits A and B, which are substantially similar, describe the user interface for a Trading Station. The Trading Station is used for all interactions with a trading system. With reference to the preamble of claim 35, the trading system of Exhibits A and B corresponds to the trading system server of the claim and the Trading Station corresponds to the trading client system.

The interface is shown in Figure 1 on page 3 of Exhibits A and B. The interface includes several action buttons on the left-hand side, some pull-down menus across the top, several tables that are displayed in the middle, an account summary, various currency rates, and a graph. The tables include Open Trades which is shown in Figure 1 and is listed at the bottom of page 6 as well as Open Positions, Open Orders, and Transaction History, as listed at the bottom of page 6 and described at pages 7 to 10. In addition, a buy/sell window shown on page 12 is available as a pop-up upon activating the buy/sell button.

With reference to paragraphs (i), (ii), and (iii) of claim 35, the trading system determines and maintains current exchange rates for a plurality of currency pairs including a first price to buy and a second price to sell. These rates are transmitted to the Trading Station where they are displayed in the Current Rates table. Seven such pairs, each with first and second prices, are shown in the interface of Figure 1 of Exhibits A and B. As noted at the bottom of page 10 of Exhibit A, "the currency pairs [are] supported by the Trading System. They are updated in real time, approximately every 5 seconds." Exhibit B is similar but refers to the Trading Game.

With reference to paragraphs (iv) and (v) of claim 35, if a trading client wishes to buy or sell a currency, he activates the buy/sell button which causes the buy/sell window depicted on page 12 of Exhibits A and B to pop-up. The buy/sell window allows the trading client to select an action (buy/sell), a currency pair, the number of units and a requested trade price. To issue the order to the trading system, the submit button must be selected as stated on page 13 of Exhibits A and B. This causes the order to be transmitted to the trading system.

With reference to paragraph (vi) of claim 35, the trading system server compares the requested trade price with the respective first price or second price of the corresponding current exchange rate and effects the trade if the first price or second price is equal to or better than the requested trade price or refuses the trade if it is worse as stated on page 13 of Exhibits A and B.

With reference to paragraph (vii) of claim 35, the trading system server acknowledges the trade as stated at page 13 of Exhibits A and B. In addition, the Open Trades table, the Open Position table, and the Transaction History table are updated to reflect the new trade.

It is respectfully submitted that the Inventors' Declaration and the Exhibits thereto establish conception of claim 35 before November 28, 2000.

Method claim 41 is similar to claim 35 but recites the steps of applicants' method that are performed at the trading system server. Thus, the comments above with respect to paragraphs (i), (ii). (v), (vi), and (vii) of claim 35 and their support in Exhibits A and B are also believed to be applicable to paragraphs (i), (ii), (ii), (iv), and (v), respectively, of claim 41. For these reasons, it is respectfully submitted that the Inventors' Declaration and the Exhibits thereto also establish conception of claim 41 before November 28, 2000.

Reduction to practice of claims 35 and 41 no later than January 30, 2001 is established by Exhibits C and D which are images of the OANDA Corporation's web-site on January 30, 2001 and on March 3 And 4, 2001. These images were obtained from the Wayback Machine operated by Internet Archive. The images are dated in the upper right-hand corner. The availability of the FX Trading Game as of January 30, 2001 is indicated by its appearance in Exhibit C under the heading of "Products" in the first column of this image, The FX Trading Game is also identified in the second column under the heading "Forex Trading." The availability of the FX currency trading system no later than March 3 - 4, 2001 is indicated by the instructions on the March 3, 2001 web page for opening a trading account for FX Trade and the registration form on the March 4, 2001 web page for opening a currency trading account.

Evidence of diligence between November 28, 2000 and January 30, 2001 includes Exhibit B which has a "last modified" date on November 29, 2000.

For the foregoing reasons, it is respectfully submitted that applicants have established that the invention recited in claims 35 and 41 was conceived before the November 28, 2000 filing date of the Buchalter reference and that diligent efforts were made to reduce the invention to practice by no later than January 30, 2001.

Dependent claims 36 - 40 are believed patentable for the same reason claim 35 is patentable.

Accordingly, it is respectfully submitted that Buchalter is not available as a reference and that the claims in this application are patentable over Potter and Buchalter..

Aside from the fee for an RCE and an extension of time, no additional fee is believed to be due for filing this response. However, if any additional fee is due, please charge such fee to Ward & Zinna, LLC Deposit Account No. 23-0420.

If the Examiner believes a telephone interview would expedite prosecution of this application, the Examiner is invited to call applicants' attorney at the number given below.

Respectfully submitted,

Date: September 4, 2011

/Francis E. Morris/\_\_\_\_

Francis E. Morris Reg. No. 24,615 Ward & Zinna, LLC Customer No. 086513 (908) 277-3333

#### IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Application of: Olsen et al. .

Serial No. 11/634,014

Filing Date: December 4, 2006

Title: CURRENCY TRADING SYSTEM, METHODS AND SOFTWARE Confirmation No.: 3344

Art Unit: 3691

Examiner: Ali, Hatem M.

Attorney Docket No: 60967-0020C

#### DECLARATION UNDER 37 C.F.R. §1.131

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

WE, Richard B. Olsen and Michael Stumm, declare and state that:

- 1. We are the inventors of the above-identified patent application.
- 2. We are the co-founders of OANDA Corporation, the assignee of the above-identified patent application, and members of its Board of Directors.
- 3. We conceived the invention that is recited in the above-identified patent application prior to November 28, 2000.
- 4. Evidence of this conception is set forth in the document OANDA Forexchange Currency Trading System User Interface Reference Manual, which was prepared on or before October 9, 2000. This document is attached as Exhibit A. For ease of reference, the pages of Exhibit A have been numbered by hand from 1 to 16.
- 5. As its name indicates, Exhibit A is the reference manual for the user interface (or "Trading Station") for our currency trading system. At the time Exhibit A was

prepared on or before October 9, 2000, considerable work had been done in developing and implementing our currency trading system. As stated in the first paragraph on page 1, the interface "is used for all interaction with the trading system." The interface is shown in Figure 1 on page 3. As can be seen, the interface includes several action buttons on the left-hand side, some pull-down menus across the top, several tables that are displayed in the middle, an account summary, various currency rates, and a graph. The tables include Open Trades as shown in Figure 1 and as listed at the bottom of page 6 as well as Open Positions, Open Orders , and Transaction History, as listed at the bottom of page 6 and described at pages 7 to 10. In addition, a buy/sell window shown on page 12 is available as a pop-up upon activating the buy/sell button. The buy/sell window is used by the trading client to make trade requests.

- 6. The trading system determines and maintains current exchange rates for a plurality of currency pairs including a first price to buy and a second price to sell. These rates are transmitted to the Trading Station where they are displayed in the Current Rates table. Seven such pairs, each with first and second prices, are shown in the interface of Figure 1. As noted at the bottom of page 10, "the currency pairs [are] supported by the Trading System. They are updated in real time, approximately every 5 seconds."
- 7. If the trading client wishes to buy or sell a currency, he activates the buy/sell button which causes the buy/sell window depicted on page 12 to pop-up. Alternatively, the window can be activated by other actions set forth on page 12. The buy/sell window allows the trading client to select an action (buy/sell), a currency pair, the number of units and a requested trade price. As stated in the middle of page 13, "[t]he *rate field*

is set by the Trading Station and corresponds to the most recent exchange rate for the selected currency pair." To issue the order, the submit button must be selected as stated on page 13. This causes the order to be transmitted to the trading system.

- 8. If the order is a market order, the trading system compares the current exchange rate at that time with the requested trade price and executes the order if the current price is equal to or better than the requested price. As stated at the bottom of page 13, the current exchange rate is the "most current exchange rate maintained at the OANDA servers and not necessarily the rate displayed in the Buy/Sell window." Otherwise the trading system does not execute the trade. The trading system then reports to the trading client whether the order was successful using the acknowledgement window shown on page 13. As also indicated on page 13, the Open Trades table, the Open Position table and the Transaction History table displayed on the Trading Station are all updated to reflect the new trade.
- 9. If the order is an entry order, as described under *Rate* on page 14, the trading system compares the current exchange rate with the rate specified in the rate window and executes the trade "as soon as the exchange rate for the selected currency pair crosses the given value; that is, for buy's if the rate goes above this value, and for sell's if the rate goes below the given value." As described under *Duration* on page 14, the value in the duration window specifies how long the entry order remains effective. It can be indefinitely, until the end of the day or for an hour.
- 10. We began efforts to reduce the invention to practice well before October 9, 2000 and continued such efforts until the invention was operational.

- 11. Evidence of these efforts is set forth in the document "OANDA FX Trading Game User Interface Reference Manual". This document is attached as Exhibit B. Records available to us indicate that work was performed on the document that is Exhibit B on November 29, 2000 because that is the date it was "last modified.".
- 12. As its name indicates, Exhibit B is the reference manual for the user interface (or "Trading Station") for our FX trading game. As stated in the first paragraph on page 1, the interface "is used for all interaction with the FX trading game." The interface is shown in Figure 1 on page 3. As can be seen, the interface is the same as that for our trading system. The content of the reference manual of Exhibit B is substantially the same as the content of the reference manual of Exhibit A except for some editorial changes, the description of some additional functionality for the mouse and the completion of the listing of durations on page 9. Thus, the FX trading game as described in Exhibit B had the same functionality as the currency trading system as described in Exhibit A except that it was a game.
- 13. The FX trading game was operational no later than January 30, 2001 as indicated by the web-site image of OANDA.com reproduced as Exhibit C. OANDA.com is a web-site that was operated by OANDA Corporation at that time and still is. The image of Exhibit C was obtained earlier this year from the Wayback Machine operated by Internet Archive. The image is dated Jan 30 2001 in the upper right-hand corner. The availability of the FX Trading Game is indicated by its appearance under the heading of "Products" in the first column of this image, The FX Trading Game is also identified in the second column under the heading "Forex Trading."

- 14. The FX currency trading system was operational no later than March 3, 2001 as indicated by the web-site images of OANDA.com reproduced as Exhibit D. These images were obtained earlier this year from the Wayback Machine operated by Internet Archive. The images are dated Mar 3 and 4 2001 in the upper right-hand corner. The Mar 3 2001 page provides instructions for opening a trading account for FX Trade. The Mar 4 2001 page sets out the registration form for opening a currency trading account.
- 15. We hereby declare that all statements made herein of our knowledge are true and that all statements made on information and belief are believed to be true, and that these statements are made with knowledge that willful false statements and the like so made are punishable by fine or imprisonment. or both. Under Section 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application, and any patent issuing thereon, or any patent to which this declaration is directed.

Date:\_\_\_\_\_

Richard B. Olsen

Date\_\_\_\_\_

Michael Stumm

# Exhibit A

## **OANDA Forexchange Currency Trading System**

## User Interface Reference Manual

Preliminary Draft: October 9, 2000

Note: this is a very preliminary draft. Hence:

- It is still incomplete
- Terminology is being used in inconsistent or suboptimal ways
- The Index is incomplete and not well done
- A lot of hyperlinks still need to be added
- The figures don't necessarily match the descriptions (where we still need to update the figures.
- Etc.

#### Overview

This manual describes the User Interface of OANDA's Forexchange Currency Trading System. The User Interface is called "*Trading Station*," and it is used for all interaction with the trading system, such as analyzing changes in currency exchange rates, reviewing your current currency positions, reviewing your past transactions, or issuing buy and sell requests. The key features of the Trading Station are:

- Runs on any of the popular Web browsers connected to the Internet
- Displays continuously updated currency exchange rates in real-time
- Displays all pertinent information in one window.
- All interaction with the server occurs over fully encrypted Internet connections.

#### **Intended Audience**

The manual is intended for those individuals wishing to use the Trading Station or existing users of the Trading Station who wish to learn about additional features. Although use of the Trading Station is pretty much self-explanatory, some users may find the contents of the manual useful for learning about some of the more salient details.

It is assumed that the reader has some familiarity with the currency markets and currency trading terminology. The following sister documentation may be useful for obtaining additional information:

- Currency Market Overview
- Trading Currencies with OANDA's Forexchange Trading System

#### System Requirements

The User Interface is implemented in Java and should run on any browser with JDK1.2 support, which includes all Netscape Navigators versions 4.2 and up as well as Microsoft's Internet Explorer versions 5.0 and up. The Trading Station is supported for Windows 95, Windows 98, Windows 2000, Windows NT, Linux, Sun Solaris, and other Unix-based operating systems.

If operated from behind a firewall, then the Trading Station will operate properly only if the firewall allows HTTP requests to Port 90. If the Trading Station is repeatedly unable to connect to the Trading System Server, then you should contact your system administrator.

#### Contents

Overview Log In Procedure Main Window of Trading Station Action Buttons Pull-down Menus Account Summary Tables Currency Rates Graph Buy/Sell Window Transaction History Table Forums Web Page Analysis Web Page

#### Log In Procedure

In order to log in, you must be a registered user. Registering is free and can be accomplished by clicking on the "new users" link on the login page.

Logging in requires you to provide a user-id and password. If you forget your password, click on the "forgot your password" link and fill in the information requested; your password will be then be emailed to you.

If user-id and password are entered correctly, a small window appears indicating that the Trading Station is being loaded. After a short time, a larger window appears with the Trading Station Graphical User Interface. Once the Trading Station is properly loaded, the contents of the small window is changed to include a number of useful links. *It is important that this small window not be closed while the Trading Station is to remain operation*, although it may be minimized so as not to be in your way. (This small window is necessary due to the limitations of typical Java implementations on most browsers that would otherwise not allow you to continue browsing the Web while the User Interface is active.)

## Main Window of Trading Station

The Trading Station user interface is shown in Figure 1. It can be resized to a convenient size, by using the standard resizing mechanisms supported by your operating system's windowing system.

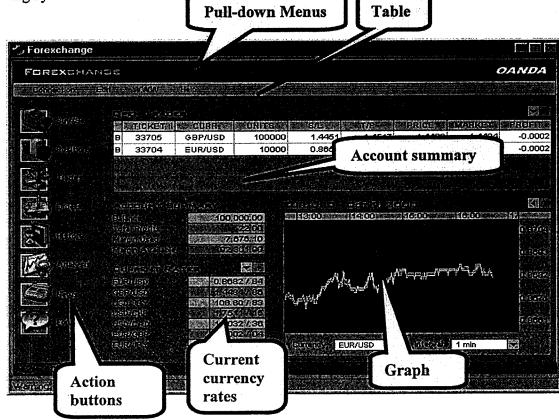


Figure 1: Trading Station User Interface

The Trading Station is partitioned into a number of components that each serve a different purpose:

- A. <u>Action buttons</u>: a vertical panel located on the left hand side of the Trading Station contains a set of action buttons that allow you to perform the most common operations.
- B. <u>Menus</u>: a set of pull-down menus across the top allow you to invoke additional operations.
- C. <u>Account summary</u>: an area in the middle of the Trading Station that gives a summary of your account.
- D. <u>Table</u>: an area located across the top of the Trading Station that is used to display various information in tabular format. The information displayed depends on the

most recently clicked Action Button. It might display currently held instruments, current open positions, or a history of recent transactions.

- E. <u>Currency rates</u>: an area at the bottom left that displays various currency rates. These rates are continuously updated in real time.
- F. <u>Graph</u>: located at the bottom-right corner, graphs display currency rates over time. The graphs are also updated in real-time as new rates become available.

Subsequent sections describe each of these components in detail.

#### Action Buttons

The Trading Station currently has the following action buttons in a panel on the left side. Clicking one will invoke the described operation:

Buy/Sell

Pops up a Buy/Sell window, from which you can issue trade requests. (See <u>buy/sell window</u> for more information.)

## Po

Positions

Displays the currently open positions in the table. (See the description of the <u>Open PositionsTable</u> for the contents of the table.)



#### Trades

Displays the currently open trades in the table. (See the description of the <u>Open Trades Table</u> for the contents of the table.)



#### Orders

Displays the open orders (that may be executed some time in the future) in the table.

(See the description of the Open Orders Table for the contents of the table.)



#### History

Displays a recent history of your transactions in the table. (See the description of the <u>History Table</u> for contents of the table.)



Pops up a new browser window with access to a number of analysis tools that might help in making trading decisions.

(See the <u>Analysis section</u> for a description of what tools are currently available.)



Pops up a new browser window with the latest currency news.



#### Forums

pops up a new browser window with access to a number of forums (sometimes known as newsgroups) that allow you to participate in discussions with other traders and currency trading experts.

(See the Forums section for a description of the forums and how to use them

#### **Pull-down Menus**

There are 5 pull-down menus, each offering different operations or services:

- Connection
  - **Disconnect**: disconnects the Trading Station from the OANDA Trading Server. The Trading Station will remain open, but currency rates will no longer be updated, and transactions will not be possible.
  - o Connect: connect the Trading Station to the server, so you are back on line
  - o *Quit*: quit and exit this application.
- Account
  - Transaction history: pop up a new browser window to display an extensive list of all transactions that occurred on your account.
     See he <u>Transaction History section</u> for a description of what is displayed.
  - *Clear account balance and P/L*: for those who have incurred large losses on their game account, this operation allows you to start over again with a cleared P/L and new funds in the account.
  - Add funds to account: for a game account, add funds to the account; for a real-money account, transfer money into the account from your credit card or obtain instructions on how to wire transfer money into your account.
  - o Buy/Sell: issue a trade or market order.
  - Open positions: display the open positions in the table.
  - o *Open trades*: display all open trades in the table.
  - o Open orders: display all open orders in the table.
  - *Recent transaction history*: display the most recent transactions in the table.
- Commands
  - o Change passwords
  - o *Graph*: specify the currency pair should be displayed in the graph
- Information

- *Interest rates*: display interest rate information in a separate browser window.
- *Market News*: display up-to-date currency market news in a separate browser window.
- o Analysis tools: use one of OANDA's analysis tools in a separate window.
- o Forum: participate in various forums related to currency trading.
- *Rankings*: see a list of the most successful currency traders using OANDA's Forexchange Currency Trading System
- Help
  - o *Documentation*: links to documents, such as this one.
  - o *About*: display software version number and see credits.
  - **Debug**: display debugging information in a new window. If you encounter technical difficulties, it may be useful to send the information (using cut-and-paste) in this window to OANDA's technical support.

## Account Summary

The account summary is a small table giving a summary of your account status. It shows:

- Account Balance: the amount of your cash holding in your account.
- Realized P/L: the amount of profit or loss you have incurred with your trading activity to date.

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- Unrealized P/L: the amount of profit or loss that you hold with your current open positions. If you clear all your open positions, then this amount would be added to the Realized P/L amount.
- Margin Used: the amount of your account balance and unrealized P/L tied up for margin purposes. (See Margin Rules for more information on how margin works.)
- Margin Available: the amount of your account balance and unrealized P/L available as margin for new trading transactions. . (See Margin Rules for more information on how margin works.)

This information is continuously updated in real-time to take current market conditions into account. Moreover, the information is always shown in the account's home currency.

### Tables

The table area of the Trading Station shows different information depending on the last Action Button selected. It can include:

- Open trades
- Open positions
- Open orders
- <u>Transaction history</u>

The default is open positions.

#### Mouse Actions:

How the information in the table is displayed can be controlled in two ways:

- 1. *Scroll bars* are used to scroll the table up or down, allowing you to see information that is hidden from view.
- 2. *Sorting* can be achieved by clicking on a column header, which causes the table to be sorted so that the column is in increasing or decreasing order. Clicking once sorts the column in increasing order; clicking again sorts it in decreasing order.

For all tables except Transaction history, clicking on a row of the table will cause a popup window to appear, offering further actions for that open trade, position, or order.

#### **Open Trades Table**

The open trades table shows a list of your currently open trades.

|   | ernice |         |        |        |             |        |        | 53           |
|---|--------|---------|--------|--------|-------------|--------|--------|--------------|
|   | TICKET | CURR    | MUNITS | SIL    | ·教尔/P: 指数 例 | PRICE  | ARKEN  | <b>HROHA</b> |
| S | 33760  | USD/CHF | 100000 |        |             | 1.7415 | 1.7413 | 0.000        |
| s | 33759  | EUR/USD | 65000  | 0.8715 | 0.8668      | 0.8689 | 0.8692 | -0.000       |
|   |        |         |        |        |             |        |        |              |

The table has 9 columns, described from left to right:

- 1. *Short/Long*: Indicates whether the position is short or long.
- 2. *Ticket Number*: a number that uniquely identifies an open trade. You can use this number as a reference for inquiries to OANDA, or to search for particular entries in the transaction history table.
- 3. *Currency pair*: the pair of currencies involved in this trade. The first currency of the pair is referred to as the *base currency*, while the second one is referred to as the *quote currency*.
- 4. Units: the number of transacted units for this trade, expressed in the base currency.
- 5. *S/L*: your stop-loss for this trade. This trade will be closed automatically as soon as the currency exchange rate for this currency pair crosses the S/L value. A stop-loss limit is used to limit the loss you may incur with this trade.
- 6. *T/P*: your take-profit for this trade. This trade will be closed automatically as soon as the currency exchange rate for this currency pair crosses the T/P value. A take-profit limit is used to realize your profit as soon as it reaches the T/P value.
- 7. *Rate*: the exchange rate obtained when the trade got executed.
- 8. *Market*: the current exchange rate for this currency pair.
- 9. *Profit*: the unrealized profit (when positive) or loss (when negative) expressed in base currency and on a per unit basis.

#### Mouse actions:

• Clicking on the scroll buttons will cause the table to scroll up or down...

- Clicking on a column header will *sort* the table so that the contents of the column are displayed in increasing or decreasing order.
- Clicking on a row with an open trade will cause a pop-up window to appear offering two operations:
  - 1. Close trade.
  - 2. *Modify trade*. This is used to modify the S/L or the T/P limits.

#### **Positions Table**

The Open Position Table displays a list of your open positions. It is similar to the Open Trades table, except that all trades of the same currency pair are aggregated into one line.

|      | <b>CURR</b> SEC | UNITS  | AVGUERICE | MARKET MARKE |         |
|------|-----------------|--------|-----------|--------------|---------|
| S    | USD/CHF         | 100000 | 1.7415    | 1.7407       | 8000.0  |
| . \$ | EUR/USD         | 65000  | 0.8689    | 0.8697       | -0.0008 |
|      |                 |        |           |              |         |

The table has 5 columns, described from left to right:

- 1. *Short/Long*: Indicates whether the position is short or long.
- 2. *Currency pair*: the pair of currencies the position refers to. The first currency of the pair is referred to as the *base currency*, while the second one is referred to as the *quote currency*.
- 3. Units: the number of units held in this position, expressed in the base currency.
- 4. *Rate*: the average exchange rate obtained for the trades in this position.
- 5. Market: the current exchange rate for this currency pair.
- 6. *Profit*: the unrealized profit (when positive) or loss (when negative) expressed in base currency and on a per unit basis.

#### Mouse actions:

- Clicking on the scroll buttons will cause the table to *scroll* up or down.
- Clicking on a column header will *sort* the table so that the contents of the column displayed in increasing or decreasing order.
- Clicking on a row with an open position will cause a pop-up window to appear offering the option to *close the position*.

#### **Open Orders Table**

The Open Orders Table shows a list of your currently open orders. An open order is a request that a particular trade should be made automatically when the exchange rate of the specified currency pair crosses a specified threshold.

| 然        | ORDER  | CURR    | UNITS         | ₽ <b>~ \$/</b> £†1\$}} | T/P  | PRICE  | MARKET | DURATIC  |
|----------|--------|---------|---------------|------------------------|--|--------|--------|----------|
| В        | 245    | EUR/JPY | 200000        | 93.203                 | 93.789   | 93.512 | 93.509 | Undefine |
|          | 100000 |         | <b>WARA</b> A |                        | <b>APRIL POR</b>   |        |        |          |
|          |        |         |               |                        |  |        |        |          |
| Sardin . |        |         |               | in the second          | and the second |        |        |          |

The table has 9 columns, described from left to right:

- 1. *Short/Long*: Indicates whether the position is short or long.
- 2. *Order Id*: a number that uniquely identifies the order. You can use this number as a reference for inquiries to OANDA.
- 3. *Currency pair*: the pair of currencies to be traded.
- 4. Units: the number of units to be traded, expressed in the base currency.
- 5. *S/L*: the stop-loss for this trade. This trade, once executed, will be closed automatically as soon as the currency exchange rate for this currency pair crosses the S/L value. A stop-loss limit is used to limit the loss you may incur with this trade.
- 6. *T/P*: your take-profit for this trade. This trade, once executed, will be closed automatically as soon as the currency exchange rate for this currency pair crosses the T/P value. A take-profit limit is used to realize your profit as soon as it reaches the T/P value.
- 7. *Rate*: specifies that the trade should be executed as soon as the exchange rate for the specified currency pair crosses this value.
- 8. Market: the current exchange rate for this currency pair.
- 9. *Duration*: specifies the amount of time an order should stand, until it is automatically cancelled. The following durations are allowed:
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  - ٠
  - ٠
  - •
  - •

#### Mouse actions:

- Clicking on the scroll buttons will cause the table to scroll up or down..
- Clicking on a column header will *sort* the table so that the contents of the column are displayed in increasing or decreasing order.
- Clicking on a row with an order will cause a pop-up window to appear offering two operations:
  - 3. Cancel order.
  - 4. *Modify order*. This is used to modify the exchange rate threshold at which the trade is to be executed, or the S/L or T/P limits.

#### **Transactions Table**

The Transactions Table shows a list of the most recent transaction on the account. For access to a full list of past transactions, select the Information pull-down menu and select Transaction History.

| Cases on lister |             |  |   |  |  |
|-----------------|-------------|--|---|--|--|
| TRANSACTION     | TYPE        | CURR   | UNITS   | PRICE  | DATEMIME .   |
| 56958           | Buy Market  | EUR/USD  | 10000   | 0.8684   | Oct 9, 2000, 18:42                                   |
| 56959           | Buy Market  | GBP/USD  | 100000  | 1.4486   | Oct 9, 2000, 16:43                                   |
| 57001           | Take Profit | GBP/USD  | 100000  | 1.4604   | Oct 11, 2000, 12:38                                  |
| 57021           | Buy Market  | EUR/USD  | 25000   | 0.8688   | Oct 11, 2000, 15:04                                  |
| 57022           | Sell Market | EUR/USD  | 25000   | 0.8689   | Oct 11, 2000, 15:07                                  |
|                 |             | in a statistican trians made and an additional a | ethellesia politi oluba analondolain ehelasiada ethe har esp we | halangannan ganahili waa muunkun waa da Adahat da da | And open in the server waves there do not a server a |

The Transaction History Table has 6 columns, described from left to right:

- 1. Transaction Id: uniquely identifies the transaction.
- 2. *Type*: identifies the type of transaction.
- 3. *Currency pair*: the pair of currencies associated with the transaction.
- 4. *Units*: the number of units to traded in the transaction, expressed in the base currency.
- 5. *Price*: the currency exchange rate applied when buying or selling a currency pair.
- 6. Date/Time: the date and time of the transaction.

#### Mouse actions:

- Clicking on the scroll buttons will cause the table to scroll up or down.
- Clicking on a column header will *sort* the table so that the contents of the column are displayed in increasing or decreasing order.

#### **Currency Rates**

The Currency Rates Table shows the current exchange rate for the currency pairs supported by the Trading System. They are updated in real time, approximately every 5 seconds. When there is a significant exchange rate movement for a currency pair, up/down indicators show direction of the rate change in order to alert you, should you not currently have the currency pair displayed in the graph.

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|---------------------------------|--------------------|
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|                                 |                    |
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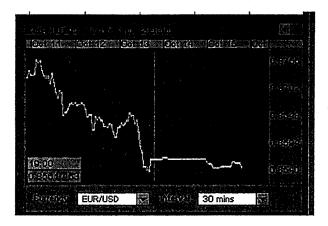
#### Mouse actions:

- Clicking on the scroll buttons will cause the table to *scroll* up or down.
- Clicking on a currency pair's ask price will pop up a *buy* window for that currency pair.
- Clicking on a currency pair's bid price will pop up a *sell* window for that currency pair.

### Graph

Graphs show how currency exchange rates change over a period of time, ranging from minutes to months. All graphs are updated in real-time, as new currency rates arrive.

At any given time, the difference between the lower boundary and the upper boundary of the curve represents the difference between the bid and the ask price, and the difference may vary over time depending on market conditions Thus, the top part of the



curve indicates the ask price, and the bottom of the curve indicates the bid price.

As the mouse is moved over the graph, a sub-area in the graph shows precise exchange rate information for the target currency pair corresponding to the time instance represented by the position of the mouse.

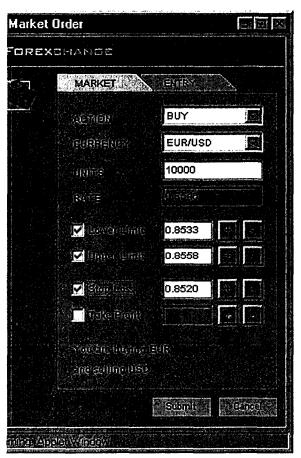
The graph may also display *Buy or Sell widgets* that indicate at which point in time you bought or sold a currency pair. Downward pointing red arrows indicate a sold currency pair (where you are hoping the rates will go down after that point), and upward pointing green arrows indicate a bought currency pair (where you are hoping the rates will go up after that point).

You can adjust what is shown in the graph:

- The *Currency pair* displayed is selected using the pull-down menu at the bottom left.
- The *granularity of the graph* is selected using the pull-down menu at the bottom right of the graph. Selecting a fine granularity, such as 5 seconds (where each point on the horizontal axis represents 5 seconds of time) will display a relatively short time interval (less than an hour, in this case). Selecting a larger granularity, such as one day will display longer term trends (9 months of exchange rate information in this case).

Mouse Actions:

- *Scroll buttons* at the top right of the graph area allow you to shift the time interval shown to the left or to the right (backward or forward in time).
- Clicking on the graph with the mouse will *hide the Buy/Sell widgets*: Clicking again, will cause them to reappear.
- Positioning the mouse over a certain instance of time causes the precise exchange rate information for the target currency pair to be displayed in a sub-area of the graph.



## **Buy/Sell Window**

The Buy/Sell pop-up window allows allows you to issue buy/sell orders. The window can be caused to pop up, either by:

Clicking on the Buy/Sell action button

• Clicking on the bid or ask price in the Currency Rates Table, or by

• Clicking on an existing trade, position, or order in the Table area.

Two types of orders are supported:

1. *Market Orders* are orders that are transacted immediately based on market exchange rates

2. *Entry Orders* are orders that are executed when the exchange rate crosses a certain threshold. The type of order can be selected by clicking on the appropriate tab in the Buy/Sell Window. Market order comes up as the default order.

#### **Issuing a Market Order**

To issue a market order with the Buy/Sell Window and the Market Tab selected, a number of fields must be filled out (most of the fields are pre-initialized with reasonable values):

- Action: choose between buy and sell.
- *Currency*: choose the currency pair you wish to buy or sell. By default, this field will be initialized as follows:
  - If the *Buy/Sell button* was used to obtain the window: the currency pair currently shown in the graph.
  - If the bid or ask price was clicked to obtain the window: the currency pair for which the price was clicked.
  - If a trade or position was clicked in the Table area: the currency pair corresponding to the trade or position.

The pull-down menu can be used to select another currency pair.

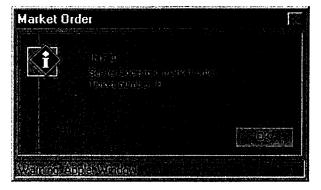
12

• Units: the number of units of the currency pair you wish to buy or sell, with units expressed in terms of the base currency.

- Lower limit: the order will result in a trade, only if a price is obtained that does lie lower than this limit. By default, no limit is selected, but one can be set by checking the check box. If the check box is checked, then the field is automatically initialized with a reasonable value; however the value can be changed either by modifying the number directly or by using the +/- buttons to increase or decrease the value, respectively.
- Upper limit: the order will result in a trade, only if a price is obtained that does lie higher than this limit. By default, no limit is selected, but one can be set by checking the check box. If the check box is checked, then the field is automatically initialized with a reasonable value; however the value can be changed either by modifying the number directly or by using the +/- buttons to increase or decrease the value, respectively.
- Stop Loss: if the order results in a trade, then the stop-loss value given will be associated with the trade. By default, no stop-loss limit is selected, but one can be set by checking the check box. If the check box is checked, then the field is automatically initialized with a reasonable value; however the value can be changed either by modifying the number directly or by using the +/- buttons to increase or decrease the value, respectively.
- *Take Profit*: if the order results in a trade, then the stop-loss value given will be associated with the trade. By default, no take profit limit is selected, but one can be set by checking the check box. If the check box is checked, then the field is automatically initialized with a reasonable value; however the value can be changed either by modifying the number directly or by using the +/- buttons to increase or decrease the value, respectively.

The *rate field* is set by the Trading Station and corresponds to the most recent exchange rate for the selected currency pair.

To issue the order, the Submit Button must be selected. If the order is successful, and a trade occurs, then an acknowledgement window pops up with a Ticket number that can be used for future references. Moreover, the **Open Trades Table** will be updated to reflect the new trade, as will the **Open Positions Table** and the **Transaction History Table**.



Several issues are important to note:

- 1. If an order is successful and a trade occurs, then the exchange rate obtained for the trade will correspond to the most current exchange rate maintained at the OANDA servers and not necessarily the rate displayed in the Buy/Sell window.
- 2. An order without Lower and Upper Limits will always result in a trade.
- 3. An order with Lower and Upper Limits will result in a trade if and only if the exchange rate for the potential trade lies between the two limits.

#### **Issuing an Entry Order**

To issue an entry order with the Buy/Sell Window and the Entry Tab selected, a number of fields must be filled out (most of the fields are preinitialized with reasonable values):

- *Action*: choose between buy and sell.
- *Currency*: choose the currency pair you wish to buy or sell. By default, this field will be initialized as follows:
  - If the *Buy/Sell button* was used to obtain the window: the currency pair currently shown in the graph.
  - If the bid or ask price was clicked to obtain the window: the currency pair for which the price was clicked.

The pull-down menu can be used to select another currency pair.

| MARKET          | ENTRY   |   |
|-----------------|---------|---|
|                 | BUY     | E |
| <b>MURBER</b>   | EUR/USD |   |
| UNIRS           | 100     |   |
|                 | 0.8546  |   |
| Burthon         | Today   | E |
| 🛃 Stop vints    | 0.8520  |   |
|                 | 0.8571  |   |
|                 |         |   |
| and solling boy |         |   |
|                 |         |   |

- Units: the number of units of the currency pair you wish to buy or sell, with units expressed in terms of the base currency.
- *Rate:* the order will result in a trade as soon as the exchange rate for the selected currency pair crosses the given value; that is, for buy's if the rate goes above this value, and for sell's if the rate goes below the given value
- **Duration**: this value is used to limit the amount of time an outstanding order will remain effective. By default, the order remains effective indefinitely. However, the duration can be set to until the end of the day or for an hour.
- Stop Loss: if the order results in a trade, then the stop-loss value given will be associated with the trade. By default, no stop-loss limit is selected, but one can be set by checking the check box. If the check box is checked, then the field is automatically initialized with a reasonable value; however the value can be changed either by modifying the number directly or by using the +/- buttons to increase or decrease the value, respectively.
- *Take Profit*: if the order results in a trade, then the stop-loss value given will be associated with the trade. By default, no take profit limit is selected, but one can be set by checking the check box. If the check box is checked, then the field is automatically initialized with a reasonable value; however the value can be changed either by modifying the number directly or by using the +/- buttons to increase or decrease the value, respectively.

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To issue the order, the Submit Button must be selected, which results an acknowledgement window poping up with a Ticket number that can be used for future references. Moreover, the *Open Orders Table* will be updated to reflect the new order. Note that you can modify the parameters of an open order (including the rate representing the trade threshold, or the S/L and T/P) by clicking on the order in the Open Orders Table.

### Transaction History Table

Forums Web Page

#### Analysis Web Page

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## Exhibit B

## **OANDA FX Trading Game**

## User Interface Reference Manual

#### Overview

This reference manual describes the User Interface of OANDA's Currency Trading Game. The User Interface is called "*Trading Station*," and is used for all interaction with the FX Trading Game, such as analyzing changes in currency exchange rates, reviewing current currency positions, reviewing past transactions, or issuing buy and sell requests. The key features of the Trading Station are:

- Runs on any of the popular Web browsers connected to the Internet.
- Displays continuously updated currency exchange rates in real-time.
- Displays all pertinent information in one window.
- All interaction with the server occurs over fully encrypted Internet connections.

Although the Trading Station is intuitive to use and does not require a manual per se, specific descriptions of its capabilities are described here, as are some of the more salient details that may be of use to more advanced users of the Trading Station. Note that this is a reference manual, organized for easy lookup, not necessarily serial read-through.

It is assumed that the reader has some familiarity with the currency markets and currency trading terminology. The following sister documentation may be useful for obtaining additional information:

- Currency Market Overview
- Trading Currencies with OANDA's FX Trading Game
- Glossary

#### **System Requirements**

The Trading Station is implemented in Java and runs on any browser with JDK1.1 support, which includes all Netscape Navigators versions 4.04 and up, as well as Microsoft's Internet Explorer versions 4.0 and up. If you do not have one of these browsers, then you may freely download them from <u>Netscape</u> or <u>Microsoft</u>. The Trading Station is supported for Windows 95, Windows 98, Windows 2000, Windows NT, Linux, Sun Solaris, and other Unix-based operating systems.

If operated from behind a firewall, the Trading Station will operate properly only if the firewall allows HTTP requests to Port 80. If the Trading Station is repeatedly unable to connect to the FX Trading Game Server, then you should contact your system administrator. If the problem persists, then send email to <u>mailto:techsupport@oanda.com</u>.

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Overview Login Procedure Main Window of Trading Station Action Buttons Pull-down Menus Account Summary Tables Currency Rates Graph Buy/Sell Window

#### Log In Procedure

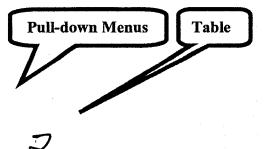
In order to log in, you must be a registered user. Registering is free and can be accomplished by clicking on the "new users" link on the login page.

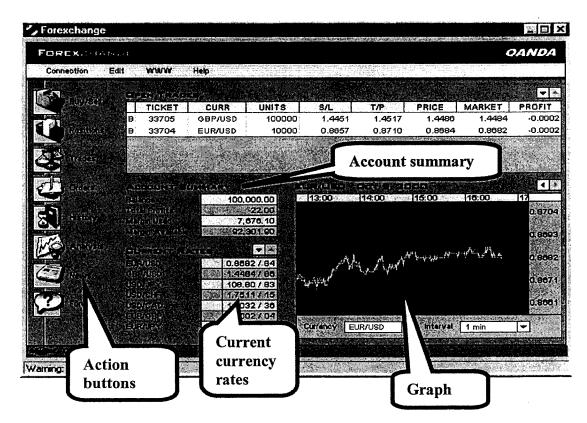
Logging in requires you to provide a user-id and password. Both the user-id and password are case sensitive. If you forget your password, click on the "forgot your password" link and fill in the information requested; your password will be then be emailed to you.

If the user-id and password are entered correctly, a small window appears indicating that the Trading Station is being loaded. After a short time, a larger window appears with the Trading Station Graphical User Interface. Once the Trading Station is properly loaded, the contents of the small window will change to include a number of useful links. *It is important that this small window not be closed while the Trading Station is to remain operation*, although it may be minimized so as not to be in your way. (This small window is necessary due to the limitations of typical Java implementations on most browsers that would otherwise not allow you to continue browsing the Web while the User Interface is active.)

#### Main Window of Trading Station

The Trading Station user interface is shown in Figure 1. It can be resized using the standard mechanisms supported by your operating system's windowing system.





**Figure 1: Trading Station User Interface** 

The Trading Station is partitioned into a number of components that each serve a different purpose:

- A. <u>Action buttons</u>: a vertical panel located on the left hand side of the Trading Station contains a set of action buttons that allow you to perform the most common operations.
- B. <u>Menus</u>: a set of pull-down menus across the top allow you to invoke additional operations.
- C. <u>Account summary</u>: an area in the middle of the Trading Station that gives a summary of your account.
- D. <u>Table</u>: an area located across the top of the Trading Station that is used to display various information in tabular format. The information displayed depends on the most recently clicked Action Button. It might display currently held instruments, current open positions, or a history of recent transactions.
- E. <u>Currency rates</u>: an area at the bottom left that displays various currency rates. These rates are continuously updated in real time.
- F. <u>Graph</u>: located at the bottom-right corner, graphs display currency rates over time. The graphs are also updated in real-time as new rates become available.

Subsequent sections describe each of these components in detail.

## Action Buttons

The Trading Station currently has the following action buttons displayed in a panel on the left side. Clicking one will invoke the described operation:



### Buy/Sell

Pops up a Buy/Sell window, from which you can issue trade requests. (See <u>buy/sell window</u> for more information.)



#### Positions

Displays the current open positions in the table. (See the description of the <u>Open PositionsTable</u> for the contents of the table.)



#### Trades

Displays the current open trades in the table. (See the description of the <u>Open Trades Table</u> for the contents of the table.)



#### Orders

Displays the open orders (that may be executed some time in the future) in the table.

(See the description of the Open Orders Table for the contents of the table.)



#### History

Displays a recent history of your transactions in the table. (See the description of the <u>History Table</u> for contents of the table.)



#### Analysis

Pops up a new browser window with access to a number of analytical tools that might help in making trading decisions.

(See the <u>Analysis section</u> for a description of what tools are currently available.)



#### News

Pops up a new browser window with the latest currency news.



Forums

Pops up a new browser window with access to a number of forums (sometimes known as newsgroups) that allow you to participate in discussions with other traders and currency trading experts.

(See the Forums section for a description of the forums and how to use them

#### **Pull-down Menus**

There are 5 pull-down menus, each offering different operations or services:

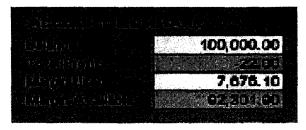
- Connection
  - **Disconnect**: disconnects the Trading Station from the OANDA Trading Server. The Trading Station will remain open, but currency rates will no longer be updated, and transactions will not be possible.
  - *Connect*: connects the Trading Station to the server, which puts you back on line
  - Quit: quit and exit this application.
- Account
  - Transaction history: pop up a new browser window to display an extensive list of all transactions that occurred on your account.
     See the Transaction History section for a description of what is displayed.
  - Clear account balance and P/L: for those who have incurred large losses on their game account, this operation allows you to start over again with a cleared P/L and new funds in the account.
  - Add funds to account: for a game account, add funds to the account; for a real-money account, transfer money into the account from your credit card or obtain instructions on how to wire transfer money into your account.
  - **Buy/Sell**: issue a trade or market order. Choosing this option will cause a Buy/Sell window to pop up, from which you can issue further instructions.
  - Open positions: display all open positions in the table.
  - Open trades: display all open trades in the table.
  - Open orders: display all open orders in the table.
  - *Recent transaction history*: display the most recent transactions in the table.
- Commands
  - Change passwords
  - *Graph*: specify the currency pair to be displayed in the graph
- Information
  - About OANDA: company information, including management and PR.
  - *Interest rates*: display interest rate information in a separate browser window.
  - *Market News*: display up-to-date currency market news in a separate browser window.
  - Analysis tools: use one of OANDA's analytical tools in a separate browser window.
  - *Forum*: participate in various forums related to currency trading.

- *Rankings*: see a list of the most successful currency traders using OANDA's Forexchange Currency Trading System
- Help
  - o Documentation: links to documents, such as this one.
  - *About*: display software version number and see credits.
  - **Debug**: display debugging information in a new window. If you encounter technical difficulties, it may be useful to send the information (using cut-and-paste) in this window to OANDA's technical support.

## Account Summary

The account summary is a small table giving a summary of your account status. It shows:

- Account Balance: the amount of your cash holding in your account.
- **Realized P/L**: the amount of profit or loss you have incurred with your



trading activity to date. It is equal to the value in your balance minus the amount of funds you have transferred into the account.

- Unrealized P/L: the amount of profit or loss that you hold with your current open positions. If you clear all your open positions, then this amount would be added to the Realized P/L amount.
- *Margin Used*: the amount of your account balance and unrealized P/L tied up for margin purposes. (See Margin Rules for more information on how margin works.)
- *Margin Available*: the amount of your account balance and unrealized P/L available as margin for new trading transactions. . (See Margin Rules for more information on how margin works.)

This information is continuously updated in real-time to take current market conditions into account. Moreover, the information is always shown in the account's home currency.

## **Tables**

The table area of the Trading Station shows different information depending on the last Action Button selected. It can include:

- Open trades
- Open positions
- Open orders
- Transaction history

The default is open positions.

### Mouse Actions:

How the information in the table is displayed can be controlled in two ways:

1. *Scroll bars* are used to scroll the table up or down, allowing you to see information that is hidden from view.

2. *Sorting* can be achieved by clicking on a column header, which causes the table to be sorted in either increasing or decreasing order. Clicking once sorts the column in increasing order; clicking again sorts it in decreasing order.

For all tables except Transaction History, clicking on a row of the table will cause a popup window to appear, offering further actions for that open trade, position, or order.

## **Open Trades Table**

The open trades table shows a list of your currently open trades.

| 1947)<br>1947<br>1947 | TICKET | CURR    | UNITS  | S/L    | T/P    | PRICE  | MARKET | PROFIT |
|-----------------------|--------|---------|--------|--------|--------|--------|--------|--------|
| S                     | 33780  | USD/CHF | 100000 | ;      |        | 1.7415 | 1.7413 | 0.000  |
| S                     | 33759  | EUR/USD | 65000  | 0.8715 | 0.8668 | 0.8689 | 0.8692 | -0.000 |
|                       |        |         |        |        |        |        |        |        |

The table has 9 columns, described from left to right:

- 1. *Bought/Sold*: Indicates whether the position is bought (long) or sold (short).
- 2. *Transaction Number*: a number that uniquely identifies an open trade. You can use this number as a reference for inquiries to OANDA, or to search for particular entries in the transaction history table.
- 3. *Currency pair*: the pair of currencies involved in this trade. The first currency of the pair is referred to as the *base currency*, while the second one is referred to as the *quote currency*.
- 4. *Units*: the number of transacted units for this trade, expressed in the base currency.
- 5. *S/L*: your stop-loss for this trade. This trade will be closed automatically as soon as the exchange rate for this currency pair crosses the S/L value. A stop-loss limit is used to limit the loss you may incur with this trade.
- 6. *T/P*: your take-profit for this trade. This trade will be closed automatically as soon as the exchange rate for this currency pair crosses the T/P value. A take-profit limit is used to realize your profit as soon as it reaches the T/P value.
- 7. Price: the exchange rate obtained when the trade was executed.
- 8. Market: the current exchange rate for this currency pair.
- 9. **Profit**: the unrealized profit (when positive) or loss (when negative) expressed in base currency and on a per unit basis. This profit/loss value is reflected in the "unrealized P/L" of the <u>Account Summary</u>, and is continuously updated to account for the latest exchange rates. If this trade is closed, the unrealized profit (or loss) becomes "realized" and added to (or subtracted from) your account balance.

## Mouse actions:

- Clicking on the scroll buttons will cause the table to *scroll* up or down.
- Positioning the cursor over a particular row will highlight that row for ease of reference.

- Clicking on a column header will *sort* the table so that the contents of the column are displayed in increasing or decreasing order.
- Clicking on a row with an open trade will cause a pop-up window to appear offering two operations:
  - 1. Close trade.
  - 2. *Modify trade*. This is used to modify the S/L or the T/P limits.

#### **Positions Table**

The Open Position Table displays a list of your open positions. It is similar to the Open Trades table, except that all trades of the same currency pair are aggregated into one line.

| $[\frac{m_{\mu_1}}{m_{\mu_2}}]_{\substack{\mu_1,\dots,\mu_{\mu_1},\dots,\mu_{\mu_n}}} [\frac{m_{\mu_1}}{m_{\mu_1}}]$ | CURR                                  | UNITS  | VG. PRICE | MARKET | PROFIT  |
|--|---------------------------------------|--------|-----------|--------|---------|
| S  | USD/CHF                               | 100000 | 1.7415    | 1.7407 | 0.0008  |
| s  | EUR/USD                               | 65000  | 0.8689    | 0.8697 | -0.0008 |
|  |                                       |        |           |        |         |
|  |                                       |        |           |        |         |
| in the second  | · · · · · · · · · · · · · · · · · · · |        |           |        |         |

The table has 5 columns, described from left to right:

- 1. Short/Long: Indicates whether the position is short or long.
- 2. *Currency pair*: the pair of currencies the position refers to. The first currency of the pair is referred to as the *base currency*, while the second one is referred to as the *quote currency*.
- 3. Units: the number of units held in this position, expressed in the base currency.
- 4. *Avg. Rate*: the weighted average exchange rate obtained for the trades in this position.
- 5. *Market*: the current exchange rate for this currency pair.
- 6. **Profit**: the unrealized profit (when positive) or loss (when negative) expressed in base currency and on a per unit basis. This profit/loss value is reflected in the "unrealized P/L" of the <u>Account Summary</u>, and is continuously updated to account for the latest exchange rates. If this trade is cleared, the unrealized profit (or loss) becomes realized and added to (or subtracted from) your account balance.

### Mouse actions:

- Clicking on the scroll buttons will cause the table to scroll up or down.
- Positioning the cursor over a particular row will highlight that row for ease of reference.
- Clicking on a column header will *sort* the table so that the contents of the column are displayed in increasing or decreasing order.
- Clicking on a row with an open position will cause a pop-up window to appear offering the option to *close the position*.

## **Open Orders Table**

The Open Orders Table shows a list of your currently open orders. An open order is a request that a trade should be made automatically when the exchange rate of the specified currency pair crosses a specified threshold.

| Π  | ORDER   | CURR    | UNITS    | S/L    | T/P    | PRICE  | MARKET     | DURATIC  |
|----|---------|---------|----------|--------|--------|--------|------------|----------|
| B. | 245     | EUR/JPY | 200000   | 93.203 | 93.789 | 93.512 | 93.509     | Undefine |
|    |         | 建长 网络小  | 制度使效性的   |        |        |        |            |          |
|    |         |         |          |        |        |        | + $+$ $ +$ |          |
|    | 医帕拉 计图理 |         | 1. 在空中10 | 義にはまた  |        |        |            |          |

The table has 9 columns, described from left to right:

- 1. Buy/Sell: Indicates whether the order is a buy (going long) or a sell (going short).
- 2. Order Id: a number that uniquely identifies the order. You can use this number as a reference for inquiries to OANDA.
- 3. Currency pair: the pair of currencies to be traded.
- 4. Units: the number of units to be traded, expressed in the base currency.
- 5. *S/L*: the stop-loss for this trade. This trade, once executed, will be closed automatically as soon as the exchange rate for this currency pair crosses the S/L value. A stop-loss limit is used to limit the loss you may incur with this trade.
- 6. *T/P*: your take-profit for this trade. This trade, once executed, will be closed automatically as soon as the exchange rate for this currency pair crosses the T/P value. A take-profit limit is used to realize your profit as soon as it reaches the T/P value.
- 7. *Price*: specifies that the trade should be executed as soon as the exchange rate for the specified currency pair crosses this value.
- 8. Market: the current exchange rate for this currency pair.
- 9. *Duration*: specifies the amount of time an order should stand, until it is automatically cancelled. The following durations are allowed:
  - indefinite
  - one day (24 hours)
  - one hour

### Mouse actions:

- Clicking on the scroll buttons will cause the table to *scroll* up or down.
- Positioning the cursor over a particular row will highlight that row for ease of reference.
- Clicking on a column header will *sort* the table so that the contents of the column are displayed in increasing or decreasing order.
- Clicking on a row with an order will cause a pop-up window to appear offering two operations:

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3. Cancel order.

4. *Modify order*. This is used to modify the exchange rate threshold at which the trade is to be executed, the duration the order is to remain open, or the S/L or T/P limits.

## **Transactions Table**

The Transactions Table shows a list of the most recent transaction on the account. For access to a full list of past transactions, select Transaction History in the <u>Account pull-down menu</u>.

| TRANSACTION | TYPE        | CURR    | UNITS  | PRICE  | DATE/TIME          |
|-------------|-------------|---------|--------|--------|--------------------|
| 56958       | Buy Market  | EUR/USD | 10000  | 0.8684 | Oct 9, 2000, 16:4  |
| 56959       | Buy Market  | GBP/USD | 100000 | 1.4486 | Oct 9, 2000, 16:4  |
| 57001       | Take Profit | GBP/USD | 100000 | 1.4804 | Oct 11, 2000, 12:3 |
| 57021       | Buy Market  | EUR/USD | 25000  | 0.8688 | Oct 11, 2000, 15:0 |
| 57022       | Sell Market | EUR/USD | 25000  | 0.8689 | Oct 11, 2000, 15:0 |

The Transaction History Table has 6 columns, described from left to right:

- 1. Transaction Id: uniquely identifies the transaction.
- 2. Type: identifies the type of transaction.
- 3. *Currency pair*: the pair of currencies associated with the transaction.
- 4. *Units*: the number of units traded in the transaction, expressed in the base currency.
- 5. *Price*: the currency exchange rate applied when buying or selling a currency pair.
- 6. Date/Time: the date and time of the transaction.

### Mouse actions:

- Clicking on the scroll buttons will cause the table to scroll up or down.
- Positioning the cursor over a particular row will highlight that row for ease of reference.
- Clicking on a column header will *sort* the table so that the contents of the column are displayed in increasing or decreasing order.

## **Currency Rates**

The Currency Rates Table shows the current OANDA exchange rate for the currency pairs supported by the Trading Game. They are updated in real-time, approximately every 5 seconds. When there is significant exchange rate movement for a currency pair, up/down

|  | -                                 |             |
|--|-----------------------------------|-------------|
| المارين الأركانية من الأولى المكرينية المكرينية المكرينية المحكمة المراجع المحكمة المحكمة المحكمة المحكمة المح<br>المحكم المحكمة المستمر المحكمة ا |                                   |             |
| 新学校 教育 しんかい かいかい   |                                   |             |
| Philip States and States   |                                   |             |
|  | $\tilde{M} \rightarrow \tilde{M}$ | 0.8545 / 40 |
|  |                                   |             |
|  |                                   | 107.00 / 08 |
|  | , I., I.                          | A17665 0.67 |
| The second second second second  |                                   | 1.5070 / 74 |
|  |                                   | 016890 / 92 |
|  |                                   | 92.230 / 49 |
|  |                                   |             |

indicators show the direction of change in order to alert you, should you not currently have the currency pair displayed in the graph.

## Mouse actions:

- Clicking on the scroll buttons will cause the table to *scroll* up or down.
- Clicking on a currency pair's ask price will pop up a *buy* window for that currency pair.
- Clicking on a currency pair's bid price will pop up a *sell* window for that currency pair.
- Clicking on a currency pair will change the graph to display that currency pair.

## Graph

Graphs show how currency exchange rates change over a period of time ranging from minutes to months. All graphs are updated in real-time, as new currency rates arrive.

The width of the curve in the graph represents the spread. Thus the upper boundary of the graph represents the ask price, while the lower boundary represents the bid price. Note that the



spread may vary over time depending on market conditions.

As the mouse is moved over the graph, a sub-area in the graph shows precise exchange rate information for the target currency pair corresponding to the point in time represented by the position of the mouse.

The graph may also display **Buy or Sell** indicators that designate at which point in time you bought or sold a currency pair. Downward pointing red arrows indicate a sold currency pair (where you are hoping the rates will go down after that point), and upward pointing green arrows indicate a bought currency pair (where you are hoping the rates will go up after that point). If the mouse is located over one of these indicators, then more detailed information is displayed in a subwindow.

You can adjust what is shown in the graph:

- The *Currency pair* displayed is selected using the pull-down menu at the bottom left, or by selecting a currency pair in the <u>rate table</u>.
- The *granularity of the graph* is selected using the pull-down menu at the bottom right of the graph. Selecting a fine granularity, such as 5 seconds (where each point on the horizontal axis represents 5 seconds of time) will display a relatively

//

short time interval (less than an hour, in this case). Selecting a larger granularity, such as one day, will display longer term trends (9 months of exchange rate information, in this case).

## Mouse Actions:

- *Scroll* buttons at the top right of the graph area allow you to shift the time interval shown to the left or to the right (backward or forward in time).
- Clicking on the graph with the mouse will *hide the Buy/Sell widgets*: Clicking again, will cause them to reappear.
- Positioning the mouse at a certain point in time causes the *exchange rate information* for the target currency pair at that time to be displayed in a sub-area of the graph.
- Positioning the mouse over an indicator provides more information about the corresponding transaction.

## Market Order Buy/Sell Window

The Buy/Sell pop-up window allows you to issue buy/sell orders. It can be raised by:

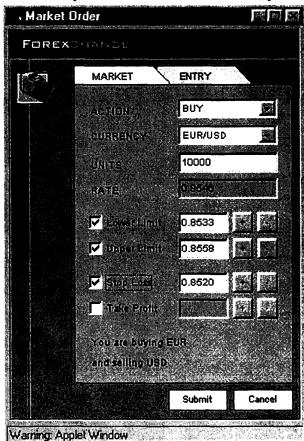
- Clicking on the Buy/Sell action button
- Clicking on the bid or ask price in the Currency Rates Table, or by
- Clicking on an existing trade, position, or order in the Table area.

The fields of the Buy/Sell window will be preinitialized, depending on how the window was raised.

Two types of orders are supported:

- 1. *Market Orders* are orders that are transacted immediately based on market exchange rates
- 2. *Entry Orders* are orders that are executed when the exchange rate crosses a specified threshold.

The type of order can be selected by clicking on the appropriate tab in the Buy/Sell Window. Market order comes up as the default type of order.



## Issuing a Market Order

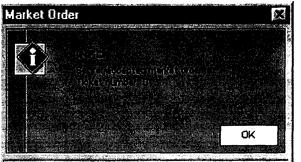
To issue a market order with the Market Order Buy/Sell Window and the Market Tab selected, a number of fields must be filled out (most of the fields are pre-initialized with reasonable values):

- Action: choose between buy and sell.
- *Currency*: choose the currency pair you wish to buy or sell. By default, this field will be initialized as follows:
  - If the *Buy/Sell button* was used to obtain the window: the currency pair currently shown in the graph.
  - If the bid or ask price was clicked to obtain the window: the currency pair whose price was clicked.
  - If a trade or position was clicked in the Table area: the currency pair corresponding to the trade or position.

The pull-down menu can be used to select another currency pair.

- Units: the number of units of the currency pair you wish to buy or sell, expressed in terms of the base currency.
- Lower limit: the order will result in a trade only if a price is obtained from the OANDA Trading System servers that is higher than or equal to this limit. By default, no limit is specified, but one can be set by checking the corresponding check box. If checked, then the field is automatically initialized with a reasonable value; however the value can be changed either by modifying it directly or by using the +/- buttons to increase or decrease its value, respectively.
- Upper limit: the order will result in a trade only if a price is obtained from the OANDA Trading System servers that is lower than or equal to this limit. By default, no limit is specified, but one can be set by checking the corresponding check box. If checked, then the field is automatically initialized with a reasonable value; however the value can be changed either by modifying it directly or by using the +/- buttons to increase or decrease its value, respectively.
- Stop Loss: if the order results in a trade, then the stop-loss value given will be associated with the trade. By default, no stop-loss limit is selected, but one can be set by checking the corresponding check box. If checked, then the field is automatically initialized with a reasonable value; however the value can be changed either by modifying it directly or by using the +/- buttons to increase or decrease its value, respectively.
- *Take Profit*: if the order results in a trade, then the stop-loss value given will be associated with the trade. By default, no take profit limit is selected, but one can be set by checking the corresponding check box. If checked, then the field is automatically initialized with a reasonable value; however the value can be changed either by modifying it directly or by using the +/- buttons to increase or decrease its value, respectively
- The *rate field* is set by the Trading Station and corresponds to the most recent exchange rate for the selected currency pair.

To issue the order, the Submit Button must be selected. If the order is successful and a trade occurs, then an



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acknowledgement window pops up with a Transaction Id that can be used for future references. Moreover, the *Open Trades Table* will be updated to reflect the new trade, as will the *Open Positions Table* and the *Transaction History Table*.

Several issues are important to note:

- 1. If an order is successful and a trade occurs, then the exchange rate obtained for the trade will correspond to the most current exchange rate maintained at the OANDA FX Trading Game servers and not necessarily the rate displayed in the Buy/Sell Market Order window. This is because the rate may change during order confirmation.
- 2. An order without Lower and Upper Limits will always result in a trade.
- 3. An order with Lower and Upper Limits set will result in a trade if and only if the exchange rate for the potential trade lies between the two limits.

### **Issuing an Entry Order**

To issue an entry order with the Buy/Sell Window and the Entry Tab selected, a number of fields must be filled out (most of the fields are preinitialized with reasonable values):

- *Action*: choose between buy and sell.
- *Currency*: choose the currency pair you wish to buy or sell. By default, this field will be initialized as follows:
  - If the *Buy/Sell button* was used to obtain the window: the currency pair currently shown in the graph.
  - If the bid or ask price was clicked to obtain the window: the currency pair whose price was clicked.

The pull-down menu can be used to select another currency pair.

| FOREX | Stintellit      | and a setting to the Wey of the Marcel Party of the set of galaxies and the Second |        |
|-------|-----------------|--|--------|
|       | MARKET          | ENTRY  |        |
|       | Aerilan,        | BUY  |        |
|       | CURRENC)        | EUR/USD  | S.     |
|       | -iii(iπe        | 100  |        |
|       |                 | 0.8546   |        |
|       | Dufman          | Today  |        |
|       | Gtop (Loss)     | 0.8520   |        |
|       | Take Profit     | 0.8571   | E      |
|       |                 | EUR  |        |
|       | and selling USA |  |        |
|       |                 |  |        |
|       |                 | Submit   | Cancel |

- Units: the number of units of the currency pair you wish to buy or sell, with units expressed in terms of the base currency.
- *Rate:* the order will result in a trade as soon as the exchange rate for the selected currency pair crosses the given value. For a buy, a trade will occur if the exchange rate goes above this value, while a sell will occur if the exchange rate goes below.

- **Duration**: this value is used to limit the amount of time an outstanding order will remain effective. By default, the order remains effective indefinitely. However, the duration can be set to one hour or until the end of the 24 hour day.
- Stop Loss: if the order results in a trade, then the stop-loss value given will be associated with the trade. By default, no stop-loss limit is selected, but one can be set by checking the corresponding check box. If checked, then the field is automatically initialized with a reasonable value; however the value can be changed either by modifying it directly or by using the +/- buttons to increase or decrease its value, respectively.
- *Take Profit*: if the order results in a trade, then the stop-loss value given will be associated with the trade. By default, no take profit limit is selected, but one can be set by checking the check box. If checked, then the field is automatically initialized with a reasonable value; however the value can be changed either by modifying it directly or by using the +/- buttons to increase or decrease its value, respectively.

To issue the order, the Submit Button must be clicked. An acknowledgement window will pop up with a Ticket number that can be used for future references. Moreover, the **Open Orders Table** will be updated to reflect the new order.

Note that you can modify the parameters of an open order (including the rate representing the trade threshold, or the S/L and T/P) by clicking on the order in the Open Orders Table.

Note: The user must manually close a position. Closing the browser or disconnecting from the system will not close a position.

# Exhibit C

## OANDA.com, The Currency Site

| <b>Daylacunach</b> na.  | http://www.oanda.com/<br>. <u>1.704 cantures</u><br>10 Over 67 - 11 Set 11  |  | DEC JAN APR <u>Close</u><br><b>30</b><br>1999 7001 2002 Helo  |  |  |
|---|---|--|---|--|--|
| OANDA.com   |   |  |   |  |  |
| NE CURRENCY SITE  | * FRInvestors Travelers Busi  | Acsses Products Partners   |   |  |  |
| Quick Converter<br>US . USD<br>Euro . EUR<br>Co<br><u>Full Currency Converter</u>   | Daily Currency Exchange Rates and<br>investors and businesses.<br>OANDA has the largest <u>database of th</u><br>extensive suite of <u>currency conversio</u><br>businesses.  | <u>irrency.Converter</u> on the Web, as well as<br>Foreign Exchange Tables for <u>travelers</u> .<br>Istorical exchange rates and the most<br><u>n and localization tools</u> for etailers and   | OANDA VAR<br>What's on this week<br>•OANDA's New FX Trading Came:<br>ses that the property of the Came.<br>Play the GANDA EXTrading Came.<br>• Trading & Risk Management - find<br>out more about OANDA's upcoming                                      |  |  |
| Get Currency Information Fac<br>your Sta.<br>Products<br>Currency Tools<br>FXConverter<br>FXCheatSheet<br>FXCheatSheet                            | Major Currencies EXCrossRate Table           Roles as of Tue Jan 30 06 55:00 2001 EST           Image: Currencies EXCrossRate Table           Image: Currencies Exclose E | Big Mac Price Index         in USD         Image: Constraint of the state of the | trading & risk management services <u>FXPense: Travel Expense Report</u> <u>Manager</u> : Create your International     expense reports online, get the     exchange rates of the day you made,     the purchase and save the results in     MS@ Excel! |  |  |
| FXDaily<br>FXHistory<br>FXCrossrate<br>FXMail<br>Currency Delivery  | Forex Trading<br>FX Trading Game, Currency Trends,<br>Price Forecast, Analytical tools  | See Full Inde<br>Travelers<br>Currency CheatSheet, Travel Expense<br>Manager, Order Currencies   | Currency and Travelers Citeques<br>delivered to your home for your next<br>trip.  |  |  |
| EXDelivery<br>Durrency Localization<br><u>Customizable Tools</u><br><u>FXP</u><br><u>FXCommerce</u><br><u>FXBrowser</u><br>Durrency for Investors | EXInvestors Channel<br>B2B Currency Services<br>Currency Localization, Currency<br>Data Services, Customized Currency<br>Tools  | Message boards   | FXBrowser: Add a <u>Quick Curren</u><br><u>Converter to your browser</u> and se<br>prices in your home currency when<br>shop online!     FXCommerce: Do you have an<br>online store? <u>Show prices in each</u><br>your users' currency with            |  |  |
| EXTrading Game<br>EXNews<br>EXAnalysis<br>EXTrends  | Businesses Channel<br>Currency and Forex Market Ne  | Products Channel<br>ws (FXNews)  | FXConnerce.<br>• Historical Coins and Bills Test you<br>knowledge with <u>MonayMuseum</u> 's<br><u>Currency Quiz</u>  |  |  |
| FXMap<br>FXGraph<br>Currency Community<br>FXMessage   | Forex markets naws<br>Currency Report: US dollar steady in<br>channelnewssia.com Pri Oct 12 174358 EDT<br>Pupils Tooking forward to multimillic<br>Otago Daily times Fri Oct 12 17 0/29 EDT 200   | 2001<br>on-dollar facelift for school  | <ul> <li>10 Secrets to Wealth: ideas and<br/>philosophies about money, the power<br/>of money and its significance to sociel<br/>and the individual. by <u>MoneyMeasum</u>)</li> </ul>  |  |  |
| DA & Wireless   | FOREX-Dollar hurt by drim retail sal  |  | FXWap: Get currency exchange<br>rates for your Wireless phone.  |  |  |
| FXWAP<br>DANDA.com<br>About OANDA Corp.<br>Web Site Awards<br>OANDA in the Press<br>Jobs@OANDA<br>Advertising info                                | Dollar Sell-Off on Weak Rétail Salas,<br>Foizanive con Fil Oct 12 18-26 24 EDT 2007<br>Xerox Savs Currency, Attacks Burt of<br>Near Fil Oct 13 14 27 02 EDT 2001<br>Get these headlines on your site  | - Make OANDA com <u>your browser's</u><br>home page.   |   |  |  |
| Register<br>Login to your<br>ccount<br>Affiliate Program  | Latést Forex Market Levels and Edite  | orțăls   |   |  |  |

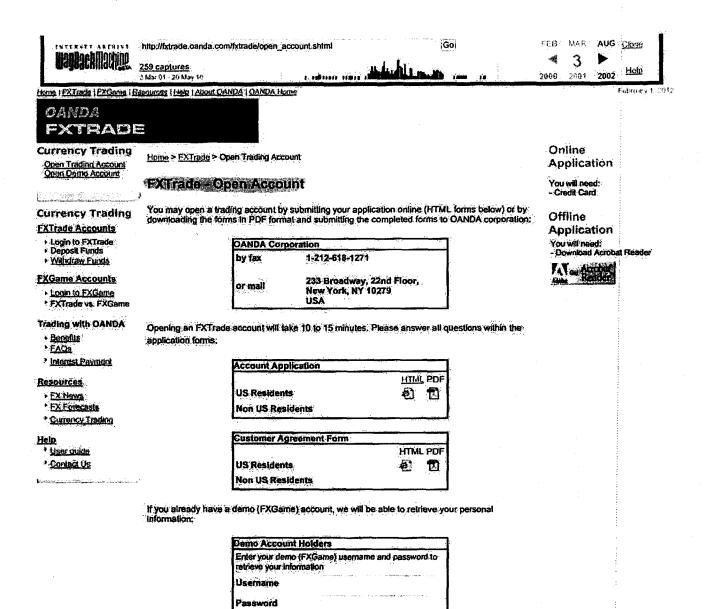
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## 01/02/2012

# Exhibit D

## FXGame Login



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## FX Trade: Open Account

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| FXGame Accounts   | If you are acting on t<br>that entity:                                   | ehalf of an entity other than individual please provide the name of  | ł                |                  |             |              |
| • FXTrade vs. FXGame<br>Trading with OANDA  | Enlity   | legal entities must complete and return the Corporate Resolution form on page 2.   |                  |                  |             |              |
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|   | Home Currency  | US Dollar  | 1                |                  | :           |              |
|   | Personal Information   | 201)<br>201  | 1                |                  |             |              |
|   | Citizenship  | United States  | 1                |                  | -           |              |
|   | Date of Birth  | January 1 19-1 1   |                  |                  | :           |              |
|   | Marital Status   | Select One   |                  |                  | :           |              |
|   | Social Security # or<br>Tax ID #   |  |                  |                  |             |              |
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|   | Username   | (EXAMPLE: JohnS)<br>Your username may be displayed publically for contest purposes:  |                  |                  | :           |              |
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|   | After successfully reusername, You shou                                  | gistering, we will e-mail you a temporary password along with your<br>Id change this password once you receive your e-mail confirmation. | 1                |                  | :           |              |
|   | E-mail   | (user@service.com)   | ]                |                  |             |              |
|   | Password Question  | Please enter a short question that only you know the answer to.<br>For example: what is my mother's maiden name?                         | ĺ                |                  |             |              |
|   |  | Question   |                  |                  |             |              |

Answer

| Electronic Patent Application Fee Transmittal |  |          |          |        |                         |
|---|--|----------|----------|--------|-------------------------|
| Application Number:                           | 116  | 34014    |          |        |                         |
| Filing Date:                                  | 04-  | Dec-2006 |          |        |                         |
| Title of Invention:                           | Currency trading system, methods, and software |          |          |        |                         |
| First Named Inventor/Applicant Name:          | Richard B. Olsen                               |          |          |        |                         |
| Filer:  | Frank Morris/Jamie Reinhardt                   |          |          |        |                         |
| Attorney Docket Number: 60967-0020C           |  |          |          |        |                         |
| Filed as Large Entity                         |  |          |          |        |                         |
| Utility under 35 USC 111(a) Filing Fees       |  |          |          |        |                         |
| Description                                   |  | Fee Code | Quantity | Amount | Sub-Total in<br>USD(\$) |
| Basic Filing:                                 |  |          |          |        |                         |
| Pages:  |  |          |          |        |                         |
| Claims:                                       |  |          |          |        |                         |
| Miscellaneous-Filing:                         |  |          |          |        |                         |
| Petition:                                     |  |          |          |        |                         |
| Patent-Appeals-and-Interference:              |  |          |          |        |                         |
| Post-Allowance-and-Post-Issuance:             |  |          |          |        |                         |
| Extension-of-Time:                            |  |          |          |        |                         |
| Extension - 5 months with \$0 paid            |  | 1255     | 1        | 2690   | 2690                    |

| Description                       | Fee Code | Quantity  | Amount | Sub-Total in<br>USD(\$) |
|-----------------------------------|----------|-----------|--------|-------------------------|
| Miscellaneous:                    |          |           |        |                         |
| Request for continued examination | 1801     | 1         | 930    | 930                     |
|                                   | Tot      | al in USD | (\$)   | 3620                    |

| Electronic A                         | cknowledgement Receipt                         |
|--------------------------------------|--|
| EFS ID:                              | 13652146                                       |
| Application Number:                  | 11634014                                       |
| International Application Number:    |  |
| Confirmation Number:                 | 3344   |
| Title of Invention:                  | Currency trading system, methods, and software |
| First Named Inventor/Applicant Name: | Richard B. Olsen                               |
| Customer Number:                     | 86513  |
| Filer:                               | Frank Morris/Jamie Reinhardt                   |
| Filer Authorized By:                 | Frank Morris                                   |
| Attorney Docket Number:              | 60967-0020C                                    |
| Receipt Date:                        | 04-SEP-2012                                    |
| Filing Date:                         | 04-DEC-2006                                    |
| Time Stamp:                          | 15:55:53                                       |
| Application Type:                    | Utility under 35 USC 111(a)                    |

## Payment information:

| Submitted with Payment                              | yes   |  |  |  |  |
|---|---|--|--|--|--|
| Payment Type  | Deposit Account   |  |  |  |  |
| Payment was successfully received in RAM            | \$3620  |  |  |  |  |
| RAM confirmation Number                             | 2801  |  |  |  |  |
| Deposit Account 230420                              |   |  |  |  |  |
| Authorized User                                     |   |  |  |  |  |
| The Director of the USPTO is hereby authorized to c | harge indicated fees and credit any overpayment as follows: |  |  |  |  |
| Charge any Additional Fees required under 37 C.F    | R. Section 1.21 (Miscellaneous fees and charges)            |  |  |  |  |

| Document<br>Number   | Document Description   | File Name  | File Size(Bytes)/<br>Message Digest   | Multi<br>Part /.zip  | Pages<br>(if appl.)                                 |
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| 1  |  | 2012_9_4_AsFiledResponsetoF  | 3754757   | yes  | 48  |
| ľ  |  | inalOA609670020D.pdf   | c93880cff696732010eec9bd253e7bde9c3e<br>8dbf  | yes  | 40  |
|  | Multip   | oart Description/PDF files in  | zip description   |  |   |
|  | Document Des   | Start  | E   | nd   |   |
|  | Request for Continued E  | Examination (RCE)  | 1   |  | 1   |
|  | Miscellaneous Inco   | oming Letter   | 2   |  | 5   |
|  | Oath or Declara  | tion filed   | 6   | 2  | 48  |
| Warnings:  |  |  |   |  |   |
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| Warnings:  |  | ·  |   |  |   |
| Information  | :  |  |   |  |   |
|  |  | Total Files Size (in bytes)  | 37  | 86743  |   |
| characterize<br>Post Card, as<br><u>New Applica</u><br>If a new appl<br>1.53(b)-(d) a<br>Acknowledg<br><u>National Sta</u><br>If a timely su<br>U.S.C. 371 ar<br>national stag | vledgement Receipt evidences receip<br>of by the applicant, and including pages<br>of described in MPEP 503.<br><u>Autions Under 35 U.S.C. 111</u><br>lication is being filed and the applica<br>nd MPEP 506), a Filing Receipt (37 CF<br>gement Receipt will establish the filin<br><u>ge of an International Application ur</u><br>obmission to enter the national stage<br>and other applicable requirements a F<br>ge submission under 35 U.S.C. 371 with<br><u>tional Application Filed with the USP</u><br>rnational application is being filed an | ge counts, where applicable.<br>Ation includes the necessary of<br>FR 1.54) will be issued in due<br>og date of the application.<br>Ander 35 U.S.C. 371<br>Form PCT/DO/EO/903 indicati<br>form PCT/DO/EO/903 indicati<br>ill be issued in addition to the<br>PTO as a Receiving Office | It serves as evidence<br>components for a filin<br>course and the date s<br>ion is compliant with<br>ing acceptance of the<br>e Filing Receipt, in du | of receipt s<br>g date (see<br>hown on th<br>the condition<br>application<br>e course.<br>ssary comp | similar to a<br>37 CFR<br>is<br>ons of 35<br>a as a |

PTO/SB/31 (07-09)

| Under the Paperwork Reduction Act of 1995, no persons are required to respo   |                              | nd Trademark Office    | se through 07/31/2012. OMB 0651-0031<br>e; U.S. DEPARTMENT OF COMMERCE |  |  |
|---|------------------------------|------------------------|--|--|--|
|   |                              | Docket Number          |  |  |  |
| NOTICE OF APPEAL FROM THE EXAMINER TO<br>THE BOARD OF PATENT APPEALS AND INTERFER   | 60967-0020C                  |                        |  |  |  |
| I hereby certify that this correspondence is being facsimile transmitted to the USPTO or deposited with the United States Postal Service with   | In re Applicat<br>Olsen et a |                        |  |  |  |
| sufficient postage as first class mail in an envelope addressed to<br>"Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-<br>1450" [37 CFR 1.8(a)]  | Application N<br>11/634,01   |                        | Filed<br>December 4, 2006  |  |  |
| on<br>Signature   | For CURREN                   | NCY TRADING SY         | STEM, METHODS AND SOFTWARE   |  |  |
|   | Art Unit                     |                        | Examiner   |  |  |
| Typed or printed name   | 3691                         |                        | Ali, Hatem M.  |  |  |
| Applicant hereby appeals to the Board of Patent Appeals and Interference  | s from the last              | decision of the exa    | aminer.  |  |  |
| The fee for this Notice of Appeal is (37 CFR 41.20(b)(1))   |                              |                        | \$ <u></u>   |  |  |
| Applicant claims small entity status. See 37 CFR 1.27. Therefore, the by half, and the resulting fee is:  | ie fee shown ab              | ove is reduced         | \$   |  |  |
| A check in the amount of the fee is enclosed.   |                              |                        |  |  |  |
| Payment by credit card. Form PTO-2038 is attached.  |                              |                        |  |  |  |
| The Director has already been authorized to charge fees in this app   | lication to a Dep            | posit Account.         |  |  |  |
| ✓ The Director is hereby authorized to charge any fees which may be to Deposit Account No. <u>23-0420</u> .   | required, or cre             | dit any overpaym       | ent  |  |  |
| A petition for an extension of time under 37 CFR 1.136(a) (PTO/SB/  | /22) is enclosed             |                        |  |  |  |
| WARNING: Information on this form may become public. Cred be included on this form. Provide credit card information and a   |                              |                        |  |  |  |
| I am the  | $\sim$                       | 1                      | C 11 -   |  |  |
| applicant/inventor.   | 1                            | rancis                 | Signature  |  |  |
| assignee of record of the entire interest.<br>See 37 CFR 3.71. Statement under 37 CFR 3.73(b) is enclosed.<br>(Form PTO/SB/96)  | Franc                        | cis E. Morris<br>Typed | d or printed name  |  |  |
| Attorney or agent of record. 24,615<br>Registration number  |                              | 277-3333               |  |  |  |
|   |                              | Tele                   | ephone number  |  |  |
| attorney or agent acting under 37 CFR 1.34.<br>Registration number if acting under 37 CFR 1.34.   | Febru                        | uary 2, 2012           | Data   |  |  |
| Date<br>NOTE: Signatures of all the inventors or assignees of record of the entire interest or their representative(s) are required.<br>Submit multiple forms if more than one signature is required, see below*. |                              |                        |  |  |  |
| *Total of forms are submitted.  |                              |                        |  |  |  |
|   |                              |                        |  |  |  |

This collection of information is required by 37 CFR 41.31. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11, 1.14 and 41.6. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

| Electronic Patent Application Fee Transmittal |  |               |          |        |                         |
|---|--|---------------|----------|--------|-------------------------|
| Application Number:                           | 116  | 11634014      |          |        |                         |
| Filing Date:                                  | 04-  | 04-Dec-2006   |          |        |                         |
| Title of Invention:                           | Currency trading system, methods, and software |               |          |        |                         |
| First Named Inventor/Applicant Name:          | Ric  | hard B. Olsen |          |        |                         |
| Filer:  | Frank Morris                                   |               |          |        |                         |
| Attorney Docket Number: 60967-0020C           |  |               |          |        |                         |
| Filed as Large Entity                         |  |               |          |        |                         |
| Utility under 35 USC 111(a) Filing Fees       |  |               |          |        |                         |
| Description                                   |  | Fee Code      | Quantity | Amount | Sub-Total in<br>USD(\$) |
| Basic Filing:                                 |  |               |          |        |                         |
| Pages:  |  |               |          |        |                         |
| Claims:                                       |  |               |          |        |                         |
| Miscellaneous-Filing:                         |  |               |          |        |                         |
| Petition:                                     |  |               |          |        |                         |
| Patent-Appeals-and-Interference:              |  |               |          |        |                         |
| Notice of appeal                              |  | 1401          | 1        | 620    | 620                     |
| Post-Allowance-and-Post-Issuance:             |  |               |          |        |                         |
| Extension-of-Time:                            |  |               |          |        |                         |

| Description    | Fee Code | Quantity  | Amount | Sub-Total in<br>USD(\$) |
|----------------|----------|-----------|--------|-------------------------|
| Miscellaneous: |          |           |        |                         |
|                | Tot      | al in USD | (\$)   | 620                     |

| Electronic Ac                        | Electronic Acknowledgement Receipt             |  |  |  |  |
|--------------------------------------|--|--|--|--|--|
| EFS ID:                              | 11984487                                       |  |  |  |  |
| Application Number:                  | 11634014                                       |  |  |  |  |
| International Application Number:    |  |  |  |  |  |
| Confirmation Number:                 | 3344   |  |  |  |  |
| Title of Invention:                  | Currency trading system, methods, and software |  |  |  |  |
| First Named Inventor/Applicant Name: | Richard B. Olsen                               |  |  |  |  |
| Customer Number:                     | 86513  |  |  |  |  |
| Filer:                               | Frank Morris                                   |  |  |  |  |
| Filer Authorized By:                 |  |  |  |  |  |
| Attorney Docket Number:              | 60967-0020C                                    |  |  |  |  |
| Receipt Date:                        | 02-FEB-2012                                    |  |  |  |  |
| Filing Date:                         | 04-DEC-2006                                    |  |  |  |  |
| Time Stamp:                          | 14:19:21                                       |  |  |  |  |
| Application Type:                    | Utility under 35 USC 111(a)                    |  |  |  |  |

# Payment information:

| Submitted with Payment   | yes   |  |  |  |
|--|---|--|--|--|
| Payment Type   | Deposit Account   |  |  |  |
| Payment was successfully received in RAM   | \$620   |  |  |  |
| RAM confirmation Number  | 583   |  |  |  |
| Deposit Account  | 230420  |  |  |  |
| Authorized User  |   |  |  |  |
| The Director of the USPTO is hereby authorized to charge indicated fees and credit any overpayment as follows:               |   |  |  |  |
| Charge any Additional Fees required under 37 C.F.R. Section 1.16 (National application filing, search, and examination fees) |   |  |  |  |
| Charge any Additional Fees required under 37 C.F.R. Se   | ction 1.17 (Patent application and reexamination processing fees) |  |  |  |

| File Listin  | g:   |   |   |  |  |  |  |  |  |
|--|--|---|---|--|--|--|--|--|--|
| Document<br>Number   | Document Description   | File Name   | File Size(Bytes)/<br>Message Digest   | Multi<br>Part /.zip  | Pages<br>(if appl.)  |  |  |  |  |
| 1  | Notice of Appeal Filed   | 60967-0020CNOA.pdf  | 65625   |  | 1  |  |  |  |  |
| I  | Notice of Appear filed   | 00907-0020CNOA.pdf  | b3494b99d45fef737827af93996d5988fb5c<br>20b3  | no   | I  |  |  |  |  |
| Warnings:  |  |   |   |  |  |  |  |  |  |
| Information:   |  |   |   |  |  |  |  |  |  |
| 2  | Fee Worksheet (SB06)   | fee-info.pdf  | 29879   | no   | 2  |  |  |  |  |
|  |  |   | 73b086b79e5203c6c0b72cd7679970a2786<br>bb672  |  |  |  |  |  |  |
| Warnings:  |  |   |   | •  |  |  |  |  |  |
| Information:   |  |   |   |  |  |  |  |  |  |
|  |  | Total Files Size (in bytes):  | 9.  | 5504   |  |  |  |  |  |
| Post Card, as<br><u>New Applica</u><br>If a new appl<br>1.53(b)-(d) at<br>Acknowledg<br><u>National Sta</u><br>If a timely su<br>U.S.C. 371 ar<br>national stag<br><u>New Internat</u><br>If a new inter<br>an internatic<br>and of the In | d by the applicant, and including page<br>described in MPEP 503.<br><u>tions Under 35 U.S.C. 111</u><br>lication is being filed and the applica<br>nd MPEP 506), a Filing Receipt (37 CF<br>ement Receipt will establish the filin<br><u>ge of an International Application ur</u><br>bmission to enter the national stage<br>nd other applicable requirements a F<br>ge submission under 35 U.S.C. 371 wi<br><u>tional Application Filed with the USP</u><br>rnational application is being filed an<br>onal filing date (see PCT Article 11 an<br>ternational Filing Date (Form PCT/RC<br>urity, and the date shown on this Ack<br>on. | tion includes the necessary of<br>R 1.54) will be issued in due<br>g date of the application.<br><u>Inder 35 U.S.C. 371</u><br>of an international applicati<br>orm PCT/DO/EO/903 indicati<br>ill be issued in addition to the<br><u>PTO as a Receiving Office</u><br>and the international applicati<br>of MPEP 1810), a Notification<br>D/105) will be issued in due co | omponents for a filin<br>course and the date s<br>on is compliant with f<br>ng acceptance of the<br>Filing Receipt, in du<br>ion includes the nece<br>of the International <i>f</i><br>ourse, subject to pres | g date (see<br>hown on th<br>the conditic<br>application<br>e course.<br>ssary comp<br>Application<br>criptions co | 37 CFR<br>is<br>ons of 35<br>as a<br>onents for<br>Number<br>oncerning |  |  |  |  |

|                                  | èd States Patent a | AND TRADEMARK OFFICE | UNITED STATES DEPAR<br>United States Patent and<br>Address: COMMISSIONER F<br>P.O. Box 1450<br>Alexandria, Virginia 22:<br>www.uspto.gov | FOR PATENTS      |
|----------------------------------|--------------------|----------------------|--|------------------|
| APPLICATION NO.                  | FILING DATE        | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO.  | CONFIRMATION NO. |
| 11/634,014                       | 12/04/2006         | Richard B. Olsen     | 60967-0020C  | 3344             |
| Ward & Zinna,<br>382 Springfiled |                    |                      | EXAM<br>ALI, HA  |                  |
| Suite 300<br>Summit, NJ 07       | 901                |                      | ART UNIT   | PAPER NUMBER     |
|                                  |                    |                      | 3691   |                  |
|                                  |                    |                      |  |                  |
|                                  |                    |                      | MAIL DATE  | DELIVERY MODE    |
|                                  |                    |                      | 01/19/2012   | PAPER            |

## Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

|   | Annelis stiene Ne   |   |  |  |  |  |  |
|---|---|---|--|--|--|--|--|
|   | Application No.   | Applicant(s)  |  |  |  |  |  |
| Advisory Action   | 11/634,014  | OLSEN ET AL.  |  |  |  |  |  |
| Before the Filing of an Appeal Brief  | Examiner  | Art Unit  |  |  |  |  |  |
|   | HATEM M. ALI  | 3691  |  |  |  |  |  |
| The MAILING DATE of this communication appears on the cover sheet with the correspondence address   |   |   |  |  |  |  |  |
| THE REPLY FILED 04 January 2012 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE.   |   |   |  |  |  |  |  |
| 1. The reply was filed after a final rejection, but prior to or on the same day as filing a Notice of Appeal. To avoid abandonment of this application, applicant must timely file one of the following replies: (1) an amendment, affidavit, or other evidence, which places the application in condition for allowance; (2) a Notice of Appeal (with appeal fee) in compliance with 37 CFR 41.31; or (3) a Request for Continued Examination (RCE) in compliance with 37 CFR 1.114. The reply must be filed within one of the following time periods: |   |   |  |  |  |  |  |
| a) $\overleftarrow{X}$ The period for reply expires <u>3</u> months from the mailing date   | of the final rejection.   |   |  |  |  |  |  |
| b) The period for reply expires on: (1) the mailing date of this A no event, however, will the statutory period for reply expire I  | ater than SIX MONTHS from the maili   | ng date of the final rejection.   |  |  |  |  |  |
| Examiner Note: If box 1 is checked, check either box (a) or (<br>MONTHS OF THE FINAL REJECTION. See MPEP 706.07(  | f).   |   |  |  |  |  |  |
| Extensions of time may be obtained under 37 CFR 1.136(a). The date have been filed is the date for purposes of determining the period of exunder 37 CFR 1.17(a) is calculated from: (1) the expiration date of the set forth in (b) above, if checked. Any reply received by the Office later may reduce any earned patent term adjustment. See 37 CFR 1.704(b) NOTICE OF APPEAL  | ension and the corresponding amoun<br>hortened statutory period for reply ori<br>than three months after the mailing d  | t of the fee. The appropriate extension fee<br>ginally set in the final Office action; or (2) as<br>ate of the final rejection, even if timely filed, |  |  |  |  |  |
| 2. The Notice of Appeal was filed on A brief in comp<br>filing the Notice of Appeal (37 CFR 41.37(a)), or any exte<br>a Notice of Appeal has been filed, any reply must be filed<br><u>AMENDMENTS</u>   | nsion thereof (37 CFR 41.37(e)), t  | o avoid dismissal of the appeal. Since  |  |  |  |  |  |
| <ul> <li>3. The proposed amendment(s) filed after a final rejection, I</li> <li>(a) They raise new issues that would require further co</li> <li>(b) They raise the issue of new matter (see NOTE below)</li> </ul>   | nsideration and/or search (see NC   |   |  |  |  |  |  |
| (c) They are not deemed to place the application in bet<br>appeal; and/or   | ter form for appeal by materially r   |   |  |  |  |  |  |
| (d) They present additional claims without canceling a NOTE: (See 37 CFR 1.116 and 41.33(a)).   | corresponding number of finally re  | ejected claims.   |  |  |  |  |  |
| 4. The amendments are not in compliance with 37 CFR 1.13<br>5. Applicant's reply has overcome the following rejection(s)  |   | ompliant Amendment (PTOL-324).  |  |  |  |  |  |
| <ul> <li>6. Newly proposed or amended claim(s) would be al non-allowable claim(s).</li> </ul>   |   | , timely filed amendment canceling the  |  |  |  |  |  |
| <ul> <li>For purposes of appeal, the proposed amendment(s): a) how the new or amended claims would be rejected is provided to the status of the claim(s) is (or will be) as follows:</li> </ul>   |   | ill be entered and an explanation of  |  |  |  |  |  |
| Claim(s) allowed:<br>Claim(s) objected to:<br>Claim(s) rejected:<br>Claim(s) withdrawn from consideration:  |   |   |  |  |  |  |  |
| AFFIDAVIT OR OTHER EVIDENCE   |   |   |  |  |  |  |  |
| 8. 🔲 The affidavit or other evidence filed after a final action, bu   | 8. The affidavit or other evidence filed after a final action, but before or on the date of filing a Notice of Appeal will <u>not</u> be entered because applicant failed to provide a showing of good and sufficient reasons why the affidavit or other evidence is necessary and  |   |  |  |  |  |  |
| 9. The affidavit or other evidence filed after the date of filing<br>entered because the affidavit or other evidence failed to c  | <ul> <li>9. The affidavit or other evidence filed after the date of filing a Notice of Appeal, but prior to the date of filing a brief, will not be entered because the affidavit or other evidence failed to overcome <u>all</u> rejections under appeal and/or appellant fails to provide a showing a good and sufficient reasons why it is necessary and was not earlier presented. See 37 CFR 41.33(d)(1).</li> </ul> |   |  |  |  |  |  |
| 10. The affidavit or other evidence is entered. An explanatio   |   |   |  |  |  |  |  |
| 11. The request for reconsideration has been considered bu<br>Paper No./Mail Date 20110726.   |   | in condition for allowance because:   |  |  |  |  |  |
| <ul> <li>12. □ Note the attached Information <i>Disclosure Statement</i>(s).</li> <li>13. ☑ Other: <u>See Continuation Sheet</u>.</li> </ul>  | PTO/SB/08) Paper No(s)  |   |  |  |  |  |  |
|   | /HANI M KAZIMI/<br>Primary Examiner, Art  | Unit 3691   |  |  |  |  |  |

Continuation of 13. Other: In the Remarks [page 3, last para] Applicant argues in substance that:

Buchalter is not describing a process for making a trade by first comparing prices. Rather, he is describing a reporting function that reports on orders that are outside recent prices. Accordingly, Buchalter does not make up for the admitted deficiency of Potter which does not disclose the step of "comparing the requested trade price to the respective first price or second price of the corresponding current exchange rate at that time."

#### In response:

The Examiner respectfully disaggrees with Applicant's assertion. Applicant is referred to the primary prior art reference, Potter which deals with automated financial transaction involving foreign currencies [abstract and details] and Buchalter (col. 6, lines 47+; via Interaction with the trading host 250 will effect automated matching of orders and provide full book display for all issues with markets [implied comaring prices] ... the FIT system can provide multiple order matching wherein the system matches multiple orders with the same price [implied price comparing]; col. 11, lines 55+; via order price should be compared against the most recent price from the system's last trade price and Fig. 35 illustrates a process/data flow [implied process for making trade] which can be utilized while implementing a price surveillance report. Fig.36A and Fig.36B ... can be used to generate a price surveillance report [implied comparing and matching prices involved]).

## REPLY UNDER 37 C.F.R.1.116 – EXPEDITED PROCEDURE TECHNOLOGY CENTER 3600

## Electronically filed January 4, 2012 IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Application of: Olsen et al. .

Confirmation No.: 3344

Examiner: Ali, Hatem M.

Serial No. 11/634,014

Art Unit: 3691

Filing Date: December 4, 2006

Attorney Docket No: 60967-0020C

## Title: CURRENCY TRADING SYSTEM, METHODS AND SOFTWARE

### **RESPONSE TO FINAL OFFICE ACTION OF AUGUST 2, 2011**

Mail Stop AF Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Sir:

### REMARKS

In the final office action of November 9, 2010, claims 35 – 41 were rejected under 35 U.S.C. 103(a) as unpatentable over Potter et al. (USP 5,787,402) in view of Buchalter (US H2064 H).

The rejection of claims 35 - 41 as obvious over Potter in view of Buchalter is respectfully traversed.

As described in the Background section on the first page of the application, in the traditional on-line currency market, a currency trade is accomplished in three steps. First, a trader specifies to a dealer the currency pair and the amount he would like to trade but does not specify whether he is buying or selling. Next, the dealer provides a bid and an ask price not knowing whether the trader will buy, sell or reject the offer; and gives the trader several seconds to respond. And the trader then responds to the dealer either rejecting the offer or indicating whether he is buying or selling.

This method of trading is also described at col. 9 lines 21 - 52 of the primary reference, Potter.

The trader is given very little time to respond to the dealer's offer because currency exchange rates are continually changing and the dealer needs to protect himself from adverse changes in these rates that might occur while waiting for the trader's response to his offer.

However, as noted in the Background of applicants' specification, there is a problem with this three-step method of currency trading arising because of signal delays in Internet transmissions. A trader might not actually have a few seconds to respond to the dealer's offer before time runs out and the dealer withdraws the offer.

One aspect of applicants' invention is an alternative method of effecting a currency trade that does not impose a severe time limit on the trader's response and therefore can be used with communication systems such as the Internet that do not have uniform high-speed message delivery. In an illustrative embodiment of applicants' method, the dealer (or trading system) provides currency pair information to a trader. The trader responds by specifying the currency pair, whether he is buying or selling, the amount involved and a price range. The dealer then redetermines the price for the currency being bought or sold and, if the redetermined price is within the trader's price range, the transaction is concluded.

As will be apparent, applicants' method differs from the three-step method of the admitted prior art and of Potter in several respects. First, in applicants' invention, the dealer is able to conclude the transaction after two communications: provision of pricing information to the trader and receipt of the trader's response. In the prior art, the trader must ask the dealer for pricing information; the dealer responds; and the trader must reply to the dealer. Second, time is not a critical factor in applicants' method. The price of the transaction, if there is a transaction, will be the price determined when the trader responds regardless of when the trader responds. In the prior art, the dealer cannot allow more than a few seconds for the trader's response because he needs to protect himself against market fluctuations. Third, in applicants' method, the trader makes known whether he is buying or selling in his initial message to the dealer. In the prior art, the dealer does not learn whether the trader is buying or selling until the final message. Fourth, the trader may set limits on an acceptable price. In the prior art, the trader can only accept or reject the price specified by the dealer.

Several of these differences between applicants' invention and the prior art are emphasized in claims 35 - 41.

Claim 35 recites the steps of "determining and dynamically maintaining a plurality of current exchange rates" at a trading system server, transmitting at least one rate to a trading client server, displaying the rate to a user, accepting input from the user including a requested trade price, transmitting the input to the trading system server, comparing the requested trade price with the

appropriate exchange rate at that time at the trading system server, making the trade if the rate at that time is equal to or better than the requested trade price, and reporting the results. Claim 35 is believed patentable because it recites the step of comparing the requested trade price with the current exchange rate at that time and making the trade if the rate at that time is equal to or better than the requested trade price.

The Examiner acknowledges at page 4 of the final office action that "Potter does not explicitly disclose the step of comparing the requested trade price to the respective first price or second price of the corresponding current exchange rate at that time." The Examiner relies on Buchalter, column 11, lines 55+, to make up for this deficiency. However, these lines do not refer to a trading function at all but rather refer to a reporting function, the description of which begins at Col. 11, line 48. There Buchalter states:

"A FIT [fixed income trading] system can also include monitoring and reporting functionality that can be presented as printed reports or additional GUIs [graphical user interfaces] wherein the monitoring and [reporting] functionality facilitates the efficient and successful trading of fixed income securities. For example, a FIT system can produce a report that contains details for each order that is X percent outside the best bid/offer from the system."

At Col. 11, lines 55 - 64, Buchalter goes on to explain what to do if there is only one bid/offer price in the system:

"If there is only one bid/offer in the system for an issue, the order price should be compared against the most recent price from the system's last trade price or the price from IDC. The system's last trade price should be used if the trade dates of both sources are equal. If an issue does not have an order in the system, a last trade price in the system, or an IDC price, then 'N/A' can be displayed in the related priced fields of a report. Reports can run at predetermined intervals such as every ten minutes. In addition, reports can be executed on request."

From the foregoing, it is apparent that Buchalter is not describing a process for making a trade by first comparing prices. Rather, he is describing a reporting function that reports on orders that are outside recent prices. Accordingly, Buchalter does not make up for the admitted deficiency of Potter which does not disclose the step of "comparing the requested trade price to the respective first price or second price of the corresponding current exchange rate at that time."

. 3

Further, applicants' claim 35 requires in paragraph (vi) that the trade be effected at the respective first or second price of the current exchange rate if that price is better than the requested trade price and refused if it is not. Claim 41 is similar. In contrast, Buchalter makes no mention of a first price to buy or a second price to sell; and the only result of the comparison appears to be that it is included in a report as set forth at Col. 11, lines 62 - 65.

For these reasons, claim 35 is believed patentable over the applied references.

Dependent claims 36 - 40 recite further details of applicants' method and are believed patentable for the same reason claim 35 is patentable.

Method claim 41 is similar to claim 35 but recites the steps of applicants' method that are performed at the trading system server. Like claim 35, claim 41 recites the step of comparing the requested trade price with the current exchange price at that time; and claim 41 is believed patentable for this reason.

For the foregoing reasons the claims in this application are believed patentable and this application is believed to be in condition for allowance.

Aside from the fee for an extension of time, no additional fee is believed to be due for filing this response. However, if any additional fee is due, please charge such fee to Ward & Zinna, LLC Deposit Account No. 23-0420.

If the Examiner believes a telephone interview would expedite prosecution of this application, the Examiner is invited to call applicant's attorney at the number given below.

Respectfully submitted,

Date: January 4, 2012

Francis E. Morris Reg. No. 24,615 Ward & Zinna, LLC Customer No. 086513 (908) 277-3333

| Electronic Patent Application Fee Transmittal |  |               |          |        |                         |
|---|--|---------------|----------|--------|-------------------------|
| Application Number:                           | 11634014                                       |               |          |        |                         |
| Filing Date:                                  | 04-  | -Dec-2006     |          |        |                         |
| Title of Invention:                           | Currency trading system, methods, and software |               |          |        |                         |
| First Named Inventor/Applicant Name:          | Ric  | hard B. Olsen |          |        |                         |
| Filer:  | Frank Morris                                   |               |          |        |                         |
| Attorney Docket Number:                       | 609  | 967-0020C     |          |        |                         |
| Filed as Large Entity                         |  |               |          |        |                         |
| Utility under 35 USC 111(a) Filing Fees       |  |               |          |        |                         |
| Description                                   |  | Fee Code      | Quantity | Amount | Sub-Total in<br>USD(\$) |
| Basic Filing:                                 |  |               |          |        |                         |
| Pages:  |  |               |          |        |                         |
| Claims:                                       |  |               |          |        |                         |
| Miscellaneous-Filing:                         |  |               |          |        |                         |
| Petition:                                     |  |               |          |        |                         |
| Patent-Appeals-and-Interference:              |  |               |          |        |                         |
| Post-Allowance-and-Post-Issuance:             |  |               |          |        |                         |
| Extension-of-Time:                            |  |               |          |        |                         |
| Extension - 3 months with \$0 paid            |  | 1253          | 1        | 1270   | 1270                    |

| Description    | Fee Code | Quantity  | Amount | Sub-Total in<br>USD(\$) |
|----------------|----------|-----------|--------|-------------------------|
| Miscellaneous: |          |           |        |                         |
|                | Tot      | al in USD | ) (\$) | 1270                    |

| Electronic Ac                        | Electronic Acknowledgement Receipt             |  |  |  |  |
|--------------------------------------|--|--|--|--|--|
| EFS ID:                              | 11758290                                       |  |  |  |  |
| Application Number:                  | 11634014                                       |  |  |  |  |
| International Application Number:    |  |  |  |  |  |
| Confirmation Number:                 | 3344   |  |  |  |  |
| Title of Invention:                  | Currency trading system, methods, and software |  |  |  |  |
| First Named Inventor/Applicant Name: | Richard B. Olsen                               |  |  |  |  |
| Customer Number:                     | 86513  |  |  |  |  |
| Filer:                               | Frank Morris                                   |  |  |  |  |
| Filer Authorized By:                 |  |  |  |  |  |
| Attorney Docket Number:              | 60967-0020C                                    |  |  |  |  |
| Receipt Date:                        | 04-JAN-2012                                    |  |  |  |  |
| Filing Date:                         | 04-DEC-2006                                    |  |  |  |  |
| Time Stamp:                          | 15:49:34                                       |  |  |  |  |
| Application Type:                    | Utility under 35 USC 111(a)                    |  |  |  |  |

# Payment information:

| Submitted with Payment   | yes             |  |  |  |  |  |
|--|-----------------|--|--|--|--|--|
| Payment Type   | Deposit Account |  |  |  |  |  |
| Payment was successfully received in RAM   | \$1270          |  |  |  |  |  |
| RAM confirmation Number  | 2275            |  |  |  |  |  |
| Deposit Account  | 230420          |  |  |  |  |  |
| Authorized User  |                 |  |  |  |  |  |
| The Director of the USPTO is hereby authorized to charge indicated fees and credit any overpayment as follows:               |                 |  |  |  |  |  |
| Charge any Additional Fees required under 37 C.F.R. Section 1.16 (National application filing, search, and examination fees) |                 |  |  |  |  |  |
| Charge any Additional Fees required under 37 C.F.R. Section 1.17 (Patent application and reexamination processing fees)      |                 |  |  |  |  |  |

| File Listing:   |                       |                              |  |                     |                     |  |  |  |  |  |
|---|-----------------------|------------------------------|--|---------------------|---------------------|--|--|--|--|--|
| Document<br>Number  | Document Description  | File Name                    | File Size(Bytes)/<br>Message Digest          | Multi<br>Part /.zip | Pages<br>(if appl.) |  |  |  |  |  |
| 1   | Amendment After Final | 60967-0020CresponsetoFOAof   | 211721                                       | no                  | 4                   |  |  |  |  |  |
|   |                       | 080211.pdf                   | 96a208b98d541962ac5ca2104cdd8a29697<br>bb2cb |                     |                     |  |  |  |  |  |
| Warnings:   |                       |                              |  |                     |                     |  |  |  |  |  |
| Information:  |                       |                              |  |                     |                     |  |  |  |  |  |
| 2   | Fee Worksheet (SB06)  | fee-info.pdf                 | 29989  | no                  | 2                   |  |  |  |  |  |
|   |                       |                              | 1eba0fea8418230f450ea64bcbbb43b2621<br>7e926 |                     |                     |  |  |  |  |  |
| Warnings:   |                       |                              |  |                     |                     |  |  |  |  |  |
| Information:  |                       |                              |  |                     |                     |  |  |  |  |  |
|   |                       | Total Files Size (in bytes): | 24   | 1710                |                     |  |  |  |  |  |
| This Acknowledgement Receipt evidences receipt on the noted date by the USPTO of the indicated documents, characterized by the applicant, and including page counts, where applicable. It serves as evidence of receipt similar to a Post Card, as described in MPEP 503.           New Applications Under 35 U.S.C. 111           If a new application is being filed and the application includes the necessary components for a filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application.           National Stage of an International Application under 35 U.S.C. 371           If a timely submission to enter the national stage of an international application is compliant with the conditions of 35           U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course.           New International Application Filed with the USPTO as a Receiving Office           If a new international application is being filed and the international application includes the necessary components for an international application Number and of the International Application Number and international Filing Date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application. |                       |                              |  |                     |                     |  |  |  |  |  |

PTO/SB/06 (07-06)

Approved for use through 1/31/2007. OMB 0651-0032 

| Under the Paperwork Reduction Act of 1995, no persons are required to respond<br><b>PATENT APPLICATION FEE DETERMINATION RECORD</b><br>Substitute for Form PTO-875 |   |   |            |   |                  | id to                                      | to a collection of information unle<br>Application or Docket Number<br>11/634,014 |                        |    |                       |                        |
|--|---|---|------------|---|------------------|--|---|------------------------|----|-----------------------|------------------------|
| APPLICATION AS FILED – PART I<br>(Column 1) (Column 2)   |   |   |            |   |                  |  | OTHER THAN SMALL ENTITY OF SMALL ENTITY   |                        |    |                       |                        |
|  | FOR   | Ν   | JMBER FIL  | .ED NUI                                     | MBER EXTRA       |  | RATE (\$)   | FEE (\$)               |    | RATE (\$)             | FEE (\$)               |
| BASIC FEE<br>(37 CFR 1.16(a), (b), or (c))   |   | or (c))                                   | N/A        |   | N/A              |  | N/A   |                        |    | N/A                   |                        |
| SEARCH FEE<br>(37 CFR 1.16(k), (i), or (m))  |   |   | N/A        |   | N/A              |  | N/A   |                        |    | N/A                   |                        |
| EXAMINATION FEE<br>(37 CFR 1.16(o), (p), or (q))   |   |   | N/A        |   | N/A              |  | N/A   |                        |    | N/A                   |                        |
| TOTAL CLAIMS<br>(37 CFR 1.16(i))   |   |   | minus 20 = |   |                  |  | X \$ =  |                        | OR | X \$ =                |                        |
| INDEPENDENT CLAIMS<br>(37 CFR 1.16(h))   |   | S   | minus 3 =  |   |                  | X \$ =                                     |   |                        |    | X \$ =                |                        |
|  | APPLICATION SIZE FEE (37 CFR 1.16(s))       If the specification and drawings exceed 100 sheets of paper, the application size fee due is \$250 (\$125 for small entity) for each additional 50 sheets or fraction thereof. See 35 U.S.C. 41(a)(1)(G) and 37 CFR 1.16(s).         MULTIPLE DEPENDENT CLAIM PRESENT (37 CFR 1.16(j))   |   |            |   |                  |  |   |                        |    |                       |                        |
| * If t   | he difference in colu   |   | ,          | 477   |                  |  | TOTAL   |                        |    | TOTAL                 |                        |
| APPLICATION AS AMENDED – PART II<br>(Column 1) (Column 2) (Column 3)   |   |   |            |   |                  | OTHER THAN<br>SMALL ENTITY OR SMALL ENTITY |   |                        |    |                       |                        |
| AMENDMENT  | 01/04/2012  | CLAIMS<br>REMAINING<br>AFTER<br>AMENDMENT |            | HIGHEST<br>NUMBER<br>PREVIOUSLY<br>PAID FOR | PRESENT<br>EXTRA |  | RATE (\$)   | ADDITIONAL<br>FEE (\$) |    | RATE (\$)             | ADDITIONAL<br>FEE (\$) |
| DME  | Total (37 CFR<br>1.16(i))   | * 7                                       | Minus      | ** 22                                       | = 0              |  | X \$ =  |                        | OR | X \$60=               | 0                      |
| ΕN   | Independent<br>(37 CFR 1.16(h))   | * 2                                       | Minus      | ***6  | = 0              |  | X \$ =  |                        | OR | X \$250=              | 0                      |
| AM   | Application Size Fee (37 CFR 1.16(s))   |   |            |   |                  |  |   |                        |    |                       |                        |
|  | FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))   |   |            |   |                  |  |   |                        | OR |                       |                        |
|  |   |   |            |   |                  |  | TOTAL<br>ADD'L<br>FEE   |                        | OR | TOTAL<br>ADD'L<br>FEE | 0                      |
|  |   | (Column 1)                                |            | (Column 2)                                  | (Column 3)       |  |   |                        | -  | •                     |                        |
|  |   | CLAIMS<br>REMAINING<br>AFTER<br>AMENDMENT |            | HIGHEST<br>NUMBER<br>PREVIOUSLY<br>PAID FOR | PRESENT<br>EXTRA |  | RATE (\$)   | ADDITIONAL<br>FEE (\$) |    | RATE (\$)             | ADDITIONAL<br>FEE (\$) |
| Ľ  | Total (37 CFR<br>1.16(i))   | *   | Minus      | **  | =                |  | X \$ =  |                        | OR | X \$ =                |                        |
| NDI  | Independent<br>(37 CFR 1.16(h))   | *   | Minus      | ***   | =                |  | X \$ =  |                        | OR | X \$ =                |                        |
| AMENDMENT  | Application Size Fee (37 CFR 1.16(s))   |   |            |   |                  |  |   |                        |    |                       |                        |
| A  | FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))   |   |            |   |                  |  | OR  |                        |    |                       |                        |
| ** If<br>*** I   | <ul> <li>* If the entry in column 1 is less than the entry in column 2, write "0" in column 3.</li> <li>** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 20, enter "20".</li> <li>*** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 3, enter "3".</li> <li>The "Highest Number Previously Paid For" (Total or Independent) is the highest number found in the appropriate box in column 1.</li> </ul> |   |            |   |                  |  |   |                        |    |                       |                        |

This collection of information is required by 37 CFR 1.16. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450, DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, Alexandria, VA 22313-1450.** 

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

|                                  | ed States Patent a | ND TRADEMARK OFFICE  | UNITED STATES DEPAR<br>United States Patent and<br>Address: COMMISSIONER F<br>P.O. Box 1450<br>Alexandria, Virginia 22:<br>www.uspto.gov | OR PATENTS       |
|----------------------------------|--------------------|----------------------|--|------------------|
| APPLICATION NO.                  | FILING DATE        | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO.  | CONFIRMATION NO. |
| 11/634,014                       | 12/04/2006         | Richard B. Olsen     | 60967-0020C  | 3344             |
| Ward & Zinna,<br>382 Springfiled |                    |                      | EXAM<br>ALI, HA  |                  |
| Suite 300<br>Summit, NJ 07       | 901                |                      | ART UNIT   | PAPER NUMBER     |
|                                  |                    |                      | 3691   |                  |
|                                  |                    |                      |  |                  |
|                                  |                    |                      | MAIL DATE  | DELIVERY MODE    |
|                                  |                    |                      | 08/02/2011   | PAPER            |

# Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

|   | Application No.   | Applicant(s)   |  |  |  |  |  |  |  |
|---|---|--|--|--|--|--|--|--|--|
|   | 11/634,014  | OLSEN ET AL.   |  |  |  |  |  |  |  |
| Office Action Summary   | Examiner  | Art Unit   |  |  |  |  |  |  |  |
|   | HATEM ALI   | 3691   |  |  |  |  |  |  |  |
| The MAILING DATE of this communication a<br>Period for Reply  | ppears on the cover sheet with the o  | correspondence address   |  |  |  |  |  |  |  |
| <ul> <li>A SHORTENED STATUTORY PERIOD FOR REF<br/>WHICHEVER IS LONGER, FROM THE MAILING</li> <li>Extensions of time may be available under the provisions of 37 CFR<br/>after SIX (6) MONTHS from the mailing date of this communication.</li> <li>If NO period for reply is specified above, the maximum statutory period</li> <li>Failure to reply within the set or extended period for reply will, by stat<br/>Any reply received by the Office later than three months after the ma<br/>earned patent term adjustment. See 37 CFR 1.704(b).</li> </ul>   | DATE OF THIS COMMUNICATION<br>1.136(a). In no event, however, may a reply be tir<br>od will apply and will expire SIX (6) MONTHS from<br>rute, cause the application to become ABANDONE | N.<br>mely filed<br>I the mailing date of this communication.<br>ED (35 U.S.C. § 133). |  |  |  |  |  |  |  |
| Status  |   |  |  |  |  |  |  |  |  |
| <ol> <li>1) Responsive to communication(s) filed on <u>09 May 2011</u>.</li> <li>2a) This action is <b>FINAL</b>.</li> <li>2b) This action is non-final.</li> <li>3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i>, 1935 C.D. 11, 453 O.G. 213.</li> </ol>  |   |  |  |  |  |  |  |  |  |
| Disposition of Claims   |   |  |  |  |  |  |  |  |  |
| <ul> <li>4) Claim(s) <u>35-41</u> is/are pending in the application.</li> <li>4a) Of the above claim(s) is/are withdrawn from consideration.</li> <li>5) Claim(s) is/are allowed.</li> <li>6) Claim(s) <u>35-41</u> is/are rejected.</li> <li>7) Claim(s) is/are objected to.</li> <li>8) Claim(s) are subject to restriction and/or election requirement.</li> </ul>   |   |  |  |  |  |  |  |  |  |
| Application Papers  |   |  |  |  |  |  |  |  |  |
| <ul> <li>9) The specification is objected to by the Exami</li> <li>10) The drawing(s) filed on is/are: a) a</li> <li>Applicant may not request that any objection to the Replacement drawing sheet(s) including the correct of the oath or declaration is objected to by the</li> </ul>   | ccepted or b) dbjected to by the<br>ne drawing(s) be held in abeyance. Se<br>ection is required if the drawing(s) is ob   | e 37 CFR 1.85(a).<br>jected to. See 37 CFR 1.121(d).                                   |  |  |  |  |  |  |  |
| Priority under 35 U.S.C. § 119  |   |  |  |  |  |  |  |  |  |
| <ul> <li>Priority under 35 U.S.C. § 119</li> <li>12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).</li> <li>a) All b) Some * c) None of: <ol> <li>Certified copies of the priority documents have been received.</li> <li>Certified copies of the priority documents have been received in Application No</li> </ol> </li> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> <li>* See the attached detailed Office action for a list of the certified copies not received.</li> </ul> |   |  |  |  |  |  |  |  |  |
| Attachment(s)         1)       Notice of References Cited (PTO-892)         2)       Notice of Draftsperson's Patent Drawing Review (PTO-948)         3)       Information Disclosure Statement(s) (PTO/SB/08)         Paper No(s)/Mail Date         U.S. Patent and Trademark Office   | 4) Interview Summary<br>Paper No(s)/Mail D<br>5) Notice of Informal F<br>6) Other:  | ate  |  |  |  |  |  |  |  |

# DETAILED ACTION

1. The following is **a Final office action** on merits in response to a communication

received on **5/09/11**.

# Acknowledgement

- 2. Claim status :
  - ✤ Claims cancelled: 1-34
  - Pending claims: 35-41

# Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-35 (Canceled).

Claims 35-41 are as understood rejected under 35 U.S.C. 103 (a) as being

unpatentable over Potter et al (5,787,402) in views of Buchalter (US H2064 H).

As per claims 35 and 41, Potter discloses a method of trading currencies over

a computer network connecting a trading system server and at least one trading client

system, comprising the steps of:

(i) at the trading system server, determining and dynamically maintaining a

plurality of current exchange rates, each current exchange rate relating to a pair of

currencies and including a first price to buy a first currency of the pair with respect to a second currency of the pair and a second price to sell the first currency of the pair with respect to the second currency of the pair; (ii) transmitting data from the trading system server to a trading client system, the transmitted data representing at least one current exchange rate at the time of the transmission; (iii) at the trading client system, displaying the first and second prices for each received current exchange rate to a user;

(iv) at the trading client system, accepting input from the user identifying a pair of currencies the user desires to trade, an amount of at least one currency of the pair desired to be traded and a requested trade price at which it is desired to effect the trade; (v) transmitting the accepted input from the trading client system to the trading system server (**Abstract**, **fig.1**, col. 3-4+, rate server[114], FX Order server[col.12, lines 35+], Target FX rate[col.13, lines 5+]),

(vi) at the trading system server, [comparing the requested trade price to the respective first price or second price of the corresponding current exchange rate at that time] and, if the respective first price or second price of the corresponding current exchange rate at that time is equal to or better than the requested trade price, effecting the trade at the corresponding respective current exchange rate first price or second price and if the corresponding current exchange rate is worse than the requested trade price, refusing the trade; and (vii) transmitting from the trading system server to the trading client system an indication of whether the trade was refused or transacted and, if transacted, an indication of the price the trade was transacted at (**Abstract** and Figs. 1+).

**Potter** did not explicitly disclose the step of comparing the requested trade price to the respective first price or second price of the corresponding current exchange rate at that time

However, **Buchalter** being in the same field of invention was made to disclose the step of comparing the requested trade price to the respective first price or second price of the corresponding current exchange rate at that time (**col. 11**, lines 55+; via order price should be compared against the most recent price from the system's last trade price)

Therefore, it would have been obvious to an ordinary skill in the art at the time of invention to modify the features mentioned by **Potter** to include the disclosures as taught by **Buchalter** in order to facilitate the efficient and successful trading of fixed income securities.

As per claim 36, Potter discloses a method of claim 35 wherein the requested trade price is derived from a respective one of the first price or second price of the received current exchange rate and a user input limit value defining a maximum acceptable difference between the respective one of the first price or second price of the received current exchange rate received at the trading client system and the respective one of the first price or second price of the respective one of the first price or second price of the respective one of the first price or second price of the trading client system and the respective one of the first price or second price of the corresponding current exchange rate determined at the trading client system at which the trade can be effected (**Abstract**, **fig.1**, col. 3-4+ , rate server[114], FX Order server[col.12, lines 35+], Target FX rate[col.13, lines 5+]),

As per claim 37, Potter discloses a method of claim 36 wherein the user can input a first limit value to define a maximum acceptable difference between the first price of the current exchange rate received at the trading client system and the first price of the corresponding current exchange rate determined at the trading client system and can input a second limit value to define a maximum acceptable difference between the second price of the current exchange rate received at the trading system and the second price of the corresponding current exchange rate determined at the trading client system and the requested trade price is derived from the first price or second price of the current exchange rate received at the trading system and the

corresponding one of the first limit value and second limit value (**Abstract**, **fig.1**, col. 3-4+ , rate server [114], FX Order server [col.12, lines 35+], Target FX rate[col.13, lines 5+]),

As per claim 38, Potter discloses a method of claim 36 wherein step (iv) comprises the steps of:

(a) the user selecting one of the first price and second price of the current exchange rate displayed at the trading client system; (b) displaying to the user a set of input fields to define a desired trade, the input fields including an identification of the pair of currencies the user desires to trade, the amount of the currencies desired to be traded, the selected first price or second price of the current exchange rate received at the trading client system and a limit value, and where the input fields to identify the pair of currencies and the first price or second price are populated with appropriate values determined from the user's selection of the one of the first price or second price; (c) receiving from the user input to the input field defining the desired amount of currency to be traded; and (d) determining the requested trade price from the selected one of the first price and second price and the limit value (**Abstract**, **fig.1**, col. 3-4+ , rate server[114], FX Order server[col.12, lines 35+], Target FX rate[col.13, lines 5+]),

As per claim 39, Potter discloses a method of claim 38 wherein in step (b) the displayed set of input fields includes: a first limit value to define a maximum acceptable difference between the first price of the current exchange rate received at the trading client system and the first price of the corresponding current exchange rate determined at the trading client system; and a second limit value to define a maximum acceptable

difference between the second price of the current exchange rate received at the trading system and the second price of the corresponding current exchange rate determined at the trading client system and in step (d) the requested trade price is derived from the selected first price or second price and the corresponding one of the first limit value and second limit value (**Abstract**, **fig.1**, col. 3-4+ , rate server[114], FX Order server[col.12, lines 35+], Target FX rate[col.13, lines 5+]),

**As per claim 40**, **Potter** discloses a method of claim 36 wherein, when the limit value is zero, the requested trade price is the current corresponding first price or second price of the current exchange rate at the trading server (**Abstract** and Figs 1+).

Claim 41 (with claim 35).

## Response to Arguments

4. Applicant's arguments with respect to claims 35-41 have been considered but not all persuasive:

A. Rejection under 112 is withdrawn. Applicant's arguments are considered persuasive.

B. In the remarks Applicant argues in substance that:

**Buchalter** describes [page 7, last para] a fixed income trading system, such a system trades large numbers of different securities but the number of any one security that is traded on a given day is a small percentage of the trading volume. In contrast, in a foreign exchange trading system, a huge number of trades occur every minute in the major currency pairs; and price changes are frequent. As a result, fixed income trading and foreign exchange trading are not in the same field of invention.

Page 8

In response to above:

The Examiner disagrees with Applicant's assertion. Applicant is referred to the primary prior art reference, **Potter** deals with automated financial transaction involving foreign currencies [abstract and details] and **Buchalter** (**col. 11**, lines 55+; via order price should be compared against the most recent price from the system's last trade price).

#### Conclusion

5. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

**Lange** et al (2003/0115128) discloses derivatives having demand-Based Adjustable Returns, And Trading Exchange Therefor.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to HATEM ALI whose telephone number is (571)270-3021 & Fax (571) 270-4021 [only for Cc to Examiner]. The examiner can normally be reached on 8.00 to 6.30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, ALEXANDER KALINOWSKI can be reached on 571-272-6771. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

HATEM ALI Examiner Art Unit 3691

/HANI M KAZIMI/

Primary Examiner, Art Unit 3691

|              | Index of Claims |           |                     |                 |                | Application/Control No. |             |             |         |     | Applicant(s)/Patent Under<br>Reexamination |        |       |      |        |
|--------------|-----------------|-----------|---------------------|-----------------|----------------|-------------------------|-------------|-------------|---------|-----|--|--------|-------|------|--------|
|              | Ind             | lex of (  | Jaim                | is<br>          |                | 11634014                |             |             |         |     | OLSEN ET AL.                               |        |       |      |        |
|              |                 |           |                     |                 | E              | xaminer                 |             |             |         |     | Art Ur                                     | nit    |       |      |        |
|              |                 |           |                     | H               | HATEM ALI 3691 |                         |             |             |         |     |  |        |       |      |        |
| ✓ Rejected - |                 |           | Car                 | Cancelled N Non |                |                         | Non-E       | Non-Elected |         |     | Α  | Appeal |       |      |        |
| =            | Α               | llowed    |                     | ÷               | Res            | stricted                |             | I           | Interfe | ere | nce  |        | 0     | Obje | ected  |
|              | Claims r        | enumbered | in the s            | ame o           | rder as p      | resented by a           | _<br>pplic: | ant         | [       |     | СРА  |        | ] т.с | ). 🗆 | R.1.47 |
|              | CLA             |           |                     |                 |                |                         |             |             | DATE    |     |  |        |       |      |        |
| Fi           | inal            | Original  | 03/21/2             | 2010 1          | 1/05/2010      | 07/28/2011              |             |             |         |     |  |        |       |      |        |
|              |                 | 1         | -                   |                 | -              | -                       |             |             |         |     |  |        |       |      |        |
|              |                 | 2         | -                   |                 | -              | -                       | _           |             |         | _   |  |        |       |      |        |
|              |                 | 3         | -                   |                 | -              | -                       |             |             |         |     |  |        |       |      |        |
|              |                 | 4         | -                   |                 | -              | -                       |             |             |         |     |  |        |       |      |        |
|              |                 | 5         | -                   |                 | -              | -                       |             |             |         |     |  |        |       |      |        |
|              |                 | 6         | -                   |                 | -              | -                       |             |             |         |     |  |        |       |      |        |
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|              |                 | 12        | -                   |                 | -              | -                       |             |             |         |     |  |        |       |      |        |
|              |                 | 13        | ✓                   |                 | √              | -                       |             |             |         |     |  |        |       |      |        |
|              |                 | 14        | ✓                   |                 | √              | -                       |             |             |         |     |  |        |       |      |        |
|              |                 | 15        | ✓                   |                 | $\checkmark$   | -                       |             |             |         |     |  |        |       |      |        |
|              |                 | 16        | ~                   |                 | $\checkmark$   | -                       |             |             |         |     |  |        |       |      |        |
|              |                 | 17        | ✓                   |                 | $\checkmark$   | -                       |             |             |         |     |  |        |       |      |        |
|              |                 | 18        | √                   |                 | $\checkmark$   | -                       |             |             |         |     |  |        |       |      |        |
|              |                 | 19        | ✓                   |                 | $\checkmark$   | -                       |             |             |         |     |  |        |       |      |        |
|              |                 | 20        | ✓                   |                 | $\checkmark$   | -                       |             |             |         |     |  |        |       |      |        |
|              |                 | 21        | ✓                   |                 | -              | -                       |             |             |         |     |  |        |       |      |        |
|              |                 | 22        | √<br>√              |                 | -              | -                       |             |             |         |     |  |        |       |      |        |
|              |                 | 23<br>24  | ✓<br>✓              |                 | -              | -                       |             |             |         |     |  |        |       |      |        |
|              |                 | 24<br>25  | v<br>√              |                 | -              | -                       |             |             |         |     |  |        |       |      |        |
|              |                 | 25        | · ·                 |                 |                | -                       |             |             |         |     |  |        |       |      |        |
|              |                 | 27        | ✓                   |                 | -              | -                       |             |             |         |     |  |        |       |      |        |
|              |                 | 28        | ✓                   |                 | -              | -                       |             |             |         |     |  |        |       |      |        |
|              |                 | 29        | ✓                   |                 | -              | -                       |             |             |         |     |  |        |       |      |        |
|              |                 | 30        | ✓                   |                 | -              | -                       |             |             |         |     |  |        |       |      |        |
|              |                 | 31        | ✓                   |                 | -              | -                       |             |             |         |     |  |        |       |      |        |
|              |                 | 32        | ✓                   |                 | -              | -                       |             |             |         |     |  |        |       |      |        |
|              |                 | 33        | ~                   |                 | -              | -                       |             |             |         |     |  |        |       |      |        |
|              |                 | 34        | ✓                   |                 | -              | -                       |             |             |         |     |  |        |       |      |        |
|              |                 | 35        | ✓                   |                 | ✓              | ✓                       |             |             |         |     |  |        |       |      |        |
|              |                 | 36        | <ul><li>✓</li></ul> |                 | $\checkmark$   | ✓                       |             |             |         |     |  |        |       |      |        |

Part of Paper No. : 20110726

| Index of Claims |              |            |          | 11   | Application/Control No. 11634014 Examiner |                       |       |                |      | Applicant(s)/Patent Under<br>Reexamination<br>OLSEN ET AL.<br>Art Unit |     |           |       |        | ſ |        |
|-----------------|--------------|------------|----------|------|---|-----------------------|-------|----------------|------|--|-----|-----------|-------|--------|---|--------|
|                 |              |            |          |      | HATEM ALI                                 |                       |       |                | 3691 |  |     |           |       |        |   |        |
| ~               | ✓ Rejected - |            |          | Can  | celled                                    |                       | Ν     | Non-Elected    |      |  |     | Α         |       | Appeal |   |        |
| =               | 4            | llowed     |          | ÷    | Res                                       | tricted               |       | I Interference |      |  |     | O Objecte |       | cted   |   |        |
|                 | Claims       | renumbered | in the s | ame  | order as pr                               | esented by a          | pplic | ant            |      |  | СРА | [         | ] T.D | •      |   | R.1.47 |
|                 | CL           | MIM        |          |      |   |                       |       |                | DAT  | Έ  |     |           |       |        |   |        |
| F               | inal         | Original   | 03/21/2  | 2010 | 11/05/2010                                | 07/28/2011            |       |                |      |  |     |           |       |        |   |        |
|                 |              | 37         | ~        |      | $\checkmark$                              | ~                     |       |                |      |  |     |           |       |        |   |        |
| <u> </u>        |              | 38         | ✓        |      |   | <ul> <li>✓</li> </ul> |       |                |      |  |     |           |       |        |   |        |
| <u> </u>        |              | 39         | ✓<br>✓   |      | ✓<br>✓                                    | ✓<br>✓                |       |                |      |  |     |           |       |        |   |        |
| <u> </u>        | 40           |            | ✓<br>✓   |      | <br>✓                                     | $\checkmark$          |       |                |      |  |     |           |       |        |   |        |
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Electronically Filed May 9, 2011

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# IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

| Application of: Ol                        | sen et al.    | Confirmation No.: 3344          |  |  |  |  |  |
|---|---------------|---------------------------------|--|--|--|--|--|
| Serial No. 11/6                           | 534,014       | Art Unit: 3691                  |  |  |  |  |  |
| Filing Date: Dec                          | ember 4, 2006 | Examiner: Ali, Hatem M.         |  |  |  |  |  |
| Title: CURRENC<br>SYSTEM, MET<br>SOFTWARE |               | Attorney Docket No: 60967-0020C |  |  |  |  |  |

## **RESPONSE TO OFFICE ACTION OF NOVEMBER 9, 2010**

Mail Stop Amendment Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Sir:

This is in response to the Office Action of November 9, 2010. Please amend the

application as set forth on the following pages:

## IN THE CLAIMS

Please revise the claims to read as follows:

#### 1.-34. (cancelled)

35.(Previously presented) A method of trading currencies over a computer network connecting a trading system server and at least one trading client system, comprising the steps of:

(i) at the trading system server, determining and dynamically maintaining a plurality of current exchange rates, each current exchange rate relating to a pair of currencies and including a first price to buy a first currency of the pair with respect to a second currency of the pair and a second price to sell the first currency of the pair with respect to the second currency of the pair;

(ii) transmitting data from the trading system server to a trading client system, the transmitted data representing at least one current exchange rate at the time of the transmission;

(iii) at the trading client system, displaying the first and second prices for each received current exchange rate to a user;

(iv) at the trading client system, accepting input from the user identifying a pair of currencies the user desires to trade, an amount of at least one currency of the pair desired to be traded and a requested trade price at which it is desired to effect the trade;

(v) transmitting the accepted input from the trading client system to the trading system server;

(vi) at the trading system server, comparing the requested trade price to the respective first price or second price of the corresponding current exchange rate at that time and, if the respective first price or second price of the corresponding current exchange rate at that time is equal to or better than the requested trade price, effecting the trade at the corresponding respective current exchange rate first price or second price and if the corresponding current exchange rate is worse than the requested trade price, refusing the trade; and

(vii) transmitting from the trading system server to the trading client system an indication of whether the trade was refused or transacted and, if transacted, an indication of the price the trade was transacted at.

36.(Previously presented) The method of claim 35 wherein the requested trade price is derived from a respective one of the first price or second price of the received current exchange rate and a user input limit value defining a maximum acceptable difference between the respective one of

the first price or second price of the received current exchange rate received at the trading client system and the respective one of the first price or second price of the corresponding current exchange rate determined at the trading client system at which the trade can be effected.

37.(Previously presented) The method of claim 36 wherein the user can input a first limit value to define a maximum acceptable difference between the first price of the current exchange rate received at the trading client system and the first price of the corresponding current exchange rate determined at the trading client system and can input a second limit value to define a maximum acceptable difference between the second price of the current exchange rate received at the trading system and the second price of the corresponding current exchange rate determined at the trading system and the requested trade price is derived from the first price or second price of the current exchange rate received at the trading client system and the corresponding one of the first limit value and second limit value.

38.(Previously presented) The method of claim 36 wherein step (iv) comprises the steps of:

(a) the user selecting one of the first price and second price of the current exchange rate displayed at the trading client system;

(b) displaying to the user a set of input fields to define a desired trade, the input fields including an identification of the pair of currencies the user desires to trade, the amount of the currencies desired to be traded, the selected first price or second price of the current exchange rate received at the trading client system and a limit value, and where the input fields to identify the pair of currencies and the first price or second price are populated with appropriate values determined from the user's selection of the one of the first price or second price;

(c) receiving from the user input to the input field defining the desired amount of currency to be traded; and

(d) determining the requested trade price from the selected one of the first price and second price and the limit value.

39.(Previously presented) The method of claim 38 wherein in step (b) the displayed set of input fields includes: a first limit value to define a maximum acceptable difference between the first price of the current exchange rate received at the trading client system and the first price of the corresponding current exchange rate determined at the trading client system; and a second limit

value to define a maximum acceptable difference between the second price of the current exchange rate received at the trading system and the second price of the corresponding current exchange rate determined at the trading client system and in step (d) the requested trade price is derived from the selected first price or second price and the corresponding one of the first limit value and second limit value.

40.(Previously presented) The method of claim 36 wherein, when the limit value is zero, the requested trade price is the current corresponding first price or second price of the current exchange rate at the trading server.

41 (Previously presented) A method of trading currencies over a computer network connecting a trading system server and at least one trading client system, comprising the steps of:

(i) at the trading system server, determining and dynamically maintaining a plurality of current exchange rates, each current exchange rate relating to a pair of currencies and including a first price to buy a first currency of the pair with respect to a second currency of the pair and a second price to sell the first currency of the pair with respect to the second currency of the pair;

(ii) transmitting data from the trading system server to a trading client system, the transmitted data representing at least one current exchange rate at the time of the transmission;

(iii) receiving at the trading system server input from a user of the trading client system identifying a pair of currencies the user desires to trade, an amount of at least one currency of the pair desired to be traded and a requested trade price at which it is desired to effect the trade;

(iv) at the trading system server, comparing the requested trade price to the respective first price or second price of the corresponding current exchange rate at that time and, if the respective first price or second price of the corresponding current exchange rate at that time is equal to or better than the requested trade price, effecting the trade at the corresponding respective current exchange rate first price or second price and if the corresponding current exchange rate is worse than the requested trade price, refusing the trade; and

(v) transmitting from the trading system server to the trading client system an indication of whether the trade was refused or transacted and, if transacted, an indication of the price the trade was transacted at.

#### REMARKS

In the office action of November 9, 2010, claims 35 - 41 were rejected under 35 U.S.C. 112, second paragraph, as indefinite. Claims 13- 20 were rejected under 35 U.S.C. 103(a) as unpatentable over Potter et al. (USP 5,787,402) in view of Szoc et al. (2002/0023053); and claims 35 to 41 were rejected under 35 U.S.C. 103(a) as unpatentable over Potter in view of Buchalter (US H2064 H). While the rejection in the middle of page 7 of the office action refers to claims 13 – 20, the Examiner has informed applicants' attorney that it is intended to refer to claims 35 - 41.

To expedite prosecution of this application, claims 13 - 20 have been cancelled without prejudice.

The rejection of claims 35 – 41 as indefinite is respectfully traversed. In particular, it is submitted that the step of "comparing the requested trade price to the respective first price or second price of the corresponding current exchange rate at that time" is clear and definite to one of ordinary skill in the art. For example, in claim 35, "the requested trade price" refers to "a requested trade price at which it is desired to effect the trade" as set forth in paragraph (iv); "the corresponding current exchange rate at that time" is clear of currencies" as set forth in paragraph (i); and "the respective first price or second price" refers to the "first price to buy a first currency of the pair" and the "second price to sell the first currency of the pair" as set forth in paragraph (i). Claim 41 is similar. "[T]he requested trade price" refers to "a requested trade price at which it is desired to effect the trade" as set forth in paragraph (iii); "the corresponding current exchange rate" refers to "each current exchange rate relating to a pair of the pair" as set forth in paragraph (i). Claim 41 is similar. "[T]he requested trade price" refers to "a requested trade price at which it is desired to effect the trade" as set forth in paragraph (iii); "the corresponding current exchange rate" refers to "each current exchange rate relating to a pair of currencies" as set forth in paragraph (i). Claim 41 is similar. "[T]he requested trade price" refers to "a requested trade price at which it is desired to effect the trade" as set forth in paragraph (iii); "the corresponding current exchange rate" refers to "each current exchange rate relating to a pair of currencies" as set forth in paragraph (i); and "the respective first price or second price" refers to the "first price to buy a first currency of the pair" and the "second price to sell the first currency of the pair" as set forth in paragraph (i).

The step of "comparing the requested trade price to the respective first price or second price of the corresponding current exchange rate at that time" is also fully supported by the specification. In particular, beginning at page 23, line 4, the specification describes how Market Orders and Entry Orders are supported. At page 23, lines 27 - 28, it is noted with respect to a Lower Limit that is entered in the Buy/Sell window of FIG. 13 that "the order will result in a trade only if a price is obtained that does not lie below this limit." Similarly, at page 24, lines 1 -2, it is noted with respect to an Upper Limit that "the order will result in a trade only if a price is obtained that does not lie approximate the approximation of the specification describes how Market Orders and Entry Orders are supported. At page 23, lines 27 - 28, it is noted with respect to a Lower Limit that is entered in the Buy/Sell window of FIG. 13 that "the order will result in a trade only if a price is obtained that does not lie below this limit." Similarly, at page 24, lines 1 -2, it is noted with respect to an Upper Limit that "the order will result in a trade only if a price is obtained that does not lie above this limit." In order to determine if a price is above or below a limit, a comparison must be

made between the specified limits and the current price as recited in claims 35 and 41. Further, at page 23, lines 10 - 11 it is noted that "Market Orders are orders that are transacted immediately based on market exchange rates."

In view of the foregoing, it is respectfully submitted that claims 35 - 41 are definite and fully supported by the specification.

The rejection of claims 35 - 41 as obvious over Potter in view of Buchalter is respectfully traversed.

As described in the Background section on the first page of the application, in the traditional on-line currency market, a currency trade is accomplished in three steps. First, a trader specifies to a dealer the currency pair and the amount he would like to trade but does not specify whether he is buying or selling. Next, the dealer provides a bid and an ask price not knowing whether the trader will buy, sell or reject the offer; and gives the trader several seconds to respond. And the trader then responds to the dealer either rejecting the offer or indicating whether he is buying or selling.

This method of trading is also described at col. 9 lines 21 - 52 of the primary reference, Potter.

The trader is given very little time to respond to the dealer's offer because currency exchange rates are continually changing and the dealer needs to protect himself from adverse changes in these rates that might occur while waiting for the trader's response to his offer.

However, as noted in the Background of applicants' specification, there is a problem with this three-step method of currency trading arising because of signal delays in Internet transmissions. A trader might not actually have a few seconds to respond to the dealer's offer before time runs out and the dealer withdraws the offer.

One aspect of applicants' invention is an alternative method of effecting a currency trade that does not impose a severe time limit on the trader's response and therefore can be used with communication systems such as the Internet that do not have uniform high-speed message delivery. In an illustrative embodiment of applicants' method, the dealer (or trading system) provides currency pair information to a trader. The trader responds by specifying the currency pair, whether he is buying or selling, the amount involved and a price range. The dealer then redetermines the price for the currency being bought or sold and, if the redetermined price is within the trader's price range, the transaction is concluded.

As will be apparent, applicants' method differs from the three-step method of the admitted prior art and of Potter in several respects. First, in applicants' invention, the dealer is able to conclude the transaction after two communications: provision of pricing information to the trader and

receipt of the trader's response. In the prior art, the trader must ask the dealer for pricing information; the dealer responds; and the trader must reply to the dealer. Second, time is not a critical factor in applicants' method. The price of the transaction, if there is a transaction, will be the price determined when the trader responds regardless of when the trader responds. In the prior art, the dealer cannot allow more than a few seconds for the trader's response because he needs to protect himself against market fluctuations. Third, in applicants' method, the trader makes known whether he is buying or selling in his initial message to the dealer. In the prior art, the dealer does not learn whether the trader is buying or selling until the final message. Fourth, the trader may set limits on an acceptable price. In the prior art, the trader can only accept or reject the price specified by the dealer.

Several of these differences between applicants' invention and the prior art are emphasized in claims 35 - 41.

Claim 35 recites the steps of "determining and dynamically maintaining a plurality of current exchange rates" at a trading system server, transmitting at least one rate to a trading client server, displaying the rate to a user, accepting input from the user including a requested trade price, transmitting the input to the trading system server, comparing the requested trade price with the appropriate exchange rate at that time at the trading system server, making the trade if the rate at that time is better than the requested trade price, and reporting the results. Claim 35 is believed patentable because it recites the step of comparing the requested trade price with the current exchange rate at that time.

The Examiner acknowledges at page 8 of the office action that "Potter does not explicitly disclose the step of comparing the requested trade price to the respective first price or second price of the corresponding current exchange rate at that time." The Examiner relies on Buchalter, column 11, lines 55+, to make up for this deficiency. At column 11, lines 55+, Buchalter states that "If there is only one bid/offer in the system for an issue. the order price should be compared against the most recent price from the system's last trade price or the price from IDC. The system's last trade price should be used if the trade dates of both sources are equal." This, however, does not make up for what the Examiner admits is lacking in Potter.

In the first place, Buchalter describes a fixed income trading system, Such a system trades large numbers of different securities but the number of any one security that is traded on a given day is a small percentage of the trading volume. In contrast, in a foreign exchange trading system, a huge number of trades occur every minute in the major currency pairs; and price changes are frequent. As a result, fixed income trading and foreign exchange trading are not in the same field of invention; and

one skilled in the art is not likely to look to fixed income trading systems for solutions to problems with foreign exchange trading systems or vice versa. l.

Secondly, the text referenced at Column 11, lines 55+ of Buchalter does not suggest its combination with Potter. Buchalter does not indicate the purpose of the comparison referred to at column 11, line 56 or what happens as a result of the comparison. Thus, there is no reason to combine Buchalter with Potter. Indeed, in the absence of any reason for their combination, Buchalter and Potter appear to have been combined in hindsight. The United States Supreme Court warned against such hindsight bias in <u>KSR v. Telefles</u>, 550 U.S.398, 421 (2007).

Thirdly, any combination of Buchalter and Potter does not suggest what is claimed by applicants. What little Buchalter indicates at column 11, lines 55+ is that he wants to compare the order price with the system's last trade price provided that price has the same trade date. Thus, there could be almost 24 hours' difference between Buchalter's order price and the last trade price. In contrast, applicants' claim 35 requires in paragraph (vi) that the requested trade price be compared with the first price or second price of the current exchange rate at that time; and paragraph (i) requires that these exchange rates be dynamically maintained and not a previous trade price that could be almost a day old as in Buchalter. Claim 41 is similar. Since applicants' claims require a comparison of the requested trade price with a dynamically maintained price, there is no way that a combination of Potter, which admittedly does not teach a comparison, and Buchalter, which teaches comparison with the last trade price suggests applicants' claimed method.

Further, applicants' claim 35 requires in paragraph (vi) that the trade be effected at the respective first or second price of the current exchange rate if that price is better than the requested trade price and refused if it is not. Claim 41 is similar. In contrast, Buchalter makes no mention of a first price to buy or a second price to sell and does not indicate what happens as a result of the comparison referred to at column 11, line 56.

For these reasons, claim 35 is believed patentable over the applied references.

Dependent claims 36 - 40 recite further details of applicants' method and are believed patentable for the same reason claim 35 is patentable.

Method claim 41 is similar to claim 35 but recites the steps of applicants' method that are performed at the trading system server. Like claim 35, claim 41 recites the step of comparing the requested trade price with the current exchange price at that time; and claim 41 is believed patentable for this reason.

For the foregoing reasons the claims in this application are believed patentable and this application is believed to be in condition for allowance.

Aside from the fee for an extension of time, no additional fee is believed to be due for filing this response. However, if any additional fee is due, please charge such fee to Ward & Olivo LLP Deposit Account No. 23-0420.

If the Examiner believes a telephone interview would expedite prosecution of this application, the Examiner is invited to call applicant's attorney at the number given below.

Respectfully submitted,

Date: May 9, 2011

orris Ronas C

Francis E. Morris Reg. No. 24,615 Ward & Olivo LLP Customer No. 086513 (908) 277-3333 .

| Electronic Patent Application Fee Transmittal |  |           |          |        |                         |  |  |  |  |  |
|---|--|-----------|----------|--------|-------------------------|--|--|--|--|--|
| Application Number:                           | 116  | 534014    |          |        |                         |  |  |  |  |  |
| Filing Date:                                  | 04-  | -Dec-2006 |          |        |                         |  |  |  |  |  |
| Title of Invention:                           | Currency trading system, methods, and software |           |          |        |                         |  |  |  |  |  |
| First Named Inventor/Applicant Name:          | Richard B. Olsen                               |           |          |        |                         |  |  |  |  |  |
| Filer:  | Frank Morris                                   |           |          |        |                         |  |  |  |  |  |
| Attorney Docket Number: 60967-0020C           |  |           |          |        |                         |  |  |  |  |  |
| Filed as Large Entity                         |  |           |          |        |                         |  |  |  |  |  |
| Utility under 35 USC 111(a) Filing Fees       |  |           |          |        |                         |  |  |  |  |  |
| Description                                   |  | Fee Code  | Quantity | Amount | Sub-Total in<br>USD(\$) |  |  |  |  |  |
| Basic Filing:                                 |  |           |          |        |                         |  |  |  |  |  |
| Pages:  |  |           |          |        |                         |  |  |  |  |  |
| Claims:                                       |  |           |          |        |                         |  |  |  |  |  |
| Miscellaneous-Filing:                         |  |           |          |        |                         |  |  |  |  |  |
| Petition:                                     |  |           |          |        |                         |  |  |  |  |  |
| Patent-Appeals-and-Interference:              |  |           |          |        |                         |  |  |  |  |  |
| Post-Allowance-and-Post-Issuance:             |  |           |          |        |                         |  |  |  |  |  |
| Extension-of-Time:                            |  |           |          |        |                         |  |  |  |  |  |
| Extension - 3 months with \$0 paid            |  | 1253      | 1        | 1110   | 1110                    |  |  |  |  |  |

| Description    | Fee Code | Quantity  | Amount | Sub-Total in<br>USD(\$) |
|----------------|----------|-----------|--------|-------------------------|
| Miscellaneous: |          |           |        |                         |
|                | Tot      | al in USD | (\$)   | 1110                    |

| Electronic Ac                        | knowledgement Receipt                          |
|--------------------------------------|--|
| EFS ID:                              | 10052856                                       |
| Application Number:                  | 11634014                                       |
| International Application Number:    |  |
| Confirmation Number:                 | 3344   |
| Title of Invention:                  | Currency trading system, methods, and software |
| First Named Inventor/Applicant Name: | Richard B. Olsen                               |
| Customer Number:                     | 86513  |
| Filer:                               | Frank Morris                                   |
| Filer Authorized By:                 |  |
| Attorney Docket Number:              | 60967-0020C                                    |
| Receipt Date:                        | 09-MAY-2011                                    |
| Filing Date:                         | 04-DEC-2006                                    |
| Time Stamp:                          | 19:30:17                                       |
| Application Type:                    | Utility under 35 USC 111(a)                    |

# Payment information:

| Submitted with Payment   | yes   |  |  |  |  |  |  |
|--|---|--|--|--|--|--|--|
| Payment Type   | Deposit Account   |  |  |  |  |  |  |
| Payment was successfully received in RAM   | \$1110  |  |  |  |  |  |  |
| RAM confirmation Number  | 6382  |  |  |  |  |  |  |
| Deposit Account  | 230420  |  |  |  |  |  |  |
| Authorized User  |   |  |  |  |  |  |  |
| The Director of the USPTO is hereby authorized to charge indicated fees and credit any overpayment as follows:               |   |  |  |  |  |  |  |
| Charge any Additional Fees required under 37 C.F.R. Section 1.16 (National application filing, search, and examination fees) |   |  |  |  |  |  |  |
| Charge any Additional Fees required under 37 C.F.R. Se   | ction 1.17 (Patent application and reexamination processing fees) |  |  |  |  |  |  |

| File Listin  | g:   |   |  |   |  |
|--|--|---|--|---|--|
| Document<br>Number   | Document Description   | File Name   | File Size(Bytes)/<br>Message Digest  | Multi<br>Part /.zip   | Pages<br>(if appl.)  |
| 1  | Amendment/Req. Reconsideration-After   | 60967-0020CresponsetoOAof1  | 428102   | 20  | 9  |
| I  | Non-Final Reject   | 10910.pdf   | 3085 eff4b3123 fed55bb7e999ea1620 efb08<br>f148  | no  | 9  |
| Warnings:  | · · · · · ·  |   |  |   |  |
| Information:   |  |   |  |   |  |
| 2  | Fee Worksheet (PTO-875)  | fee-info.pdf  | 29886  | no  | 2  |
| 2  |  | ree mo.par  | 9da3367ea15fceee988b5a2f7381314da26c<br>5095   | 110   | 2  |
| Warnings:  | · · · · · · · · · · · · · · · · · · ·  |   | · ·  |   |  |
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| the applicati  | •  |   |  |   |  |

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Approved for use through 1/31/2007. OMB 0651-0032 LLC Detent and T

| P/   | ATENT APPL  |  | for Form P  |   | N RECORD                                     | Application or Docket Number<br>11/634,014 |      |                           | Filing Date<br>12/04/2006 |                       | To be Maile            |
|------|---|--|---|---|--|--|------|---------------------------|---------------------------|-----------------------|------------------------|
|      | AF  | PPLICATIO                                | N AS FILE   | ) – PART I  |  |  |      | _                         |                           | OTH                   | IER THAN               |
|      |   |  | (Column 1   | ) (   | Column 2)                                    | SMA  | LL E |                           | OR                        | SMA                   | LL ENTITY              |
|      | FOR NUMBER FILED NUMBER EXTRA                                     |  |   |   |  |  | (\$) | FEE (\$)                  |                           | RATE (\$)             | FEE (\$)               |
|      | BASIC FEE<br>(37 CFR 1.16(a), (b),                                | or (c))                                  | N/A   |   | N/A  | N/A  |      |                           |                           | N/A                   |                        |
|      | SEARCH FEE<br>(37 CFR 1.16(k), (i), (                             | or (m))                                  | N/A   |   | N/A  |  |      |                           |                           | N/A                   |                        |
|      | EXAMINATION FE<br>(37 CFR 1.16(o), (p),                           |  | N/A   |   | N/A  | N/A  |      |                           |                           | N/A                   |                        |
|      | TAL CLAIMS<br>CFR 1.16(i))  |  | min   | us 20 = *   |  | X \$                                       | =    |                           | OR                        | X \$ =                |                        |
|      | EPENDENT CLAIM<br>CFR 1.16(h))                                    | S  | mi  | nus 3 = *   |  | X \$                                       | =    |                           |                           | X \$ =                |                        |
|      | APPLICATION SIZE<br>(37 CFR 1.16(s))<br>MULTIPLE DEPEN            | FEE is<br>ac<br>35                       | eets of pape<br>\$250 (\$125<br>dditional 50 s<br>5 U.S.C. 41(a | tion and drawing<br>for small entity)<br>heets or fraction<br>a)(1)(G) and 37<br>7 CFB 1 16(ii) | n size fee due<br>for each<br>n thereof. See |  |      |                           |                           |                       |                        |
| lf t | the difference in colu  |  | ,   | 477   |  | τοτα                                       | L    |                           |                           | TOTAL                 |                        |
| -    | 05/09/2011  | AFIER                                    |   | HIGHEST<br>NUMBER<br>PREVIOUSLY<br>PAID FOR   | PRESENT<br>EXTRA                             | RATE (                                     | (\$) | ADDITIONAL<br>FEE (\$)    |                           | RATE (\$)             | ADDITIONAL<br>FEE (\$) |
|      | Total (37 CFR   | AMENDMEN                                 | Minus   | ** 22   | = 0  | X \$                                       | =    |                           | OR                        | X \$52=               | 0                      |
|      | 1.16(i))<br>Independent<br>(37 CFR 1.16(h))                       | * 2                                      | Minus   | ***6  | = 0  | X \$                                       | =    |                           | OR                        | X \$220=              | 0                      |
|      |   | ze Fee (37 CF                            | R 1.16(s))  |   |  |  |      |                           |                           |                       |                        |
|      |   | ITATION OF MUI                           | LTIPLE DEPENI   | DENT CLAIM (37 CFI  | R 1.16(j))                                   |  |      |                           | OR                        |                       |                        |
|      |   |  |   |   |  | TOTAL<br>ADD'L<br>FEE                      |      |                           | OR                        | TOTAL<br>ADD'L<br>FEE | 0                      |
|      |   | (Column 1)                               | )   | (Column 2)  | (Column 3)                                   |  |      |                           |                           |                       |                        |
|      |   | CLAIMS<br>REMAINING<br>AFTER<br>AMENDMEN |   | HIGHEST<br>NUMBER<br>PREVIOUSLY<br>PAID FOR   | PRESENT<br>EXTRA                             | RATE (                                     | (\$) | ADDITIONAL<br>FEE (\$)    |                           | RATE (\$)             | ADDITIONAL<br>FEE (\$) |
|      | Total (37 CFR<br>1.16(i))   | *  | Minus   | **  | =  | X \$                                       | =    |                           | OR                        | X \$ =                |                        |
|      | Independent<br>(37 CFR 1.16(h))                                   | *  | Minus   | ***   | =  | X \$                                       | =    |                           | OR                        | X \$ =                |                        |
|      | Application Si  | ze Fee (37 CF                            | R 1.16(s))  |   |  |  |      |                           |                           |                       |                        |
| Ē    | FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))   |  |   |   |  |  |      |                           | OR                        |                       |                        |
|      |   |  |   |   |  | TOTAL<br>ADD'L<br>FEE                      |      |                           | OR                        | TOTAL<br>ADD'L<br>FEE |                        |
| lf   | the entry in column<br>the "Highest Numbe<br>If the "Highest Numb | er Previously P<br>per Previously F      | aid For" IN TH<br>Paid For" IN Th                               | IIS SPACE is less   | than 20, enter "20"<br>s than 3, enter "3".  | · /BRE                                     |      | strument Ex<br>A HARRISOI | N/                        | er:                   |                        |

This collection of information is required by 37 CFR 1.16. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450, DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, Demod Patents, P.O. Box 1450, Alexandria, VA 22313-1450.** 

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

|   | ed States Patent a | ND TRADEMARK OFFICE      | UNITED STATES DEPAR<br>United States Patent and<br>Address: COMMISSIONER F<br>P.O. Box 1450<br>Alexandria, Virginia 22:<br>www.uspto.gov | FOR PATENTS      |  |
|---|--------------------|--------------------------|--|------------------|--|
| APPLICATION NO.                                     | FILING DATE        | FIRST NAMED INVENTOR     | ATTORNEY DOCKET NO.  | CONFIRMATION NO. |  |
| 11/634,014  | 12/04/2006         | Richard B. Olsen         | 60967-0020C  | 3344             |  |
| <sup>86513</sup><br>Ward & Olivo<br>382 Springfileo | d Avenue           | EXAMINER<br>ALI, HATEM M |  |                  |  |
| Summit, NJ 07                                       | 901                |                          | ART UNIT   | PAPER NUMBER     |  |
|   |                    |                          | 3691   |                  |  |
|   |                    |                          |  |                  |  |
|   |                    |                          | MAIL DATE  | DELIVERY MODE    |  |
|   |                    |                          | 11/09/2010   | PAPER            |  |

# Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

|   | Application No.                          | Applicant(s)      |
|---|--|-------------------|
|   | 11/634,014                               | OLSEN ET AL.      |
| Office Action Summary   | Examiner                                 | Art Unit          |
|   | HATEM ALI                                | 3691              |
| The MAILING DATE of this communication appears on the cover sheet with the correspondence address<br>Period for Reply   |  |                   |
| <ul> <li>A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS,<br/>WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.</li> <li>Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed<br/>after SIX (6) MONTHS from the mailing date of this communication.</li> <li>If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.</li> <li>Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).<br/>Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any<br/>earned patent term adjustment. See 37 CFR 1.704(b).</li> </ul> |  |                   |
| Status  |  |                   |
| 1) Responsive to communication(s) filed on <u>31 August 2010</u> .  |  |                   |
|   | action is non-final.                     |                   |
| 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is  |  |                   |
| closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.   |  |                   |
| Disposition of Claims   |  |                   |
| 4)⊠ Claim(s) <u>13-20 and 35-41</u> is/are pending in the application.  |  |                   |
| 4a) Of the above claim(s) is/are withdrawn from consideration.  |  |                   |
| 5) Claim(s) is/are allowed.   |  |                   |
| 6)⊠ Claim(s) <u>13-20 and 35-41</u> is/are rejected.  |  |                   |
| 7) Claim(s) is/are objected to.   |  |                   |
| 8) Claim(s) are subject to restriction and/or election requirement.   |  |                   |
| Application Papers  |  |                   |
| 9) The specification is objected to by the Examiner.  |  |                   |
| 10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner.  |  |                   |
| Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).   |  |                   |
| Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  |  |                   |
| 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.  |  |                   |
| Priority under 35 U.S.C. § 119  |  |                   |
| 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).<br>a) All b) Some * c) None of:   |  |                   |
| 1. Certified copies of the priority documents have been received.   |  |                   |
| 2. Certified copies of the priority documents have been received in Application No  |  |                   |
| 3. Copies of the certified copies of the priority documents have been received in this National Stage   |  |                   |
| application from the International Bureau (PCT Rule 17.2(a)).   |  |                   |
| * See the attached detailed Office action for a list of the certified copies not received.  |  |                   |
|   |  |                   |
| Attachment(a)   |  |                   |
| Attachment(s) 1) X Notice of References Cited (PTO-892)   | 4) 🔲 Interview Summary                   | (PTO-413)         |
| 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Da                      | ate               |
| 3) Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date   | 5) 🔛 Notice of Informal F<br>6) 🔲 Other: | atent Application |
| U.S. Patent and Trademark Office  |  |                   |

# **DETAILED ACTION**

1. The following is **an office action** in response to a communication received on

## 8/31/10.

## Acknowledgement

# 2. Claim status :

- Claims cancelled: 1-12, and 21-34
- Claims newly added: 35-41
- Pending claims: 13-20 and 35-41

## Claim Rejections - 35 USC § 112

# 3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

**Claims 35-41** are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Specifically in claims 35 and 41, the citations, **"comparing** the requested trade price to the respective first price or second price" are not found and not described in detail in specification or in original claims. Proper clarification is required.

## 4. Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be

patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

6. **Claims 13-20** are as understood rejected under 35 U.S.C. 103 (a) as being unpatentable over **Potter** et al (5,787,402) in views of **Szoc** et al (2002/0023053).

Claims 1-12 (Canceled).

As per claims 13-14, *Potter* discloses a method of trading currency over a computer network, comprising the steps of:

(a) transmitting currency market information over a computer network to an end user; (b) receiving <u>at a trading system server</u> a currency trade order from said end user, wherein said currency trade order comprises limits within which the currency trade will be acceptable to said end user; (c) <u>after receiving the currency trade order</u>, calculating <u>at a trading system server</u> a market exchange rate for said currency trade order; and (d) executing said order if said market exchange rate is within said limits (**Abstract**, **fig.1**, col. 3-4+, rate server[114], FX Order server[col.12, lines 35+], Target FX rate[col.13, lines 5+]) and

[wherein said market information and said trade order are prefaced with http headers.]

*Potter* did not disclose explicitly said market information and said trade order are prefaced with http headers.

However, Szoc being in the same field of invention discloses said market information and said trade order are prefaced with http headers(para 0035, 0064+,

**fig.3**; via Manu page 300, Manu bar 340 remains visible as a header or footer, as a client's display ... changes from web page to web pages).

Therefore, it would have been obvious to an ordinary skill in the art at the time of invention was made to modify the disclosures of *Potter* to include the features as taught by *Szoc* to facilitate the client to navigate through continually visible Menu bar as http headers.

As per claim 15-16 Potter discloses a method of trading currency over a computer network, comprising the steps of:

(a) transmitting currency market information over a computer network to an end user; (b) receiving <u>at a trading system server</u> a currency trade order from said end user, wherein said currency trade order comprises a threshold exchange rate; (c) <u>after receiving the currency trade order</u>, calculating <u>at a trading system server</u> a market exchange rate for said currency trade order; and (d) executing said order (1) if said market exchange rate is or becomes above said threshold exchange rate and said order is a sell order, and (2) if said market exchange rate is or becomes rate is or becomes threshold exchange rate and said order is a buy order (**Abstract**, **fig.1**, col. 3-4+ , rate server[114], FX Order server[col.12, lines 35+], Target FX rate[col.13, lines 5+]), and

[wherein said market information and said trade order are prefaced with http headers]

*Potter* did not disclose explicitly said market information and said trade order are prefaced with http headers.

However, **Szoc** being in the same field of invention discloses said market information and said trade order are prefaced with http headers(**para 0035**, **0064+**, **fig.3**; via Manu page 300, Manu bar 340 remains visible as a header or footer, as a client's display ... changes from web page to web pages).

Therefore, it would have been obvious to an ordinary skill in the art at the time of invention was made to modify the disclosures of *Potter* to include the features as taught by *Szoc* to facilitate the client to navigate through continually visible Menu bar as http headers.

As per claim 17-18, *Potter* discloses a method of trading currency over a computer network, comprising the steps of:

(a) receiving currency market information over a computer network from a trading system server; (b) transmitting a currency trade order to said trading system server, wherein said currency trade order comprises limits within which the currency trade will be acceptable; and (c) if a market exchange rate <u>that is determined after transmission of</u> <u>the currency trade order</u> is within said limits, receiving information from said trading system server indicating that said currency trade order has been executed (**Abstract**, **fig.1, col.** 3-4+ , rate server [114], FX Order server [**col**.12, lines 35+], Target FX rate[col.13, lines 5+]), and

[wherein said market information and said trade order are prefaced with http headers].

**Potter** did not disclose explicitly said market information and said trade order are prefaced with http headers.

Page 5

However, **Szoc** being in the same field of invention discloses said market information and said trade order are prefaced with http headers(**para 0035**, **0064+**, **fig.3**; via Manu page 300, Manu bar 340 remains visible as a header or footer, as a client's display ... changes from web page to web pages).

Therefore, it would have been obvious to an ordinary skill in the art at the time of invention was made to modify the disclosures of *Potter* to include the features as taught by *Szoc* to facilitate the client to navigate through continually visible Menu bar as http headers.

As per claims 19-20, *Potter* discloses a method of trading currency over a computer network, comprising the steps of:

(a) receiving currency market information over a computer network from a trading system server; (b) transmitting a currency trade order to said trading system server, wherein said Currency trade order comprises a threshold exchange rate; and (c) if (1) the applicable market exchange rate <u>that is determined after transmission of the currency trade order</u> is or becomes above said threshold exchange rate and said order is a sell order, or (2) the applicable market exchange rate exchange rate is or becomes below said threshold exchange rate and said order is a buy order, receiving information from said trading system server indicating that said currency trade order has been executed (**Abstract**, **fig.1**, col. 3-4+ , rate server[114], FX Order server[col.12, lines 35+], Target FX rate[col.13, lines 5+]), and

[wherein said market information and said trade order are prefaced with http headers]..

Potter did not disclose explicitly said market information and said trade order are

prefaced with http headers.

However, **Szoc** being in the same field of invention discloses said market information and said trade order are prefaced with http headers(**para 0035**, **0064+**, **fig.3**; via Manu page 300, Manu bar 340 remains visible as a header or footer, as a client's display ... changes from web page to web pages).

Therefore, it would have been obvious to an ordinary skill in the art at the time of invention was made to modify the disclosures of *Potter* to include the features as taught by *Szoc* to facilitate the client to navigate through continually visible Menu bar as http headers.

**Claims 13-20** are as understood rejected under 35 U.S.C. 103 (a) as being unpatentable over **Potter** et al (5,787,402) in views of **Buchalter** (US H2064 H)

As per claims 35 and 41 (New) Potter discloses a method of trading currencies over a computer network connecting a trading system server and at least one trading client system, comprising the steps of:

(i) at the trading system server, determining and dynamically maintaining a plurality of current exchange rates, each current exchange rate relating to a pair of currencies and including a first price to buy a first currency of the pair with respect to a second currency of the pair and a second price to sell the first currency of the pair with respect to the second currency of the pair; (ii) transmitting data from the trading system server to a trading client system, the transmitted data representing at least one current exchange rate at the time of the transmission; (iii) at the trading client system,

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displaying the first and second prices for each received current exchange rate to a user; (iv) at the trading client system, accepting input from the user identifying a pair of currencies the user desires to trade, an amount of at least one currency of the pair desired to be traded and a requested trade price at which it is desired to effect the trade; (v) transmitting the accepted input from the trading client system to the trading system server (**Abstract**, **fig.1**, col. 3-4+ , rate server[114], FX Order server[col.12, lines 35+], Target FX rate[col.13, lines 5+]),

(vi) at the trading system server, [comparing the requested trade price to the respective first price or second price of the corresponding current exchange rate at that time] and, if the respective first price or second price of the corresponding current exchange rate at that time is equal to or better than the requested trade price, effecting the trade at the corresponding respective current exchange rate first price or second price and if the corresponding current exchange rate is worse than the requested trade price, refusing the trade; and (vii) transmitting from the trading system server to the trading client system an indication of whether the trade was refused or transacted and, if transacted, an indication of the price the trade was transacted at (**Abstract** and Figs. 1+).

**Potter** did not explicitly disclose the step of comparing the requested trade price to the respective first price or second price of the corresponding current exchange rate at that time

However, **Buchalter** being in the same field of invention was made to disclose the step of comparing the requested trade price to the respective first price or second

Page 8

trade price)

Therefore, it would have been obvious to an ordinary skill in the art at the time of invention to modify the features mentioned by **Potter** to include the disclosures as taught by **Buchalter** in order to facilitate the efficient and successful trading of fixed income securities.

36.(New) The method of claim 35 wherein the requested trade price is derived from a respective one of the first price or second price of the received current exchange rate and a user input limit value defining a maximum acceptable difference between the respective one of the first price or second price of the received current exchange rate received at the trading client system and the respective one of the first price or second price of the first price or second price of the trading client system and the respective one of the first price or second price of the first price or second price of the trading client system and the respective one of the first price or second price of the corresponding current exchange rate determined at the trading client system at which the trade can be effected (**Abstract**, **fig.1**, col. 3-4+ , rate server[114], FX Order server[col.12, lines 35+], Target FX rate[col.13, lines 5+]),

37 (New) The method of claim 36 wherein the user can input a first limit value to define a maximum acceptable difference between the first price of the current exchange rate received at the trading client system and the first price of the corresponding current exchange rate determined at the trading client system and can input a second limit value to define a maximum acceptable difference between the second price of the current exchange rate received at the trading system and the second price of the current exchange rate received at the trading system and the second price of the current exchange rate received at the trading system and the second price of the current exchange rate exchange rate determined at the trading system and the second price of the current exchange rate exchange rate determined at the trading system and the second price of the corresponding current exchange rate determined at the trading system and the second price of the corresponding current exchange rate determined at the trading system and the second price of the corresponding current exchange rate determined at the trading client system and the

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# Application/Control Number: 11/634,014 Art Unit: 3691

requested trade price is derived from the first price or second price of the current exchange rate received at the trading client system and the corresponding one of the first limit value and second limit value (**Abstract**, **fig.1**, col. 3-4+ , rate server[114], FX Order server[col.12, lines 35+], Target FX rate[col.13, lines 5+]),

38 (New) The method of claim 36 wherein step (iv) comprises the steps of:

(a) the user selecting one of the first price and second price of the current exchange rate displayed at the trading client system; (b) displaying to the user a set of input fields to define a desired trade, the input fields including an identification of the pair of currencies the user desires to trade, the amount of the currencies desired to be traded, the selected first price or second price of the current exchange rate received at the trading client system and a limit value, and where the input fields to identify the pair of currencies and the first price or second price are populated with appropriate values determined from the user's selection of the one of the first price or second price; (c) receiving from the user input to the input field defining the desired amount of currency to be traded; and (d) determining the requested trade price from the selected one of the first price and second price and the limit value (**Abstract**, **fig.1**, col. 3-4+ , rate server[114], FX Order server[col.12, lines 35+], Target FX rate[col.13, lines 5+]),

39 (New) The method of claim 38 wherein in step (b) the displayed set of input fields includes: a first limit value to define a maximum acceptable difference between the first price of the current exchange rate received at the trading client system and the first price of the corresponding current exchange rate determined at the trading client system; and a second limit value to define a maximum acceptable difference between Application/Control Number: 11/634,014 Art Unit: 3691

the second price of the current exchange rate received at the trading system and the second price of the corresponding current exchange rate determined at the trading client system and in step (d) the requested trade price is derived from the selected first price or second price and the corresponding one of the first limit value and second limit value (**Abstract**, **fig.1**, col. 3-4+ , rate server[114], FX Order server[col.12, lines 35+], Target FX rate[col.13, lines 5+]),

40 (New) The method of claim 36 wherein, when the limit value is zero, the requested trade price is the current corresponding first price or second price of the current exchange rate at the trading server (**Abstract** and Figs 1+).

Claim 41 (New)(with claim 35).

## **Response to Arguments**

7. Applicant's arguments with respect to claims 13-20 and 35-41 have been considered but are **moot** in view of the new ground(s) of rejection.

Note:

Rejection under 101 and 112 have been withdrawn due to applicant's amendments and cancellation of claims.

## Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

**Lange** et al (2003/0115128) discloses derivatives having demand-Based Adjustable Returns, And Trading Exchange Therefor.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to HATEM ALI whose telephone number is (571)270-3021 & Fax (571) 270-4021 [only for Cc to Examiner]. The examiner can normally be reached on 8.00 to 6.30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, ALEXANDER KALINOWSKI can be reached on 571-272-6771. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Application/Control Number: 11/634,014 Art Unit: 3691

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

HATEM ALI Examiner Art Unit 3691

/Hani M. Kazimi/ Primary Examiner, Art Unit 3691

| Notice of References Cited  | Application/Control No.<br>11/634,014 | Applicant(s)/Patent Under<br>Reexamination<br>OLSEN ET AL. |             |  |  |
|-----------------------------|---------------------------------------|--|-------------|--|--|
| notice of Nereferices Offen | Examiner                              | Art Unit   |             |  |  |
|                             | HATEM ALI                             | 3691   | Page 1 of 1 |  |  |
| lied                        |                                       |  |             |  |  |

#### **U.S. PATENT DOCUMENTS**

| * |   | Document Number<br>Country Code-Number-Kind Code | Date<br>MM-YYYY | Name                | Classification |
|---|---|--|-----------------|---------------------|----------------|
| * | А | US-H0,002,064                                    | 05-2003         | Buchalter, Lawrence | 705/37         |
|   | В | US-  |                 |                     |                |
|   | С | US-  |                 |                     |                |
|   | D | US-  |                 |                     |                |
|   | ш | US-  |                 |                     |                |
|   | F | US-  |                 |                     |                |
|   | G | US-  |                 |                     |                |
|   | Т | US-  |                 |                     |                |
|   | Ι | US-  |                 |                     |                |
|   | J | US-  |                 |                     |                |
|   | К | US-  |                 |                     |                |
|   | L | US-  |                 |                     |                |
|   | М | US-  |                 |                     |                |

### FOREIGN PATENT DOCUMENTS

| * |   | Document Number<br>Country Code-Number-Kind Code | Date<br>MM-YYYY | Country | Name | Classification |
|---|---|--|-----------------|---------|------|----------------|
|   | N |  |                 |         |      |                |
|   | 0 |  |                 |         |      |                |
|   | Р |  |                 |         |      |                |
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|   | R |  |                 |         |      |                |
|   | s |  |                 |         |      |                |
|   | Т |  |                 |         |      |                |

#### NON-PATENT DOCUMENTS

| * |   | Include as applicable: Author, Title Date, Publisher, Edition or Volume, Pertinent Pages) |
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\*A copy of this reference is not being furnished with this Office action. (See MPEP § 707.05(a).) Dates in MM-YYYY format are publication dates. Classifications may be US or foreign.

# EAST Search History

# EAST Search History (Prior Art)

| Ref #      | Hits | Search Query   | DBs   | Default<br>Operator | Plurals | Time Stamp          |  |  |  |
|------------|------|--|---|---------------------|---------|---------------------|--|--|--|
| L1         | 4    | compar\$ with trade adj<br>price and<br>@ad<"20010101"   | US-PGPUB;<br>USPAT; FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB           | OR                  | ON      | 2010/11/05<br>12:34 |  |  |  |
| L2         | 4    | compar\$ with trade adj<br>price and (current<br>exchange rate) and<br>@ad<"20010101"  | US-PGPUB;<br>USPAT; FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB           | OR                  | ON      | 2010/11/05<br>12:41 |  |  |  |
| S1         | 3068 | 705/35.ccls.   | US-PGPUB;<br>USPAT; EPO;<br>JPO   | OR                  | ON      | 2007/09/27<br>13:34 |  |  |  |
| <b>S</b> 4 | 16   | S1 and index and value<br>and patent and portfolio<br>and market adj segment<br>and share and growth   | US-PGPUB;<br>USPAT;<br>USOCR; FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR                  | ON      | 2007/10/10<br>15:16 |  |  |  |
| S5         | 5    | index adj value and<br>patent and portfolio and<br>market adj segment and<br>share and growth  | US-PGPUB;<br>USPAT;<br>USOCR; FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR                  | ON      | 2007/10/10<br>12:15 |  |  |  |
| S12        | 2    | "6,175,824".pn.  | US-PGPUB;<br>USPAT;<br>USOCR; FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR                  | ON      | 2007/10/10<br>12:16 |  |  |  |
| S19        | 138  | patent and portfolio and<br>relative and impact and<br>trade and index and value<br>and market with(size<br>growth share) not<br>@ad>"20040206"      | US-PGPUB;<br>USPAT;<br>USOCR; FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR                  | ON      | 2007/10/10<br>12:22 |  |  |  |
| S20        | 154  | patent and portfolio and<br>relative and impact and<br>trade and index and value<br>and market with(size<br>growth rate share) not<br>@ad>"20040206" | US-PGPUB;<br>USPAT;<br>USOCR; FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR                  | ON      | 2007/10/10<br>12:22 |  |  |  |

| S21 | 8    | patent adj portfolio and<br>relative and impact and<br>trade and index and value<br>and market with(size<br>growth rate share) not<br>@ad> "20040206"                         | US-PGPUB;<br>USPAT;<br>USOCR; FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2007/10/10<br>15:00 |
|-----|------|---|---|----|----|---------------------|
| S22 | 8    | patent adj portfolio and<br>relative and impact and<br>trade and index and value<br>and market with(size<br>growth rate share) not<br>@ad>"20040206" and<br>database and R&D  | US-PGPUB;<br>USPAT;<br>USOCR; FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2007/10/11<br>17:20 |
| S23 | 3076 | 705/35.ccls.  | US-PGPUB;<br>USPAT;<br>USOCR; FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2007/10/10<br>15:17 |
| S24 | 1    | S22 and S23   | US-PGPUB;<br>USPAT;<br>USOCR; FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2007/10/10<br>15:17 |
| S25 | 8    | patent adj portfolio and<br>relative and impact and<br>trade and index and value<br>and market with(size<br>growth rate share) not<br>@ad>"20040206" and<br>database and R&D  | US-PGPUB;<br>USPAT;<br>USOCR; FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2007/10/11<br>17:26 |
| S26 | 8    | patent with portfolio and<br>relative and impact and<br>trade and index and value<br>and market with(size<br>growth rate share) not<br>@ad>"20040206" and<br>database and R&D | US-PGPUB;<br>USPAT;<br>USOCR; FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2007/10/11<br>17:27 |
| S27 | 17   | patent and portfolio and<br>relative and impact and<br>trade and index and value<br>and market with(size<br>growth rate share) not<br>@ad>"20040206" and<br>database and R&D  | US-PGPUB;<br>USPAT;<br>USOCR; FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2007/10/11<br>18:45 |
| S28 | 2    | "6556992".pn.   | US-PGPUB;<br>USPAT;<br>USOCR; FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2007/10/11<br>18:46 |

| S29  | 17   | "6263314"   | US-PGPUB;<br>USPAT;<br>USOCR; FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2007/10/11<br>18:47 |
|------|------|---|---|----|----|---------------------|
| S30  | 2    | "6263314".pn.   | US-PGPUB;<br>USPAT;<br>USOCR; FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2007/10/11<br>18:54 |
| S31  | 2    | "6175824".pn.   | US-PGPUB;<br>USPAT;<br>USOCR; FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2007/10/11<br>18:55 |
| S32  | 3269 | 705/37.ccls.  | US-PGPUB;<br>USPAT;<br>USOCR; FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2007/10/15<br>15:24 |
| \$33 | 9    | S32 and currenc\$ and<br>server with(transaction<br>rate front-end) and<br>pricing adj engine and<br>database   | US-PGPUB;<br>USPAT;<br>USOCR; FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2007/10/15<br>16:01 |
| S34  | 10   | ("20010044771"  <br>"20010049651"  <br>"20010056398"  <br>"20020023053"  <br>"20020087455"  <br>"20030115128"  <br>"20030159109"  <br>"5787402"   "5916307"  <br>"6199046").PN. | US-PGPUB;<br>USPAT; USOCR   | OR | ON | 2007/10/15<br>15:34 |
| \$35 | 25   | currenc\$ and server with<br>(transaction rate front-<br>end) and pricing adj<br>engine and database  | US-PGPUB;<br>USPAT;<br>USOCR; FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2007/10/15<br>17:00 |
| S36  | 4    | currenc\$ and server and<br>(transaction rate front-<br>end) and pricing adj<br>engine and database not<br>@ad>"20010308"   | US-PGPUB;<br>USPAT;<br>USOCR; FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2007/10/15<br>16:15 |

| S38 | 2  | currenc\$ and server with<br>(transaction or rate or<br>front-end) and pricing adj<br>engine and database not<br>@ad>"20010308"   | US-PGPUB;<br>USPAT;<br>USOCR; FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2007/10/15<br>16:24 |
|-----|----|---|---|----|----|---------------------|
| S39 | 1  | currency adj trading and<br>network and server and<br>(transaction or rate or<br>front-end) and pricing adj<br>engine and database not<br>@ad>"20010308"  | US-PGPUB;<br>USPAT;<br>USOCR; FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2007/10/15<br>16:55 |
| S40 | 10 | ("20010044771"  <br>"20010049651"  <br>"20010056398"  <br>"20020023053"  <br>"20020087455"  <br>"20030115128"  <br>"20030159109"  <br>"5787402"   "5916307"  <br>"6199046").PN. OR<br>("7146336").URPN.             | US-PGPUB;<br>USPAT; USOCR   | OR | ON | 2007/10/15<br>17:05 |
| S41 | 12 | ("20010044771"  <br>"20010049651"  <br>"20010056398"  <br>"20020023053"  <br>"20020087455"  <br>"20030115128"  <br>"20030159109"  <br>"5787402"   "5916307"  <br>"6199046").PN. OR<br>("7146336")".URPN.and"<br>S37 | US-PGPUB;<br>USPAT; USOCR   | OR | ON | 2007/10/15<br>17:07 |
| S42 | 78 | Trading adj currency  | US-PGPUB;<br>USPAT; USOCR   | OR | ON | 2007/10/15<br>17:08 |
| S43 | 39 | Trading adj currency and computer adj network   | US-PGPUB;<br>USPAT; USOCR   | OR | ON | 2007/10/15<br>17:08 |
| S44 | 12 | Trading adj currency and<br>computer adj network not<br>@ad> "20010308"   | US-PGPUB;<br>USPAT; USOCR   | OR | ON | 2007/10/15<br>17:11 |
| S45 | 7  | Trading adj currency and<br>computer adj network not<br>@ad> "20010308" and<br>transaction and server<br>and (rate transaction front-<br>end)   | US-PGPUB;<br>USPAT; USOCR   | OR | ON | 2007/10/15<br>17:13 |
| S46 | 2  | Trading adj currency and<br>computer adj network not<br>@ad> "20010308" and<br>transaction and server<br>and (rate transaction front-<br>end) and pricing and<br>engine   | US-PGPUB;<br>USPAT; USOCR   | OR | ON | 2007/10/15<br>17:15 |

| S47 | 11     |  | US-PGPUB;<br>USPAT; USOCR | OR | ON | 2007/10/15<br>17:32 |
|-----|--------|--|---------------------------|----|----|---------------------|
| S48 | 13     | currency adj trading and<br>online not @ad><br>"20010308" and<br>transaction and server<br>and (rate transaction front-<br>end) and pricing and<br>engine                          | US-PGPUB;<br>USPAT; USOCR | OR | ON | 2007/10/15<br>18:00 |
| S49 |        | currency adj trading and<br>online not @ad><br>"20010308" and<br>transaction and server<br>and (rate transaction front-<br>end) and engine and<br>(pricing hedging)                | US-PGPUB;<br>USPAT; USOCR | OR | ON | 2007/10/15<br>18:52 |
| S50 | 625085 | currency adj trading and<br>online not @ad><br>"20010308" and<br>transaction and server<br>and (rate transaction front-<br>end) and pricing (engine<br>hedging)                    | US-PGPUB;<br>USPAT; USOCR | OR | ON | 2007/10/15<br>18:52 |
| S51 |        | currency adj trading and<br>online not @ad><br>"20010308" and<br>transaction and server<br>and (rate transaction front-<br>end) and pricing with<br>(engine hedging)               | US-PGPUB;<br>USPAT; USOCR | OR | ON | 2007/10/15<br>19:01 |
| S52 | 14     | currency adj trading and<br>online not @ad><br>"20010308" and<br>transaction and server<br>and (rate transaction front-<br>end) and pricing and<br>(engine hedging)                | US-PGPUB;<br>USPAT; USOCR | OR | ON | 2007/10/15<br>18:53 |
| S53 |        | currency adj trading and<br>online not @ad><br>"20010308" and<br>transaction and server<br>and (rate transaction front-<br>end) and pricing with<br>(engine hedging) and<br>module | US-PGPUB;<br>USPAT; USOCR | OR | ON | 2007/10/15<br>19:02 |

| S54 | 23 | display adj curve with rate<br>and (currency rate<br>indicatot boundary upper<br>lper)                                  | USPAT; FPRS;  | OR | ON | 2010/03/21<br>21:18 |
|-----|----|---|---|----|----|---------------------|
| S55 | 13 | display adj curve with rate<br>and (currency rate<br>indicatot boundary upper<br>Iper)and<br>@ad<"20010101"             | US-PGPUB;<br>USPAT; FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/03/21<br>21:19 |
| S56 | 11 | curve and trade adj order<br>and (currency rate<br>indicator boundary upper<br>lower trade order)and<br>@ad< "20010101" | US-PGPUB;<br>USPAT; FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/03/21<br>21:33 |

## EAST Search History (Interference)

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|          | Ind      | lex of (  | Claim    | าร     |                       | oplication/0<br>634014 | Cont           | trol N | lo.   |            | Applie<br>Reexa | amina | tion  | tent Unde | ۶r     |
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|          | CLAIM    |           |          |        |                       |                        |                |        | DATE  |            |                 |       |       |           |        |
| Fi       | inal     | Original  | 03/21/2  | 2010 1 | 1/05/2010             | Г                      |                |        |       |            |                 |       |       |           | Ι      |
| <u> </u> |          | 1         | -        |        | -                     |                        |                |        |       |            |                 |       |       |           |        |
|          |          | 2         | -        |        | -                     |                        |                |        |       |            |                 |       |       |           |        |
|          |          | 3         | -        |        | -                     |                        |                | _      |       |            |                 |       |       |           |        |
|          |          | 4         | -        |        | -                     |                        |                |        |       |            |                 |       |       |           |        |
|          |          | 5         | -        |        | -                     |                        |                |        |       |            |                 |       |       |           |        |
|          |          | 6         | -        |        | -                     |                        |                |        |       |            |                 |       |       |           |        |
|          |          | 7         | -        |        | -                     |                        |                |        |       |            |                 |       |       |           |        |
|          |          | 8         | -        |        | -                     |                        |                |        |       |            |                 |       |       |           |        |
|          |          | 9<br>10   | -        |        | -                     |                        |                |        |       |            |                 |       |       |           |        |
|          |          | 10        | -        |        | -                     |                        |                |        |       |            |                 |       |       |           |        |
|          |          | 12        | _        |        | -                     |                        |                |        |       |            |                 |       |       |           |        |
|          |          | 13        | ✓        |        | √                     |                        |                |        |       |            |                 |       |       |           |        |
|          |          | 14        | ✓        |        | ✓                     |                        |                |        |       |            |                 |       |       |           |        |
|          |          | 15        | ✓        |        | √                     |                        |                |        |       |            |                 |       |       |           |        |
|          |          | 16        | √        |        | $\checkmark$          |                        |                |        |       |            |                 |       |       |           |        |
|          |          | 17        | ~        |        | $\checkmark$          |                        |                |        |       |            |                 |       |       |           |        |
|          |          | 18        | ~        |        | $\checkmark$          |                        |                |        |       |            |                 |       |       |           |        |
| L        |          | 19        | ✓        |        | <ul> <li>✓</li> </ul> |                        |                |        |       |            |                 |       |       |           |        |
|          |          | 20        | ✓        |        | $\checkmark$          |                        |                |        |       |            |                 |       |       |           |        |
|          |          | 21        | ✓<br>✓   |        | -                     | ├                      |                |        |       |            |                 |       |       |           |        |
|          |          | 22<br>23  | ✓<br>✓   |        | -                     |                        |                |        |       | -          |                 |       |       |           |        |
| <u> </u> |          | 23        | ✓<br>✓   |        | -                     |                        |                |        |       | -          |                 |       |       |           |        |
| <u> </u> |          | 24        | · ·      |        | -                     |                        |                |        |       |            |                 |       |       |           |        |
| <u> </u> |          | 26        | √        |        | -                     |                        |                |        |       |            |                 |       |       |           |        |
|          |          | 27        | ✓        |        | -                     |                        |                |        |       |            |                 |       |       |           |        |
|          |          | 28        | ✓        |        | -                     |                        |                |        |       |            |                 |       |       |           |        |
|          |          | 29        | √        |        | -                     |                        |                |        |       |            |                 |       |       |           |        |
|          |          | 30        | √        |        | -                     |                        |                |        |       |            |                 |       |       |           |        |
|          |          | 31        | ~        |        | -                     |                        |                |        |       |            |                 |       |       |           |        |
|          |          | 32        | ✓        |        | -                     |                        |                |        |       |            |                 |       |       |           |        |
|          |          | 33        | ✓        |        | -                     |                        |                |        |       |            |                 |       |       |           |        |
| <u> </u> |          | 34        | ✓        |        | -                     |                        |                |        |       |            |                 |       |       |           |        |
| <u> </u> |          | 35        | ✓        |        |                       |                        |                |        |       |            |                 |       |       |           |        |
|          |          | 36        | ✓        | 1      |                       |                        |                |        |       |            |                 |       |       |           |        |

Part of Paper No.: 20101027

|    | Inc        | dex of (   | Claim    | ns   |          | Application/Control No.<br>11634014<br>Examiner |              |     |      |         | Applicant(s)/Patent Under<br>Reexamination<br>OLSEN ET AL.<br>Art Unit |   |       |            |        |        |  |
|----|------------|------------|----------|------|----------|---|--------------|-----|------|---------|--|---|-------|------------|--------|--------|--|
|    |            |            |          |      |          | HATEM ALI                                       |              |     |      |         | 3691   |   |       |            |        |        |  |
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| =  | ļ          | Allowed    |          | ÷    | Re       | estricted                                       | I Interferen |     |      | ence    |  | 0 |       | Obje       | cted   |        |  |
|    | Claims     | renumbered | in the s | ame  | order as | presented by ap                                 | plic         | ant |      |         | СРА  | 0 | ] т.с | <b>)</b> . |        | R.1.47 |  |
|    | CLA        | MIA        |          |      |          |   |              |     | DATE |         |  |   |       |            |        |        |  |
| Fi | inal       | Original   | 03/21/2  | 2010 | 11/05/20 | 10  |              |     |      |         |  |   |       |            |        |        |  |
|    |            | 37         | √        |      |          |   |              |     |      |         |  |   |       |            |        |        |  |
|    | 38 ✓       |            |          |      |          |   |              |     |      |         |  |   |       |            |        |        |  |
|    |            | 39         | √        |      |          |   |              |     |      |         |  |   |       |            |        |        |  |
|    |            | 40         | ~        |      |          |   |              |     |      |         |  |   |       |            |        |        |  |
|    |            | 41         | ✓        |      |          |   |              |     |      | $\perp$ |  |   |       |            |        |        |  |
|    |            | 49         |          |      |          |   |              |     |      |         |  |   |       |            |        |        |  |

|              | Application/Control No. | Applicant(s)/Patent Under<br>Reexamination |
|--------------|-------------------------|--|
| Search Notes | 11634014                | OLSEN ET AL.                               |
|              | Examiner                | Art Unit                                   |
|              | HATEM ALI               | 3691                                       |

|       | SEARCHED |         |          |
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| Class | Subclass | Date    | Examiner |
| 705   | 37       | 3/18/10 | HA       |

| SEARCH NOTE   | S       |          |
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| Search Notes  | Date    | Examiner |
| Searched EAST | 3/18/10 | HA       |
| Searched EAST | 11/5/10 | HA       |

|       | INTERFERENCE SEARCH |      |          |
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| Class | Subclass            | Date | Examiner |
|       |                     |      |          |

| United St   | ates Patent and Tradema | UNITED STA<br>United State:<br>Addres: COMMI<br>PO. Box | a, Virginia 22313-1450                  |
|---|-------------------------|---|---|
| APPLICATION NUMBER  | FILING OR 371(C) DATE   | FIRST NAMED APPLICANT                                   | ATTY. DOCKET NO./TITLE                  |
| 11/634,014  | 12/04/2006              | Richard B. Olsen  | 60967-0020C                             |
| 86513<br>Ward & Olivo LLP<br>382 Springfiled Avenue<br>Summit, NJ 07901 |                         |   | CONFIRMATION NO. 3344<br>EPTANCE LETTER |

# NOTICE OF ACCEPTANCE OF POWER OF ATTORNEY

This is in response to the Power of Attorney filed 08/31/2010.

The Power of Attorney in this application is accepted. Correspondence in this application will be mailed to the above address as provided by 37 CFR 1.33.

/gbien-aime/

Office of Data Management, Application Assistance Unit (571) 272-4000, or (571) 272-4200, or 1-888-786-0101

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

| Application o | f: Olsen et al                    | Confirmation No.: 3344          |
|---------------|-----------------------------------|---------------------------------|
| Serial No.    | 11/634,014                        | Art Unit: 3691                  |
| Filing Date:  | December 4, 2006                  | Examiner: Ali, Hatem M.         |
|               | ENCY TRADING<br>METHODS AND<br>RE | Attorney Docket No: 60967-0020C |

#### AMENDMENT

Mail Stop Amendment Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Sir:

This is in response to the Office Action of March 31, 2010. Please amend the application

as set forth on the following pages:

#### IN THE CLAIMS

Please revise the claims to read as follows:

1.-12. (cancelled)

13 (Currently amended). A method of trading currency over a computer network, comprising the steps of:

(a) transmitting currency market information over a computer network to an end user;

(b) receiving <u>at a trading system server</u> a currency trade order from said end user, wherein said currency trade order comprises limits within which the currency trade will be acceptable to said end user;

(c) <u>after receiving the currency trade order</u>, calculating <u>at the trading system server</u> a market exchange rate for said currency trade order; and

(d) executing said order if said market exchange rate is within said limits.

14 (Original). A method as in claim 13, wherein said market information and said trade order are prefaced with http headers.

15 (Currently amended). A method of trading currency over a computer network, comprising the steps of:

(a) transmitting currency market information over a computer network to an end user;

(b) receiving <u>at a trading system server</u> a currency trade order from said end user, wherein said currency trade order comprises a threshold exchange rate;

(c) <u>after receiving the currency trade order</u>, calculating <u>at the trading system server</u> a market exchange rate for said currency trade order; and

(d) executing said order (1) if said market exchange rate is or becomes above said threshold exchange rate and said order is a sell order, and (2) if said market exchange rate is or becomes below said threshold exchange rate and said order is a buy order.

16 (Original). A method as in claim 15, wherein said market information and said trade order are prefaced with http headers.

17 (Currently amended). A method of trading currency over a computer network, comprising the steps of:

(a) receiving currency market information over a computer network from a trading system server;

(b) transmitting a currency trade order to said trading system server, wherein said currency trade order comprises limits within which the currency trade will be acceptable; and

(c) if a market exchange rate <u>that is determined after transmission of the currency trade order</u> is within said limits, receiving information from said trading system server indicating that said currency trade order has been executed.

18 (Original). A method as in claim 17, wherein said market information and said trade order are prefaced with http headers.

19 (Currently amended). A method of trading currency over a computer network, comprising the steps of:

(a) receiving currency market information over a computer network from a trading system server;

(b) transmitting a currency trade order to said trading system server, wherein said currency trade order comprises a threshold exchange rate; and

(c) if (1) the <u>an</u> applicable market exchange rate <u>that is determined after transmission of the</u> <u>currency trade order</u> is or becomes above said threshold exchange rate and said order is a sell order, or (2) the applicable market exchange rate is or becomes below said threshold exchange rate and said order is a buy order, receiving information from said trading system server indicating that said currency trade order has been executed.

20 (Original). A method as in claim 19, wherein said market information and said trade order are prefaced with http headers.

21 – 34 (Cancelled)..

35.(New) A method of trading currencies over a computer network connecting a trading system server and at least one trading client system, comprising the steps of:

(i) at the trading system server, determining and dynamically maintaining a plurality of current exchange rates, each current exchange rate relating to a pair of currencies and including a first price to buy a first currency of the pair with respect to a second currency of the pair and a second price to sell the first currency of the pair with respect to the second currency of the pair;

(ii) transmitting data from the trading system server to a trading client system, the transmitted data representing at least one current exchange rate at the time of the transmission;

(iii) at the trading client system, displaying the first and second prices for each received current exchange rate to a user;

(iv) at the trading client system, accepting input from the user identifying a pair of currencies the user desires to trade, an amount of at least one currency of the pair desired to be traded and a requested trade price at which it is desired to effect the trade;

(v) transmitting the accepted input from the trading client system to the trading system server;

(vi) at the trading system server, comparing the requested trade price to the respective first price or second price of the corresponding current exchange rate at that time and, if the respective first price or second price of the corresponding current exchange rate at that time is equal to or better than the requested trade price, effecting the trade at the corresponding respective current exchange rate first price or second price and if the corresponding current exchange rate is worse than the requested trade price, refusing the trade; and

(vii) transmitting from the trading system server to the trading client system an indication of whether the trade was refused or transacted and, if transacted, an indication of the price the trade was transacted at.

36.(New) The method of claim 35 wherein the requested trade price is derived from a respective one of the first price or second price of the received current exchange rate and a user input limit value defining a maximum acceptable difference between the respective one of the first price or second price of the received current exchange rate received at the trading client system and the respective one of the first price or second price of the corresponding current exchange rate determined at the trading client system at which the trade can be effected.

37.(New) The method of claim 36 wherein the user can input a first limit value to define a maximum acceptable difference between the first price of the current exchange rate received at the trading client system and the first price of the corresponding current exchange rate determined at the trading client system and can input a second limit value to define a maximum acceptable difference between the second price of the current exchange rate received at the trading system and the second price of the corresponding current exchange rate determined at the trading client system and the second price of the current exchange rate determined at the trading client system and the requested trade price is derived from the first price or second price of the current exchange rate received at the trading client system and the corresponding one of the first limit value and second limit value.

38.(New) The method of claim 36 wherein step (iv) comprises the steps of:

(a) the user selecting one of the first price and second price of the current exchange rate displayed at the trading client system;

(b) displaying to the user a set of input fields to define a desired trade, the input fields including an identification of the pair of currencies the user desires to trade, the amount of the currencies desired to be traded, the selected first price or second price of the current exchange rate received at the trading client system and a limit value, and where the input fields to identify the pair of currencies and the first price or second price are populated with appropriate values determined from the user's selection of the one of the first price or second price;

(c) receiving from the user input to the input field defining the desired amount of currency to be traded; and

(d) determining the requested trade price from the selected one of the first price and second price and the limit value.

39.(New) The method of claim 38 wherein in step (b) the displayed set of input fields includes: a first limit value to define a maximum acceptable difference between the first price of the current exchange rate received at the trading client system and the first price of the corresponding current exchange rate determined at the trading client system; and a second limit value to define a maximum acceptable difference between the second price of the current exchange rate received at the trading client system and the second price of the current exchange rate determined at the trading client system; and a second limit value to define a the trading system and the second price of the current exchange rate determined at the trading client system and the second price of the corresponding current exchange rate determined at the trading client system and the second price of the corresponding current exchange rate determined at the trading client system and in step (d) the requested trade price is derived from the selected

first price or second price and the corresponding one of the first limit value and second limit value.

40.(New) The method of claim 36 wherein, when the limit value is zero, the requested trade price is the current corresponding first price or second price of the current exchange rate at the trading server.

41 (New) A method of trading currencies over a computer network connecting a trading system server and at least one trading client system, comprising the steps of:

(i) at the trading system server, determining and dynamically maintaining a plurality of current exchange rates, each current exchange rate relating to a pair of currencies and including a first price to buy a first currency of the pair with respect to a second currency of the pair and a second price to sell the first currency of the pair with respect to the second currency of the pair;

(ii) transmitting data from the trading system server to a trading client system, the transmitted data representing at least one current exchange rate at the time of the transmission;

(iii) receiving at the trading system server input from a user of the trading client system identifying a pair of currencies the user desires to trade, an amount of at least one currency of the pair desired to be traded and a requested trade price at which it is desired to effect the trade;

(iv) at the trading system server, comparing the requested trade price to the respective first price or second price of the corresponding current exchange rate at that time and, if the respective first price or second price of the corresponding current exchange rate at that time is equal to or better than the requested trade price, effecting the trade at the corresponding respective current exchange rate first price or second price and if the corresponding current exchange rate is worse than the requested trade price, refusing the trade; and

(v) transmitting from the trading system server to the trading client system an indication of whether the trade was refused or transacted and, if transacted, an indication of the price the trade was transacted at.

#### REMARKS

In the office action of March 31, 2010, claims 13 - 16 were rejected under 35 U.S.C. 101 as being directed to non-statutory subject matter. Claims 13- 20 were rejected under 35 U.S.C. 103(a) as unpatentable over Potter et al. (USP 5,787,402) in view of Szoc et al. (2002/0023053); and claims 21 - 34 were rejected under 35 U.S.C. 103(a) as unpatentable over Potter and Szoc in view of Selleck (2001/0049651). Claims 24 - 30 were also rejected under 35 U.S.C. 112, second paragraph, as being indefinite.

To expedite prosecution of this application, claims 21 - 34 have been cancelled without prejudice. Claims 13, 15, 17 and 19 have been amended. New claims 35 - 41 have been added.

Claims 13 and 15 have been amended to specify that the steps of receiving and calculating are performed at a trading system server. With these amendments the methods recited in claims 13 - 16 are limited to methods performed on apparatus. Accordingly, claims 13 - 16 are believed to be patentable subject matter.

As described in the Background section on the first page of the application, in the traditional on-line currency market, a currency trade is accomplished in three steps. First, a trader specifies to a dealer the currency pair and the amount he would like to trade but does not specify whether he is buying or selling. Next, the dealer provides a bid and an ask price not knowing whether the trader will buy, sell or reject the offer; and gives the trader several seconds to respond. And the trader then responds to the dealer either rejecting the offer or indicating whether he is buying or selling.

This method of trading is also described at col. 9 lines 21 - 52 of the primary reference, Potter.

The trader is given very little time to respond to the dealer's offer because currency exchange rates are continually changing and the dealer needs to protect himself from adverse changes in these rates that might occur while waiting for the trader's response to his offer.

However, as noted in the Background of applicants' specification, there is a problem with this three-step method of currency trading arising because of signal delays in Internet transmissions. A trader might not actually have a few seconds to respond to the dealer's offer before time runs out and the dealer withdraws the offer.

One aspect of applicants' invention is an alternative method of effecting a currency trade that does not impose a severe time limit on the trader's response and therefore can be used with communication systems such as the Internet that do not have uniform high-speed message delivery.

In an illustrative embodiment of applicants' method, the dealer (or trading system) provides currency pair information to a trader. The trader responds by specifying the currency pair, whether he is buying or selling, the amount involved and a price range. The dealer then redetermines the price for the currency being bought or sold and, if the redetermined price is within the trader's price range, the transaction is concluded.

As will be apparent, applicants' method differs from the three-step method of the admitted prior art and of Potter in several respects. First, in applicants' invention, the dealer is able to conclude the transaction after two communications: provision of pricing information to the trader and receipt of the trader's response. In the prior art, the trader must ask the dealer for pricing information; the dealer responds; and the trader must reply to the dealer. Second, time is not a critical factor in applicants' method. The price of the transaction, if there is a transaction, will be the price determined when the trader responds regardless of when the trader responds. In the prior art, the dealer cannot allow more than a few seconds for the trader's response because he needs to protect himself against market fluctuations. Third, in applicants' method, the trader makes known whether he is buying or selling in his initial message to the dealer. In the prior art, the dealer does not learn whether the trader is buying or selling until the final message. Fourth, the trader may set limits on an acceptable price. In the prior art, the trader can only accept or reject the price specified by the dealer.

Several of these differences between applicants' invention and the prior art are emphasized in claims 13 - 20 and 34 - 41.

For example, claim 13 as amended specifies the steps of "receiving at a trading system server a currency trade order from said end user, wherein said currency trade order comprises limits", "after receiving the currency trade order, calculating at the trading system server a market exchange rate", and "executing said order if said market exchange rate is within said limits." As noted above, the prior art does not describe a currency trading method in which the end user or trader specifies a currency trade order that includes limits. It also does not describe a method in which an exchange rate is calculated by the trading system server after receiving the currency trade order or one in which the order is executed if the calculated exchange rate is within limits specified by the end user (or trader).

Independent claim 15 as amended contains similar limitations and is believed patentable for the same reason.

Dependent claims 14 and 16 are believed patentable for the same reasons claims 13 and 15 are patentable.

Claims 17 – 20 describe applicants' invention from the point of view of the end user (or trader). Step (b) of claims 17 and 19 specify "transmitting a currency trade order to said trading system server, wherein said currency trade order comprises limits..." As emphasized above in the discussion of claims 13 and 15, the prior art does not describe a currency trading method in which the end user or trader specifies a currency trade order that includes limits. For these reasons, claims 17 and 19 are believed patentable over the cited art. Claims 17 and 19 have been amended to specify that the market exchange rate "is determined after transmission of the currency trade order." Again, as noted above in the discussion of claims 13 and 15, the prior art does not described a currency trade order." Again, trading method in which the market exchange rate is determined after transmission of the currency trade order.

Dependent claims 18 and 20 are believed patentable for the same reason claims 17 and 19 are patentable.

Method claims 35 – 41 have been added. Claim 35 recites the steps of 'determining and dynamically maintaining a plurality of current exchange rates" at a trading system server, transmitting at least one rate to a trading client server, displaying the rate to a user, accepting input from the user including a requested trade price, transmitting the input to the trading system server, comparing the requested trade price with the appropriate exchange rate at that time at the trading system server, making the trade if the rate at that time is better than the requested trade price, and reporting the results. Claim 35 is believed patentable because it recites the step of comparing the requested trade price with the current exchange rate at that time. In contrast, in the prior art, the rate at which the trade is done is determined before the end user (or trader) submits his order.

Dependent claims 36 - 40 recite further details of applicants' method and are believed patentable for the same reason claim 35 is patentable.

Method claim 41 is similar to claim 35 but recites the steps of applicants' method that are performed at the trading system server. Like claim 35, claim 41 recites the step of comparing the requested trade price with the current exchange price at that time; and claim 41 is believed patentable for this reason.

For the foregoing reasons the claims in this application are believed patentable and this application is believed to be in condition for allowance.

Aside from the fee for an extension of time, no additional fee is believed to be due for filing this response. However, if any additional fee is due, please charge such fee to Ward & Olivo LLP Deposit Account No. 23-0420.

If the Examiner believes a telephone interview would expedite prosecution of this

application, the Examiner is invited to call applicant's attorney at the number given below.

Date: August 31, 2010

Respectfully submitted,

Francis & Morris

Francis E. Morris Reg. No. 24,615 Ward & Olivo LLP Customer No. 086513 (908) 277-3333

| Electronic Patent A                     | pp  | lication Fee         | Transm         | ittal       |                         |
|---|-----|----------------------|----------------|-------------|-------------------------|
| Application Number:                     | 116 | 534014               |                |             |                         |
| Filing Date:                            | 04- | Dec-2006             |                |             |                         |
| Title of Invention:                     | Cui | rrency trading syste | em, methods, a | nd software |                         |
| First Named Inventor/Applicant Name:    | Ric | hard B. Olsen        |                |             |                         |
| Filer:                                  | Fra | nk Morris            |                |             |                         |
| Attorney Docket Number:                 | 060 | 0967-0020-US01       |                |             |                         |
| Filed as Large Entity                   |     |                      |                |             |                         |
| Utility under 35 USC 111(a) Filing Fees |     |                      |                |             |                         |
| Description                             |     | Fee Code             | Quantity       | Amount      | Sub-Total in<br>USD(\$) |
| Basic Filing:                           |     |                      |                |             |                         |
| Pages:                                  |     |                      |                |             |                         |
| Claims:                                 |     |                      |                |             |                         |
| Miscellaneous-Filing:                   |     |                      |                |             |                         |
| Petition:                               |     |                      |                |             |                         |
| Patent-Appeals-and-Interference:        |     |                      |                |             |                         |
| Post-Allowance-and-Post-Issuance:       |     |                      |                |             |                         |
| Extension-of-Time:                      |     |                      |                |             |                         |
| Extension - 2 months with \$0 paid      |     | 1252                 | 1              | 490         | 490                     |

| Description    | Fee Code | Quantity  | Amount | Sub-Total in<br>USD(\$) |
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| Miscellaneous: |          |           |        |                         |
|                | Tot      | al in USD | (\$)   | 490                     |

| Electronic A                         | cknowledgement Receipt                         |
|--------------------------------------|--|
| EFS ID:                              | 8331134  |
| Application Number:                  | 11634014                                       |
| International Application Number:    |  |
| Confirmation Number:                 | 3344   |
| Title of Invention:                  | Currency trading system, methods, and software |
| First Named Inventor/Applicant Name: | Richard B. Olsen                               |
| Customer Number:                     | 09629  |
| Filer:                               | Frank Morris                                   |
| Filer Authorized By:                 |  |
| Attorney Docket Number:              | 060967-0020-US01                               |
| Receipt Date:                        | 31-AUG-2010                                    |
| Filing Date:                         | 04-DEC-2006                                    |
| Time Stamp:                          | 17:51:11                                       |
| Application Type:                    | Utility under 35 USC 111(a)                    |

# Payment information:

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| Payment was successfully received in RAM                 | \$490  |
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| Deposit Account  | 230420   |
| Authorized User  |  |
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| Charge any Additional Fees required under 37 C.F.R. Se   | ction 1.16 (National application filing, search, and examination fees) |
| Charge any Additional Fees required under 37 C.F.R. Se   | ction 1.17 (Patent application and reexamination processing fees)      |

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#### PTO/SB/81 (01-09)

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| POV   | VER OF ATTORNEY   | Application Number   | 11/634,014  |
|---|---|--|---|
|   | OR  | Filing Date  | December 4, 2006  |
| REVOCATION  | OF POWER OF ATTORNEY  | First Named Inventor   | Richard B. Olsen  |
|   | W POWER OF ATTORNEY   | Title  | CURRENCY TRADING SYSTEM, METHODS AND SOF                  |
|   | AND   | Art Unit   | 3691  |
|   | ORRESPONDENCE ADDRESS   | Exeminer Name  | Hatem M. Ali  |
|   |   | Attorney Docket Number   | 60967-0020C   |
| hereby revoke a   | Il previous powers of attorney given i  | n the above-identified   | application.  |
| A Power of At   | tomey is submitted herewith.  |  |   |
| Number as my<br>identified abov   | nt Practitioner(s) associated with the following<br>/our attorney(s) or agent(s) to prosecute the a<br>e, and to transact all business in the United S<br>k Office connected therewith: | upplication  | 086513  |
| I hereby appoi  | nt Practitioner(s) named below as my/our atto<br>business in the United States Patent and Trac  | mey(s) or agent(s) to prose<br>lemark Office connected the   | aute the application identified above, and rewith:        |
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|---|---|---|--|--|--|--|--|
| Applicant   | Patent Owner: OANDA Corporation   |   |  |  |  |  |  |
|   |   | Filed/Issue Date: December 4, 2006  |  |  |  |  |  |
| Titled:   | CURRENCY TRADING SYSTEM, N  |   |  |  |  |  |  |
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| (Name of A:   |   | , a <u>corporation</u><br>(Type of Assignee, e.g., corporation, partnership, university, government egency, etc.  |  |  |  |  |  |
| states that   | at it is:   |   |  |  |  |  |  |
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| B. 🗌  | A chain of title from the inventor(s), of t   | the patent application/patent identified above, to the current assignee as follows:   |  |  |  |  |  |
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|   | Additional documents in the chain of ti   | tle are listed on a supplemental sheet(s).  |  |  |  |  |  |
|   | As required by 37 CFR 3.73(b)(1)(i), the documentary evidence of the chain of title from the original owner to the assignee was, or concurrently is being, submitted for recordation pursuant to 37 CFR 3.11. |   |  |  |  |  |  |
|   |   | of the original assignment document(s)) must be submitted to Assignment Division in<br>the assignment in the records of the USPTO. See MPEP 302.08]   |  |  |  |  |  |
| The undersigned (whose title is supplied below) is authorized to act on behalf of the assignee. |   |   |  |  |  |  |  |
| //  | gnature   | <u>Ang. 30, 2010</u><br>Date  |  |  |  |  |  |
| Michael E   | Borland   | General Counsel   |  |  |  |  |  |
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| This collectio<br>process) an a   | n of information is required by 37 CFR 3.73(b). The application, Confidentiality is governed by 35 U.S.C.   | information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to<br>122 and 37 CFR 1.11 and 1.14. This collection is estimated to take 12 minutes to complete, including |  |  |  |  |  |

gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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PTO/SB/06 (07-06)

Approved for use through 1/31/2007. OMB 0651-0032 

| Under the Paperwork Reduction Act of 1995, no persons are required to respond<br><b>PATENT APPLICATION FEE DETERMINATION RECORD</b><br>Substitute for Form PTO-875   |   |   |            |   | nd to            | to a collection of information unle<br>Application or Docket Number<br>11/634,014 |                       |                        |                       |                       |                        |
|--|---|---|------------|---|------------------|---|-----------------------|------------------------|-----------------------|-----------------------|------------------------|
| APPLICATION AS FILED – PART I<br>(Column 1) (Column 2)   |   |   |            |   | SMALL            |   | OR                    |                        | HER THAN<br>LL ENTITY |                       |                        |
|  | FOR NUMBER FILED NUMBER EXTRA   |   |            |   | RATE (\$)        | FEE (\$)  |                       | RATE (\$)              | FEE (\$)              |                       |                        |
|  | BASIC FEE<br>(37 CFR 1.16(a), (b), c  | or (c))                                   | N/A N/A    |   |                  |   | N/A                   |                        |                       | N/A                   |                        |
|  | SEARCH FEE<br>(37 CFR 1.16(k), (i), c   | or (m))                                   | N/A        |   | N/A              |   | N/A                   |                        |                       | N/A                   |                        |
| EXAMINATION FEE<br>(37 CFR 1.16(o), (p), or (q))   |   |   | N/A        |   | N/A              |   |                       | N/A                    |                       |                       |                        |
|  | AL CLAIMS<br>CFR 1.16(i))   |   | minus 20 = |   | *                |   | X \$ =                |                        | OR                    | X \$ =                |                        |
|  | EPENDENT CLAIM<br>CFR 1.16(h))  | s   | m          | nus 3 = *                                   |                  |   | X \$ =                |                        |                       | X \$ =                |                        |
| APPLICATION SIZE FEE<br>(37 CFR 1.16(s)) If the specification and drawings exceed 100<br>sheets of paper, the application size fee due<br>is \$250 (\$125 for small entity) for each<br>additional 50 sheets or fraction thereof. See<br>35 U.S.C. 41(a)(1)(G) and 37 CFR 1.16(s). |   |   |            |   |                  |   |                       |                        |                       |                       |                        |
|  | MULTIPLE DEPEN  |   | ,          | 0//   |                  |   | TOTAL                 |                        |                       | TOTAL                 |                        |
| * If t   | he difference in colu   |   | ,          |   |                  |   | TOTAL                 |                        |                       | TOTAL                 |                        |
| APPLICATION AS AMENDED – PART II<br>(Column 1) (Column 2) (Column 3)   |   |   |            | SMAI  | L ENTITY         | OR  |                       | ER THAN<br>LL ENTITY   |                       |                       |                        |
| AMENDMENT  | 08/31/2010  | CLAIMS<br>REMAINING<br>AFTER<br>AMENDMENT |            | HIGHEST<br>NUMBER<br>PREVIOUSLY<br>PAID FOR | PRESENT<br>EXTRA |   | RATE (\$)             | ADDITIONAL<br>FEE (\$) |                       | RATE (\$)             | ADDITIONAL<br>FEE (\$) |
| OME  | Total (37 CFR<br>1.16(i))   | * 15                                      | Minus      | ** 22                                       | = 0              |   | X \$ =                |                        | OR                    | X \$52=               | 0                      |
| IN I   | Independent<br>(37 CFR 1.16(h))   | * 6                                       | Minus      | ***6  | = 0              |   | X \$ =                |                        | OR                    | X \$220=              | 0                      |
| AME  | Application Si  | ze Fee (37 CFR                            | 1.16(s))   |   |                  |   |                       |                        |                       |                       |                        |
| FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))  |   |   |            |   |                  |   |                       | OR                     |                       |                       |                        |
|  |   |   |            |   |                  |   | TOTAL<br>ADD'L<br>FEE |                        | OR                    | TOTAL<br>ADD'L<br>FEE | 0                      |
|  |   | (Column 1)                                |            | (Column 2)                                  | (Column 3)       |   |                       |                        |                       |                       |                        |
| _  |   | CLAIMS<br>REMAINING<br>AFTER<br>AMENDMENT |            | HIGHEST<br>NUMBER<br>PREVIOUSLY<br>PAID FOR | PRESENT<br>EXTRA |   | RATE (\$)             | additional<br>Fee (\$) |                       | RATE (\$)             | ADDITIONAL<br>FEE (\$) |
| Ľ<br>Ľ   | Total (37 CFR<br>1.16(i))   | *   | Minus      | **  | =                |   | X \$ =                |                        | OR                    | X \$ =                |                        |
| MO   | Independent<br>(37 CFR 1.16(h))   | *   | Minus      | ***   | =                |   | X \$ =                |                        | OR                    | X \$ =                |                        |
| AMENDMENT  | Application Size Fee (37 CFR 1.16(s))   |   |            |   |                  |   |                       |                        |                       |                       |                        |
| AM   | FIRST PRESEN  | ITATION OF MULT                           | PLE DEPEN  | DENT CLAIM (37 CF                           | R 1.16(j))       |   |                       |                        | OR                    |                       |                        |
| * If the entry in column 1 is less than the entry in column 2, write "0" in column 3.<br>** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 20, enter "20".<br>*** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 3, enter "3".     |   |   |            |   |                  |   |                       |                        |                       |                       |                        |
|  | The "Highest Number Previously Paid For" (Total or Independent) is the highest number found in the appropriate box in column 1.<br>This collection of information is required by 37 CFR 1.16. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to |   |            |   |                  |   |                       |                        |                       |                       |                        |

This collection of information is required by 37 CFR 1.16. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.** If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

|                      | <u>ed States Patent a</u>                                | and Trademark Office | UNITED STATES DEPAR<br>United States Patent and<br>Address: COMMISSIONER F<br>P.O. Box 1450<br>Alexandria, Virginia 22:<br>www.uspto.gov | FOR PATENTS      |  |  |
|----------------------|--|----------------------|--|------------------|--|--|
| APPLICATION NO.      | FILING DATE  | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO.  | CONFIRMATION NO. |  |  |
| 11/634,014           | 12/04/2006   | Richard B. Olsen     | 060967-0020-US01   | 3344             |  |  |
| MORGAN LE            | 7590 03/31/2010<br>WIS & BOCKIUS LLP<br>LVANIA AVENUE NW |                      | EXAMINER<br>ALI, HATEM M   |                  |  |  |
| WASHINGTON, DC 20004 |  | ART UNIT             | PAPER NUMBER   |                  |  |  |
|                      |  |                      | 3691   |                  |  |  |
|                      |  |                      | MAIL DATE  | DELIVERY MODE    |  |  |
|                      |  |                      | 03/31/2010   | PAPER            |  |  |

# Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

|   | Application No.   | Applicant(s)                  |  |  |  |  |  |
|---|---|-------------------------------|--|--|--|--|--|
|   | 11/634,014  | OLSEN ET AL.                  |  |  |  |  |  |
| Office Action Summary   | Examiner  | Art Unit                      |  |  |  |  |  |
|   | HATEM ALI   | 3691                          |  |  |  |  |  |
| The MAILING DATE of this communication app<br>Period for Reply  | The MAILING DATE of this communication appears on the cover sheet with the correspondence address<br>Period for Reply |                               |  |  |  |  |  |
| <ul> <li>A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.</li> <li>Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.</li> <li>If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.</li> <li>Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).</li> </ul> |   |                               |  |  |  |  |  |
| Status  |   |                               |  |  |  |  |  |
| 1) Responsive to communication(s) filed on <u>04 Description</u>  | ecember 2006.   |                               |  |  |  |  |  |
| 2a) This action is <b>FINAL</b> . 2b) ⊠ This  | action is non-final.  |                               |  |  |  |  |  |
| 3) Since this application is in condition for allowar   | nce except for formal matters, pro  | osecution as to the merits is |  |  |  |  |  |
| closed in accordance with the practice under E  | x parte Quayle, 1935 C.D. 11, 4   | 53 O.G. 213.                  |  |  |  |  |  |
| Disposition of Claims   |   |                               |  |  |  |  |  |
| 4) Claim(s) <u>13-34</u> is/are pending in the application  | ז.  |                               |  |  |  |  |  |
| 4a) Of the above claim(s) is/are withdraw   | vn from consideration.  |                               |  |  |  |  |  |
| 5) Claim(s) is/are allowed.   |   |                               |  |  |  |  |  |
| 6) Claim(s) <u>13-34</u> is/are rejected.   |   |                               |  |  |  |  |  |
| 7) Claim(s) is/are objected to.   |   |                               |  |  |  |  |  |
| 8) Claim(s) are subject to restriction and/or   | r election requirement.   |                               |  |  |  |  |  |
| Application Papers  |   |                               |  |  |  |  |  |
| 9) The specification is objected to by the Examine  | r.  |                               |  |  |  |  |  |
| 10) The drawing(s) filed on is/are: a) acce   | epted or b) objected to by the I  | Examiner.                     |  |  |  |  |  |
| Applicant may not request that any objection to the   |   |                               |  |  |  |  |  |
| Replacement drawing sheet(s) including the correct  |   |                               |  |  |  |  |  |
| 11) The oath or declaration is objected to by the Ex  | aminer. Note the attached Office  | Action or form P10-152.       |  |  |  |  |  |
| Priority under 35 U.S.C. § 119  |   |                               |  |  |  |  |  |
| 12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).<br>a)☐ All b)☐ Some * c)☐ None of:   |   |                               |  |  |  |  |  |
|   | 1. Certified copies of the priority documents have been received.   |                               |  |  |  |  |  |
| 2. Certified copies of the priority documents have been received in Application No.   |   |                               |  |  |  |  |  |
| 3. Copies of the certified copies of the priority documents have been received in this National Stage   |   |                               |  |  |  |  |  |
| application from the International Bureau (PCT Rule 17.2(a)).<br>* See the attached detailed Office action for a list of the certified copies not received.   |   |                               |  |  |  |  |  |
|   |   |                               |  |  |  |  |  |
|   |   |                               |  |  |  |  |  |
| Attachment(s)   | _   |                               |  |  |  |  |  |
| 1) X Notice of References Cited (PTO-892)   | 4) 🔲 Interview Summary<br>Paper No(s)/Mail Da   |                               |  |  |  |  |  |
| <ul> <li>2) Notice of Draftsperson's Patent Drawing Review (PTO-948)</li> <li>3) Information Disclosure Statement(s) (PTO/SB/08)</li> </ul>   | 5) D Notice of Informal P   |                               |  |  |  |  |  |
| Paper No(s)/Mail Date 6) U Other:   |   |                               |  |  |  |  |  |

# DETAILED ACTION

1. The following is an office action in response to a communication received on

# 12/04/2006

# Acknowledgement

## 2. Claim status :

- Claims cancelled: 1-12
- Claims newly added: 31-34
- Pending claims: 13-34

# Claim Rejections - 35 USC § 112

# 3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. **Claims 24-30** are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim **24** there are recited elements without functional/structural language relating the separate elements, which therefore is vague and confusing. Without such language such claims may be considered incomplete for omitting essential structural (or gaps between steps if a method claim) cooperative relationships See MPEP § 2172.01.

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There is claimed "**for currency trading**" in the claim **24** preamble which is vague and confusing since there is no recitation in the claim body regarding currency trading. Such a recitation may be considered non-functional descriptive material. The steps/elements would be performed the same regardless of the data. Thus, this descriptive material will not distinguish the claimed invention from the prior art in terms of patentability, see In re Gulack, 703 F.2d 1381, 1385, 217 USPQ 401,404 (Fed. Cir. 1983); In re Lowery, 32 F.3d 1579, 32 USPQ2d 1031 (Fed. Cir. 1994).

In claim **29**, there is recitation "**the second**", which may refer to time interval, step number etc .... and therefore this recitation is vague and confusing. While applicant's specification indicates time intervals, applicant's specification does not preclude the term "second" from referring to a specific element or step recited in an independent claim or as description in general. The claims must include clear recitations so to understand the meets and bounds of the invention. The term "second" per se is not limited only to a time interval.

#### Claim Rejections - 35 USC § 101

#### 5. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

**Claims 13-16** are rejected under 35 U.S.C. 101. Based on Supreme Court precedent and recent Federal Circuit decisions, the Office's guidance to examiners is that a § 101 process must (1) be tied to a machine or (2) transform underlying subject matter (such as an article or materials) to a different state or thing. In re **Bilski** et al, 88

USPQ 2d 1385 CAFC (2008); Diamond v. Diehr, 450 U.S. 175, 184 (1981); Parker v. Flook, 437 U.S. 584, 588 n.9 (1978); Gottschalk v. Benson, 409 U.S. 63, 70 (1972); Cochrane v. Deener, 94 U.S. 780,787-88 (1876).

An example of a method claim that would <u>not</u> qualify as a statutory process would be a claim that recited purely mental steps. Thus, to qualify as a § 101 statutory process, the claim should positively recite the other statutory class (the thing or product) to which it is tied, for example by identifying the apparatus that accomplishes the method steps, or positively recite the subject matter that is being transformed, for example by identifying the material that is being changed to a different state.

Here, applicant's method steps fail the first prong of the new Federal Circuit decision since they are not tied to a machine and can be performed without the use of a particular machine. Thus, **claims 13-16** are non-statutory since they may be performed within the human mind.

The mere recitation of the machine in the preamble with an absence of a machine in the body of the claim fails to make the claim statutory under 35 USC 101. *Insignificant extra-solution* activity will not transform an unpatentable principle into a patentable process.

**Note**: the Board of Patent Appeals Informative Opinion Ex parte LangeMyer et al <u>http://iplaw.bna.com/iplw/5000/split\_display.adp?fedfid=10988734&vname=ippqcases2</u> <u>&wsn=500826000&searchid=6198805&doctypeid=1&type=court&mode=doc&split=0&s</u> <u>cm=5000&pg=0</u>

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## Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

7. **Claims 13-20** are as understood rejected under 35 U.S.C. 103(a) as being unpatentable over **Potter** et al (5,787,402) in view of **Szoc** et al (2002/0023053).

Claims 1-12 (Canceled).

As per claims 13-14, Potter discloses a method of trading currency over a

computer network, comprising the steps of:

(a) transmitting currency market information over a computer network to an end user; (b) receiving a currency trade order from said end user, wherein said currency trade order comprises limits within which the currency trade will be acceptable to said end user; (c) calculating a market exchange rate for said currency trade order; and (d) executing said order if said market exchange rate is within said limits (**Abstract**, **fig.1**, col. 3-4+ , rate server[114], FX Order server[col.12, lines 35+], Target FX rate[col.13, lines 5+]) and

[ wherein said market information and said trade order are prefaced with http headers.]

**Potter** did not disclose explicitly said market information and said trade order are prefaced with http headers.

However, **Szoc** being in the same field of invention discloses said market information and said trade order are prefaced with http headers(**para 0035, 0064+**, **fig.3**; via Manu page 300, Manu bar 340 remains visible as a header or footer, as a client's display ... changes from web page to web pages).

Therefore, it would have been obvious to an ordinary skill in the art at the time of invention was made to modify the disclosures of *Potter* to include the features as taught by *Szoc* to facilitate the client to navigate through continually visible Menu bar as http headers.

As per claim 15-16 *Potter* discloses a method of trading currency over a computer network, comprising the steps of:

(a) transmitting currency market information over a computer network to an end user; (b) receiving a currency trade order from said end user, wherein said currency trade order comprises a threshold exchange rate; (c) calculating a market exchange rate for said currency trade order; and (d) executing said order (1) if said market exchange rate is or becomes above said threshold exchange rate and said order is a sell order, and (2) if said market exchange rate is or becomes below said threshold exchange rate and said order is a buy order (**Abstract**, **fig.1**, col. 3-4+ , rate server[114], FX Order server[col.12, lines 35+], Target FX rate[col.13, lines 5+]), and

[wherein said market information and said trade order are prefaced with http headers]

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**Potter** did not disclose explicitly said market information and said trade order are prefaced with http headers.

However, **Szoc** being in the same field of invention discloses said market information and said trade order are prefaced with http headers(**para 0035, 0064+**, **fig.3**; via Manu page 300, Manu bar 340 remains visible as a header or footer, as a client's display ... changes from web page to web pages).

Therefore, it would have been obvious to an ordinary skill in the art at the time of invention was made to modify the disclosures of *Potter* to include the features as taught by *Szoc* to facilitate the client to navigate through continually visible Menu bar as http headers.

As per claim 17-18, *Potter* discloses a method of trading currency over a computer network, comprising the steps of:

(a) receiving currency market information over a computer network from a trading system server; (b) transmitting a currency trade order to said trading system server, wherein said currency trade order comprises limits within which the currency trade will be acceptable; and (c) if a market exchange rate is within said limits, receiving information from said trading system server indicating that said currency trade order has been executed (**Abstract**, **fig.1**, col. 3-4+ , rate server[114], FX Order server[col.12, lines 35+], Target FX rate[col.13, lines 5+]), and

[wherein said market information and said trade order are prefaced with http headers].

**Potter** did not disclose explicitly said market information and said trade order are prefaced with http headers.

However, **Szoc** being in the same field of invention discloses said market information and said trade order are prefaced with http headers(**para 0035, 0064+**, **fig.3**; via Manu page 300, Manu bar 340 remains visible as a header or footer, as a client's display ... changes from web page to web pages).

Therefore, it would have been obvious to an ordinary skill in the art at the time of invention was made to modify the disclosures of *Potter* to include the features as taught by *Szoc* to facilitate the client to navigate through continually visible Menu bar as http headers.

As per claims 19-20, *Potter* discloses a method of trading currency over a computer network, comprising the steps of:

(a) receiving currency market information over a computer network from a trading system server; (b) transmitting a currency trade order to said trading system server, wherein said Currency trade order comprises a threshold exchange rate; and (c) if (1) the applicable market exchange rate is or becomes above said threshold exchange rate and said order is a sell order, or (2) the applicable market exchange rate is or becomes below said threshold exchange rate and said order is a buy order, receiving information from said trading system server indicating that said currency trade order has been executed (**Abstract**, **fig.1**, col. 3-4+ , rate server[114], FX Order server[col.12, lines 35+], Target FX rate[col.13, lines 5+]), and

[wherein said market information and said trade order are prefaced with http headers].

*Potter* did not disclose explicitly said market information and said trade order are prefaced with http headers.

However, *Szoc* being in the same field of invention discloses said market information and said trade order are prefaced with http headers(para 0035, 0064+, fig.3; via Manu page 300, Manu bar 340 remains visible as a header or footer, as a client's display ... changes from web page to web pages).

Therefore, it would have been obvious to an ordinary skill in the art at the time of invention was made to modify the disclosures of *Potter* to include the features as taught by *Szoc* to facilitate the client to navigate through continually visible Menu bar as http headers.

8. Claims 21--34 are as understood rejected under 35 U.S.C. 103(a) as being unpatentable over Potter et al (5,787,402) and *Szoc* et al (2002/0023053) in view of *Selleck* (2001/0049651).

As per claims 21-23, *Potter* discloses Software for currency trading over a computer network, comprising:

(a) software for receiving data over a computer network from a trading system server; (b) software for displaying a first graphical user interface display that: (i) displays continuously updated currency exchange rates in real-time based on data received from said trading system server; and (ii) displays a plurality of action buttons, including at least one buy/sell button; (c) software for displaying, in response to a user clicking said

buy/sell action button, a buy/sell window display that: (i) comprises trade order parameter fields; and (ii) accepts trade order data entered into said fields by a user; and (d) software for transmitting said trade order data to said trading system server over said computer network.(**Abstract**, **fig.1**, col. 3-4+ , rate server[114], FX Order server[col.12, lines 35+], Target FX rate[col.13, lines 5+]),

wherein said trade order parameter fields comprise fields for upper and lower limits on acceptable trade market exchange rates. , wherein said trade order parameter fields comprise a field for a threshold market rate above or below which a trade should be executed.(**Abstract**, **fig.1**, col. 3-4+ , rate server[114], FX Order server[col.12, lines 35+], Target FX rate [col.13, lines 5+], pre-set limits [col.8, lines 42+]),

As per claims 31-34, *Potter* discloses Software as in claim 21, wherein said continuously updated currency exchange rates are displayed via a curve with an upper boundary and a lower boundary for each point in time, wherein a difference between said upper boundary and said lower boundary represents a difference between bid and ask prices for said point in time, wherein mousing over said curve with a mouse cursor causes a sub-area of said display to show precise exchange rate information for a target currency pair, said sub-area corresponding to a time period corresponding to said mouse cursor's position.(Abstract, fig.1, col.3-4+, rate server[114], FX Order server[col.12, lines 35+], Target FX rate [col.13, lines 5+], pre-set limits [col.8, lines 42+]),

[software for displaying indicators that graphically indicate points in time at which a user has bought or sold a currency pair, wherein said indicators comprise upward

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pointing indicators to indicate bought currency pairs and downward pointing indicators to indicate sold currency pairs].

**Potter** did not disclose explicitly software for displaying indicators that graphically indicate points in time at which a user has bought or sold a currency pair, wherein said indicators comprise upward pointing indicators to indicate bought currency pairs and downward pointing indicators to indicate sold currency pairs.

However, **Selleck** being in the same field of invention discloses software for displaying indicators that graphically indicate points in time at which a user has bought or sold a currency pair, wherein said indicators comprise upward pointing indicators to indicate bought currency pairs and downward pointing indicators to indicate sold currency pairs (**Abstract** and **fig**. Nine)

Therefore, it would have been obvious to an ordinary skill in the art at the time of invention was made to modify the disclosures of *Potter* to include the features as taught by *Selleck* to facilitate to know the user's trading position.

As per claim 24-30, *Potter* discloses Software for currency trading over a computer network, comprising:

(a) a database management module; (b) a transaction server module;(c) a rate server and pricing engine module; and (d) a transaction server module. a bank interface module., a trade manager module, a hedging engine module and an interest rate manager module (**Abstract**, **fig.1**, **col**. 3-4+, rate server[114], FX Order server[**col**.12, lines 35+], Target FX rate [**col**.13, lines 5+], pre-set limits [**col**.8, lines 42+]),

and collect interest by the second. and, wherein said interest rate manager module is operative to calculate, pay out, and collect interest on a tick-by-tick basis].

**Potter** did not disclose explicitly Said interest rate manager module is operative to calculate, pay out, and collect interest by the second. and, wherein said interest rate manager module is operative to calculate, pay out, and collect interest on a tick-by-tick basis.

However, *Selleck* being in the same field of invention discloses said interest rate manager module is operative to calculate, pay out, and collect interest by the second. and, wherein said interest rate manager module is operative to calculate, pay out, and collect interest on a tick-by-tick basis.(para 0179).

Therefore, it would have been obvious to an ordinary skill in the art at the time of invention was made to modify the disclosures of *Potter* to include the features as taught by *Selleck* to facilitate the trade by point increment with potions potentially second-by-second basis. relative fluctuation of spot prices.

### Conclusion

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

*Lange* et al (2003/0115128) discloses derivatives having demand-Based Adjustable Returns, And Trading Exchange Therefor.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to HATEM ALI whose telephone number is (571)270-3021 & Fax (571) 270-4021 [only for Cc to Examiner]. The examiner can normally be reached on 8.00 to 6.30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, ALEXANDER KALINOWSKI can be reached on 571-272-6771. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

HATEM ALI Examiner Art Unit 3691

/Hani M. Kazimi/ Primary Examiner, Art Unit 3691

| Notice of References Cited | Application/Control No.<br>11/634,014 | Applicant(s)/P<br>Reexaminatio<br>OLSEN ET AI | n           |
|----------------------------|---------------------------------------|---|-------------|
| Notice of References Offed | Examiner                              | Art Unit                                      |             |
|                            | HATEM ALI                             | 3691  | Page 1 of 1 |
|                            | PATENT DOCUMENTS                      |   |             |

#### U.S. PATENT DOCUMENTS

| * |   | Document Number<br>Country Code-Number-Kind Code | Date<br>MM-YYYY | Name             | Classification |
|---|---|--|-----------------|------------------|----------------|
| * | А | US-5,787,402                                     | 07-1998         | Potter et al.    | 705/37         |
| * | В | US-2002/0023053                                  | 02-2002         | Szoc et al.      | 705/39         |
| * | С | US-2001/0049651                                  | 12-2001         | Selleck, Mark N. | 705/37         |
|   | D | US-  |                 |                  |                |
|   | Е | US-  |                 |                  |                |
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#### FOREIGN PATENT DOCUMENTS

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#### NON-PATENT DOCUMENTS

| * |   | Include as applicable: Author, Title Date, Publisher, Edition or Volume, Pertinent Pages) |
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\*A copy of this reference is not being furnished with this Office action. (See MPEP § 707.05(a).) Dates in MM-YYYY format are publication dates. Classifications may be US or foreign.

| Index of Claims         Allowed       At Unit         At Unit         3691         Image: colspan="4">Colspan="4">At Unit         Colspan="4">At Unit         Colspan="4">At Unit         Colspan="4">At Unit         Colspan="4">At Unit         Colspan="4">At Unit         Image: colspan="4">At Unit         Image: colspan="4">At Unit         Image: colspan="4">At Unit         Colspan="4">At Unit         Image: colspan="4"   |   |           |           |          |       |          | Application/Control No. |        |     |        | Applie<br>Reexa | Applicant(s)/Patent Under<br>Reexamination |       |      |        |  |
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|              | Application/Control No. | Applicant(s)/Patent Under<br>Reexamination |
|--------------|-------------------------|--|
| Search Notes | 11634014                | OLSEN ET AL.                               |
|              | Examiner                | Art Unit                                   |
|              | HATEM ALI               | 3691                                       |

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| Class | Subclass | Date    | Examiner |
| 705   | 37       | 3/18/10 | HA       |

| SEARCH NOTES  |         |          |
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## **CONFIRMATION NO. 3344**

| SERIAL NUM   | BER                    | FILING or                                   | 371(c)                 |                 | CLASS               | GRO   | OUP ART        | UNIT         | ΑΤΤΟ                   |  | DOCKET         |
|--|------------------------|---|------------------------|-----------------|---------------------|-------|----------------|--------------|------------------------|--|----------------|
| 11/634,01  | 4                      | <b>DATE</b><br>12/04/20                     | -                      |                 | 705                 |       | 3691           |              | NO.<br>060967-0020-USC |  | 0-US01         |
| RULE   |                        |   |                        |                 |                     |       |                |              |                        |  |                |
| Michael S  | 3. Olsen<br>Stumm,     | n, Zurich, SWI<br>Toronto, CAN              | IADA;                  |                 |                     |       |                |              |                        |  |                |
| whi  | ication i<br>ich clair | s a CON of 09                               | 9/858,610<br>60/274,17 | 05/16<br>4 03/0 |                     | 6,336 |                |              |                        |  |                |
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| ** <b>IF REQUIRE</b><br>12/28/200  |                        | EIGN FILING                                 |                        | E GRA           | ANTED **            |       |                |              |                        |  |                |
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| TITLE  |                        |   |                        |                 |                     |       |                |              |                        |  |                |
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## **EAST Search History**

## EAST Search History (Prior Art)

| Ref # | Hits   | Search Query   | DBs   | Default<br>Operator | Plurals | Time Stamp          |
|-------|--------|--|---|---------------------|---------|---------------------|
| L1    | 2      | "5787402".pn.  | US-PGPUB;<br>USPAT; FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR                  | ON      | 2010/03/19<br>12:14 |
| L2    | 2      | "20020023053".pn.  | US-PGPUB;<br>USPAT; FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR                  | ON      | 2010/03/19<br>12:16 |
| L3    | 2      | "20010049651".pn.  | US-PGPUB;<br>USPAT; FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR                  | ON      | 2010/03/19<br>12:25 |
| S1    | 344071 | ((order or request or<br>requisition or buy or<br>purchase or purchasing<br>or transaction or<br>contract or trade or<br>trading or ((buy or<br>buying or purchase or<br>purchasing) adj<br>(directive or instruction<br>or command or order))))<br>near2 (limit or guideline<br>or thresh\$1hold or<br>threshold or limiting or<br>constraint or delimit? or<br>bound\$4 or restriction<br>or ceiling or specific or<br>specify or specification<br>or approved or<br>permitted or fixed or<br>stated or defined or<br>preselect\$3 or preset or<br>predetermined)) | US-PGPUB;<br>USPAT  | OR                  | ON      | 2010/03/19<br>08:05 |

| <b>S</b> 2 | 434661  | (currency or money or<br>dollar or dollars or euro<br>or euros or franc or<br>francs or deutschmark<br>or deutschmarks or<br>pound or pounds or<br>sterling or rupee or<br>rupees or yen or lira or<br>peso or pesos)  | US-PGPUB;<br>USPAT | OR | ON | 2010/03/19<br>08:05 |
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| S3         | 2692    | S1 with S2   | US-PGPUB;<br>USPAT | OR | ON | 2010/03/19<br>08:06 |
| S4         | 5       | S3 with (market adj<br>(information or data))  | US-PGPUB;<br>USPAT | OR | ON | 2010/03/19<br>08:06 |
| <b>S</b> 5 | 1621294 | (commodity or stocks or<br>bond or bill or<br>((financial or<br>investment) adj (vehicle<br>or vehicles or product or<br>products or instrument<br>or instruments)) or fund<br>or futures or portfolio or<br>equities or securities)   | US-PGPUB;<br>USPAT | OR | ON | 2010/03/19<br>08:10 |
| S6         | 8742    | S5 with S1   | US-PGPUB;<br>USPAT | OR | ON | 2010/03/19<br>08:11 |
| S7         | 51      | S6 with (market adj<br>(information or data))  | US-PGPUB;<br>USPAT | OR | ON | 2010/03/19<br>08:12 |
| <b>S8</b>  | 344071  | ((order or request or<br>requisition or buy or<br>purchase or purchasing<br>or transaction or<br>contract or trade or<br>trading or ((buy or<br>buying or purchase or<br>purchasing) adj<br>(directive or instruction<br>or command or order)))<br>near2 (limit or guideline<br>or thresh\$1hold or<br>threshold or limiting or<br>constraint or delimit? or<br>bound\$4 or restriction<br>or ceiling or specific or<br>specify or specification<br>or approved or<br>permitted or fixed or<br>stated or defined or<br>established or stipulated<br>or predefined or<br>preselect\$3 or preset or<br>predetermined)) | US-PGPUB;<br>USPAT | OR | ON | 2010/03/19<br>09:08 |

| <b>S</b> 9 | 1621294 | (commodity or stocks or<br>bond or bill or<br>((financial or<br>investment) adj (vehicle<br>or vehicles or product or<br>products or instrument<br>or instruments)) or fund<br>or futures or portfolio or<br>equities or securities) | US-PGPUB;<br>USPAT | OR | ON | 2010/03/19<br>09:08 |
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| S10        | 8742    | S9 with S8   | US-PGPUB;<br>USPAT | OR | ON | 2010/03/19<br>09:08 |
| S11        | 51      | S10 with (market adj<br>(information or data))   | US-PGPUB;<br>USPAT | OR | ON | 2010/03/19<br>09:08 |
| S12        | 51      | S11  | US-PGPUB;<br>USPAT | OR | ON | 2010/03/19<br>09:08 |

## EAST Search History (Interference)

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United States Patent and Trademark Office



| APPLICATION NUMBER | FILING OR 371(c) DATE | FIRST NAMED APPLICANT | ATTY. DOCKET NO./TITLE |
|--------------------|-----------------------|-----------------------|------------------------|
| 11/634,014         | 12/04/2006            | Richard B. Olsen      | 060967-0020-US01       |

**CONFIRMATION NO. 3344** 

9629 MORGAN LEWIS & BOCKIUS LLP 1111 PENNSYLVANIA AVENUE NW WASHINGTON, DC20004

Title: Currency trading system, methods, and software

Publication No. US-2007-0078755-A1 Publication Date: 04/05/2007

## NOTICE OF PUBLICATION OF APPLICATION

The above-identified application will be electronically published as a patent application publication pursuant to 37 CFR 1.211, et seq. The patent application publication number and publication date are set forth above.

The publication may be accessed through the USPTO's publically available Searchable Databases via the Internet at www.uspto.gov. The direct link to access the publication is currently http://www.uspto.gov/patft/.

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Pre-Grant Publication Division, 703-605-4283



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| APPLICATION NUMBER | FILING or 371(c)<br>DATE | GRP ART UNIT | FIL FEE REC'D | ATTY.DOCKET.NO | DRAWINGS | TOT CLAIMS | IND CLAIMS |
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| 11/634,014         | 12/04/2006               | 1762         | 1700 0        | 60967-0020-US( | )1 14    | 22         | 6          |

#### CONFIRMATION NO. 3344

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS PO. Box 1450 Alexandria, Vignia 22313-1450 www.uspto.gov

FILING RECEIPT

9629 MORGAN LEWIS & BOCKIUS LLP 1111 PENNSYLVANIA AVENUE NW WASHINGTON, DC20004

Date Mailed: 12/29/2006

Receipt is acknowledged of this regular Patent Application. It will be considered in its order and you will be notified as to the results of the examination. Be sure to provide the U.S. APPLICATION NUMBER, FILING DATE, NAME OF APPLICANT, and TITLE OF INVENTION when inquiring about this application. Fees transmitted by check or draft are subject to collection. Please verify the accuracy of the data presented on this receipt. If an error is noted on this Filing Receipt, please mail to the Commissioner for Patents P.O. Box 1450 Alexandria Va 22313-1450. Please provide a copy of this Filing Receipt with the changes noted thereon. If you received a "Notice to File Missing Parts" for this application, please submit any corrections to this Filing Receipt with your reply to the Notice. When the USPTO processes the reply to the Notice, the USPTO will generate another Filing Receipt incorporating the requested corrections (if appropriate).

#### Applicant(s)

Richard B. Olsen, Zurich, SWITZERLAND; Michael Stumm, Toronto, CANADA;

#### Power of Attorney: None

#### Domestic Priority data as claimed by applicant

This application is a CON of 09/858,610 05/16/2001 PAT 7,146,336 which claims benefit of 60/274,174 03/08/2001

#### Foreign Applications

#### If Required, Foreign Filing License Granted: 12/28/2006

The country code and number of your priority application, to be used for filing abroad under the Paris Convention, is **US11/634,014** 

Projected Publication Date: 04/05/2007

Non-Publication Request: No

Early Publication Request: No

Title

Currency trading system, methods, and software

#### **Preliminary Class**

705

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| TRANSMITTAL   | First Na                    | med Inventor:                         | Olsen et al.   | 11/          |
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| APPLICATION ELEMENTS<br>See MPEP chapter 600 concerning utility patent applica  | ntion contents.             | ADDRESS TO:                           | Mail Stop Patent Applica<br>Commissioner for Patents<br>P.O. Box 1450<br>Alexandria, VA 22313-1450   | ition        |
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| (preferred arrangement set forth below) - Descriptive title of the Invention  | .27<br>32 Pages]            | <i>(if ap</i> )<br>a. □ C<br>b. □ Pa  | eotide and/or Amino Acid Sequence<br>plicable, all necessary)<br>omputer Readable Copy<br>aper Copy (identical to computer co<br>atement verifying identity of above | ору)         |
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| - Brief Description of the Drawings (if filed)  |                             | (whe                                  | n there is an assignee) [Pages]  |              |
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| Signed statement attached deleting invention application, see 37 CFR 1.63(d)(2)   |                             | 122(b)(2)(i).                         |  |              |
| 6. Application Data Sheet. See 37 CFR 1.76  |                             | 17. 🛛 Other:                          |  |              |
| <ul> <li>If a CONTINUING APPLICATION, check appropriate pecification following the title, or in an Application Data Sh</li> <li>Continuation Divisional Continuation-in-</li> <li>Divisional Application No. 60/274,174.</li> </ul> | eet under 37 CFR 1.7        | 6:                                    |  | -            |
| For CONTINUATION OR DIVISIONAL APPS only; The<br>supplied under Box 5b, is considered a part of the disclosure<br>by reference. The incorporation <u>can only</u> be relied upon whe<br>19. COR                                     | of the accompanying         | continuation or c<br>nadvertently omi | livisional application and is hereby   | incorporate  |
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#### Express Mail No. EV 907 292 767 US Attorney Docket No. 060967-0020-US01

## MORGAN, LEWIS & BOCKIUS LLP COUNSELORS AT LAW

1111 Pennsylvania Avenue, NW Washington, DC 20004 (202) 739-3000

Mail Stop PATENT APPLICATION Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Sir:

The following utility patent application is enclosed for filing:

Applicants(s): Olsen et al. Executed on: Title of Invention: CURRENCY TRADING SYSTEM, METHOD, AND SOFTWARE

|                                       |             | PAII           | ENT APPLICATION FEE VALU            |                   |            |
|---------------------------------------|-------------|----------------|-------------------------------------|-------------------|------------|
| ТҮРЕ                                  | NO.         | LESS           | EXTRA                               | EXTRA RATE        | FEE        |
|                                       | FILED       |                |                                     |                   |            |
| Total Claims                          | 22          | -20            | 2                                   | \$50.00 each      | \$ 100.00  |
| Independent                           | 6           | -3             | 3                                   | \$200.00 each     | \$ 600.00  |
|                                       |             |                | Minimum Fee                         | \$300.00          | \$ 300.00  |
|                                       |             |                | Search Fee                          | \$500.00          | \$ 500.00  |
|                                       |             |                | Examination Fee                     | \$200.00          | \$ 200.00  |
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|                                       |             |                | Total                               |                   | \$1,700.00 |
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| ····· ··· ··· · · · · · · · · · · · · |             |                | Total Filing Fee                    |                   | \$1,700.00 |

#### PATENT APPLICATION FEE VALUE

**DO NOT PUBLISH**. I hereby certify that the invention disclosed in the attached application has not and will not be the subject of an application filed in another country, or under a multilateral agreement, that requires publication at eighteen months after filing. I hereby request that the attached application not be published under 35 U.S.C. 122(b).

Priority of application no. \_\_\_\_\_\_ is claimed under 35 U.S.C. § 119.

The certified copy of the priority application has been filed in application no. filed

Amend the specification by inserting before the first line the following sentence: The present application is a continuation of prior Application No. 09/858,610 filed May 16, 2001 which claims priority to U.S. Provisional Application No. 60/274,174, filed March 8, 2001.

Please charge the required fee to Morgan, Lewis & Bockius LLP Deposit Account No. 50-0310. A copy of this sheet is enclosed.

Date: December 4, 2006

Respectfully submitted

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 Registration No. 24,615
 MORGAN, LEWIS & BOCKIUS LLP
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 (212) 309-6632

### CURRENCY TRADING SYSTEM, METHODS, AND SOFTWARE

**CROSS-REFERENCE TO RELATED APPLICATION** 

This application claims priority to U.S. provisional application no. 60/274,174, filed
March 8, 2001, and incorporates the entire contents thereof herein by reference.

## FIELD OF THE INVENTION

The present invention is related to currency trading; more particularly, the invention is related to trading currency over a computer network.

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#### BACKGROUND

In a traditional on-line currency market, a trade occurs through three steps: (1) the trader specifies to a dealer the currency pair and the amount that he would to trade (but does not specify whether he would like to buy or sell); (2) the dealer specifies to the trader both a

- 15 bid and an ask price and gives the trader several seconds to respond (the dealer not knowing whether the trader will buy, sell, or reject the offer); and (3) the trader either rejects the offer or specifies whether he is buying or selling (his response must occur within a time frame of a few seconds).
- But performing such a three-way handshake over the Internet is somewhat impractical because of Internet delays: the trader might not actually have a few seconds to respond before the dealer withdraws the offer. Thus, there is a need for a system and method of online currency trading that is based on a trading model that is superior to the three-way handshake described above.

Another problem is that many corporations have firewalls that restrict access to the corporate network, and that typically restrict access to the Internet (and to well-known services such as email, the World Wide Web, etc.) from within the corporation. This inhibits the ability of on-line trading systems to access information from and transfer information to users behind corporate firewalls.

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#### SUMMARY

The present invention overcomes the above-described and other disadvantages of previous currency trading systems and methods. In one aspect, the present invention comprises a system for trading currencies over a computer network. A preferred embodiment

5 comprises: (a) a server front-end; (b) at least one database; (c) a transaction server; (d) a rate server; (e) a pricing engine; (f) an interest rate manager; (g) a trade manager; (h) a value at risk server; (i) a margin control manager; (j) a trading system monitor; and (k) a hedging engine. Each of these components is described in detail below in the Detailed Description section.

In another aspect, the present invention comprises methods for trading currency over a computer network. In one embodiment, a preferred method comprises: (a) transmitting currency market information over a computer network to an end user; (b) receiving a currency trade order from the end user, wherein the currency trade order comprises limits within which the currency trade will be acceptable to the end user; (c) calculating a market exchange rate for the currency trade order; and (d) executing the order if the market exchange rate is within the specified limits.

In another embodiment, a preferred method comprises: (a) transmitting currency market information over a computer network to an end user; (b) receiving a currency trade order from the end user, wherein the currency trade order comprises a threshold exchange rate; (c) calculating a market exchange rate for the received currency trade order; and (d) executing the order (1) if the market exchange rate is or goes above the threshold exchange rate and the order is a sell order, and (2) if the market exchange rate is or goes below the threshold exchange rate and the order is a buy order.

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In a further embodiment, a preferred method comprises: (a) receiving currency 25 market information over a computer network from a trading system server; (b) transmitting a currency trade order to the trading system server, wherein the currency trade order comprises limits within which the currency trade will be acceptable; and (c) if a market exchange rate is within the specified limits, receiving information from the trading system server indicating that the currency trade order was executed.

30 In another embodiment, a preferred method comprises: (a) receiving currency market information over a computer network from a trading system server; (b) transmitting a

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currency trade order to the trading system server, wherein the currency trade order comprises a threshold exchange rate; and (c) if (1) the applicable market exchange rate is or goes above the threshold exchange rate and the order is a sell order, or (2) the applicable market exchange rate is or becomes below the threshold exchange rate and the order is a buy order,

5 receiving information from the trading system server indicating that the currency trade order was executed.

In another aspect, the present invention comprises software for currency trading over a computer network. In one embodiment, preferred software comprises: (a) software for receiving data over a computer network from a trading system server; (b) software for

- 10 displaying a first graphical user interface display that: (i) displays continuously updated currency exchange rates in real-time based on data received from the trading system server; and (ii) displays action buttons, including a buy/sell button; (c) software for displaying, in response to a user clicking the buy/sell action button, a buy/sell window display that: (i) comprises trade order parameter fields; and (ii) accepts trade order data entered into the trade
- 15 order parameter fields by a user; and (d) software for transmitting said trade order data to said trading system server over said computer network.

#### BRIEF DESCRIPTION OF THE DRAWINGS

|       | FIG. 1 depicts parties involved in a preferred embodiment.           |
|-------|--|
| 20    | FIG. 2 depicts a graphical user interface of a preferred embodiment. |
| чы: " | FIG. 3 depicts modules of a preferred trading system server.         |
|       | FIG. 4 depicts hardware components of a preferred embodiment.        |
|       | FIG. 5 depicts a graphical user interface of a preferred embodiment. |
|       | FIG. 6 depicts an account summary table display.                     |
| 25    | FIG. 7 depicts an open trades table display.                         |
|       | FIG. 8 depicts an open positions table display.                      |
|       | FIG. 9 depicts an open orders table display.                         |
|       | FIG. 10 depicts a transactions table display.                        |
|       | FIG. 11 depicts a currency rates table display.                      |
| 30    | FIG. 12 depicts a currency exchange rate graph display.              |
|       | FIG. 13 depicts a buy/sell pop-up window display.                    |

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FIG. 14 depicts an acknowledgment window display.

FIG. 15 depicts an entry order display.

FIG. 16 depicts steps of a method of a preferred embodiment.

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#### DETAILED DESCRIPTION OF PREFERRED EMBODIMENTS

The Currency Trading System of a preferred embodiment (hereinafter "Trading System") of the present invention allows traders to trade currencies over a computer network. Preferably, this computer network is the Internet, and the subsequent description herein is primarily in terms of the Internet. However, those skilled in the art will recognize that the

- 10 following description also applies to other computer networks. Traders interface to the system using ordinary Web browsers running feature-rich Java applets; they obtain real-time data feeds of current exchange rates, they can analyze past exchange rates using graphical tools, they can review their current portfolio and past trades, and they can place buy and sell orders in the real-time market. Businesses interface to the system using an API. Innovative
- 15 features that set the Trading System apart from the competition are: (i) extremely low spreads on the order of a few basis points, (ii) the ability to trade very small amounts as low as \$1, and (iii) 24 hour a day, 7 days a week availability. This system has the potential to revolutionize the way currency trading is done and to open up currency trading to a new, large market segment of investors and speculators for whom currency trading is not feasible today.
- 20 Moreover, it allows businesses to address their currency exchange requirements in the most cost-effective and efficient way.

A description of the preferred server infrastructure used in the Trading System follows. We first give a brief introduction of the system as a whole.

The Trading System involves three components (see **FIG. 1**): (1) traders that are distributed around the world; (2) Trading System servers; and (3) "Partners" consisting of the financial institution(s) through which real currency exchange trades are executed, and from which real-time data feeds are obtained.

Traders communicate with Trading System servers over a secure, encrypted Internet connection to review their accounts, to monitor currency exchange market conditions, or to

30 initiate currency exchange trades. The Trading System servers are preferably connected to the partners' back-office systems, using direct, private lines. A trader trades with the Trading System similar to the way she currently trades with a broker, except that the trading is over the Web, occurs 24 hours a day, 7 days a week, and allows very small trades with very low spreads. Moreover, an initial deposit, which may be as low as \$20, can be charged to a credit card to get started. Alternatively, the trader can transfer initial funds directly to the Partner bank to be credited to her Trading System account.

The end user interface to the Trading System is a Web page that can be displayed on any standard Java-enabled browser. The Web page (one version is shown in **FIG. 2**; a second, preferred version is shown in **FIG. 5**) depicts a summary of the trader's current position, recent trading activities, profit/loss performance of the portfolio, and a graphical display of

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recent trading activities, profit/loss performance of the portfolio, and a graphical display of recent past performance of the currencies the trader has positions in, as well as real-time exchange rates.

As discussed above, in a traditional on-line currency market a trade occurs through three steps: (1) a trader specifies a currency pair and an amount he would like to trade (and does not specify whether he would like to buy or sell); (2) a dealer provides both a bid and an ask price to the trader and gives the trader several seconds to respond (the dealer does not know whether the trader will buy, sell, or reject the offer); and (3) the trader either rejects the offer or accepts the offer and specifies whether he is buying or selling, within the response period set by the dealer.

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In the Internet domain, this type of three-way handshake is problematic. The timing constraints are difficult to implement because of frequent delays in transmission over the Internet. To overcome this problem, the present invention uses a "two-way handshake," in which: (1) a trader specifies in her trade order: (a) a currency pair; (b) a desired amount to trade; (c) whether she wishes to buy or sell; and (optionally) (d) upper and lower limits on an

- 25 acceptable exchange rate; and (2) a dealer (in this case, a preferred Trading System) executes the trade using the most current "market rates" (as calculated by the system). However, the system only executes the order if the calculated market rate lies above any specified lower limit and below any specified upper limit. Note that this method does not require the use of timing constraints, and thus avoids the Internet-implementation disadvantage of previous
- 30 methods.

In the present invention, trades can be initiated by the trader at the push of a button. A trading request form pops up with fields properly initialized so as to minimize the number of keystrokes required. A trader may elect to execute a trade right away, in which case the buyer of a currency will buy at the current exchange rate market offer price. Conversely, a trader

5 can sell a currency at the current bid price. A range of automatic trading options is available, including setting bid/offer prices with a certain duration and "all-or-nothing" rules. Furthermore, the trader can limit her risks by placing stop-loss orders that are executed automatically. Similarly, she can lock in profits, by issuing take-profit orders.

All communication between the trader's browser and the Trading System server occurs through the Internet, preferably using the strongest available encryption (e.g., 128 bit keys). Moreover, the trader must authenticate herself using private passwords or certification keys obtained from certification authorities, such as Verisign or Entrust.

A request for a market trade preferably proceeds as follows: the trader, at a push of a button, obtains a trade order ticket in a popup window on the browser with key fields
pre-initialized (see FIG. 13). When the trade order is issued, again by the push of a button, a message is sent to a Trading System server, where the market price is calculated based on such factors as market data, size of the transaction, time of day, the Trading System's current exposure, and predictions on market direction. The trade order is executed using this market price. (The trader can specify limits, so that the trade occurs only if the price falls within these
limits.) As such, the Trading System operates as a market maker. A message is then sent back to the trader with specific trade details, which is displayed in a popup window (see FIG. 14) on the trader's browser together with a transaction id (for future reference). Moreover, an open orders table (see FIG. 9) and current portfolio summary table (not shown) is updated to reflect the change.

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Alternatively, the trader can issue in a similar manner an entry order (see **FIG. 15**) that requests a trade be made when the currency exchange rate reaches a specified threshold. The trader may specify how long the entry order will be valid.

Referring to the attached figures, a preferred embodiment comprises a method of trading that in turn comprises the following steps (see **FIG. 16**): At step **1605**, a trader

desiring to trade opens a Trading Station display, and at step 1610 clicks a "Buy/Sell" button
 510 on the Trading Station display (see FIG. 5). At step 1615 an order window is displayed

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(see FIG. 13). At step 1620 the trader decides whether to place a market order or an entry order. If a market order, then the trader proceeds to step 1635 and enters desired order parameters (as shown in FIG. 13). If an entry order, then the trader proceeds to step 1625 and clicks an "Entry" tab 1320 (see FIG. 13). At step 1630 entry order fields are displayed

5 (see FIG. 15). Then the trader proceeds to step 1635 and enters desired order parameters (as shown in FIG. 15).

Once order parameters are entered at step 1635, the trader submits the order by clicking a "Submit" button 1310 (see FIG. 13) if the order is a market order, or clicking a "Submit" button 1510 (see FIG. 15) if the order is an entry order. At step 1645 data

10 describing the order is sent by the Trading Station application to a Trading System server, where the data is stored. At step 1650 a current market price for the currency the trader desires to purchase is calculated. At step 1655 the trader's order is executed if (a) the trader's order is a market order and the calculated market price is within the limits set by the trader in the market order form at step 1635; or (b) order is an entry order and the calculated market 15 price meets the threshold(s) specified in the Entry order form at step 1635.

At step 1660 the Trading System server sends trade status data to the trader's Trading Station application. This data includes an indication that the order has been executed, if that is the case, and at any rate includes an indication that the order has been received. At step 1665, the Trading Station application displays an order acknowledgment window (see FIG.

20 14) that displays order status information.

Over time, the Trading System will accumulate an imbalance in its currency portfolio and, at times, it will need to neutralize its risk exposure to adverse currency fluctuations. The Trading System Pricing Engine can influence its exposure by setting its price quotes accordingly. Moreover, it can close out its positions periodically or take hedging positions by

25 executing larger trades through its Partners. Preferably the Trading System's positions are managed based on state-of-the-art trading models. Preferred trading models are described in U.S. patent application no. [METHODS FOR TRADE DECISION MAKING, to Olsen et al.], filed May 14, 2001, the contents of which are incorporated herein by reference, as well as in U.S. provisional application no. 60/274,174, filed March 8, 2001.

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The Trading System servers preferably operate 24 hours a day, 7 days a week. These servers interface with the traders over the Internet on the one hand and on the other hand with

- 7 -

- the Partner's back-office operations. Using standard, state-of-the-art database technology, it maintains the accounts of all traders and executes trades issued by the traders. The Trading System thus plays the role of a market maker in that it internally aggregates all trades and only occasionally balances its internal positions by trading larger sums through the Partner.
- 5 These larger trades are issued to the Partner in an automated way. The Trading System also takes hedging positions so as to minimize risks on the unbalanced portions of the traders' account aggregates.

#### **Partner's role**

The Partner maintains all actual funds. It is the source and target of all fund transfers to and from customers; it maintains the aggregate accounts; and it executes all trades issued automatically by the Trading System servers. From a legal point of view, all funds must be maintained in money market instruments. Hence, the Partner will maintain a Long and a Short money market fund for each currency supported.

#### **Overview of Currency Trading System Server Internal Design**

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The Trading System server architecture is designed to be:

(1) modular, in order to: (a) simplify development (time-to-market); (b) easily allow extensions and modifications; (c) ensure correctness and robustness, and (d) keep it maintainable;

(2) efficient, in order to provide fast response times to online users and minimize thecomputational and networking resources required to support the service;

(3) scalable, in order to support (with suitable computing infrastructure) a large number of online users and high transaction volumes; and

(4) fault resilient, so that any individual failure of a computing node or network connection does not interrupt service.

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The Trading System server software preferably runs exclusively on Unix platforms, and is composed of the following modules, each with a distinct set of responsibilities (see **FIG. 3**):

(1) Database (DBMS) **310**. This is the heart of the server. It keeps track of customer profile information, all customer accounts and all transactions, and ensures that atomicity,

30 consistency, independence, and durability ("ACID") properties are maintained. The database is the reference point for all information kept by the system. The database is preferably a standard commercially-available SQL database, configured for full replication for reliability, availability, and improved performance. The preferred embodiment is based on IBM's DB-2 product line, but Oracle, for example, could also easily be used.

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(2) Server Front-end **315**. The server front-end **315** is responsible for all communication with the Web-based clients. It supports both persistent and non-persistent connections to the traders. The persistent connects are used primarily for periodic (i.e., every few seconds) transmission of the latest currency rates so that the traders can update the currency graphs and tables in real-time. Using persistent connections significantly reduces

10 protocol processing overhead and reduces network bandwidth requirements. Non-persistent connections are used for all transaction-oriented requests, such as orders, transaction history requests, logins, etc. All transaction-oriented communication between the trader browsers and the Server Front-end occurs fully encrypted, while rate information is transmitted in unencrypted form for efficiency reasons.

15 Traders preferably communicate with the server using a request-response type of protocol. The Server Front-end **315** interprets each request it receives and, for each, takes appropriate action. For login requests, it sets up appropriate data structures so that all future requests can be serviced in the most efficient way. It also sets up encryption keys for secure communication, and logs the start of a new session with the Transaction Server. For rate

- 20 requests, it returns the requested rates it obtains from the rate server. For orders, it executes the orders by issuing appropriate requests to the transaction server after checking the margin requirements, the availability of funds, and using rates as determined by the pricing engine. For stop-loss/take-profit and fixed-price orders (that may get executed in the future), the Trade Manager 365 is also informed. For each trade that gets executed, the Hedging Engine
- 25 340 and Margin Control 350 modules are informed, so that they always have an up-to-date snapshot of the state. For transaction history, the appropriate information is returned to the client after obtaining it from the Transaction Server 355.

The Server Front-end **315** also encapsulates a standard Web server (a la Apache), that services other trader requests that entail formatted text; this includes all of the Help pages,

large transaction history requests, and server monitoring information. The Server Front-end
 315 also acts as a Firewall.

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Internally, the Server Front-end **315** is structured as a set of threads that service one request after another. The threads allow concurrent request servicing so that many requests can be serviced in parallel.

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(3) Rate Server / Pricing Engine 325. The Rate Server obtains currency exchange rate
information from a variety of external rate sources and stores it locally. The Pricing Engine computes the currency exchange rates that the traders see and that are used for trading. These are computed from the currency exchange rates obtained from the external rate sources, the directional movement and volatility of the market, the current Trading System exposure and a number of other parameters. The computed rates are made available to the other modules of
the system, and are also stored on persistent media. Various methods of calculating such

rates are known to those skilled in the art. A preferred method is described in U.S. Patent Application No. 09/764,366, filed January 18, 2001, to Müller et al.

Traders can request historical rate data so that they can graphically display the movements of any pair of currencies. The Rate Server serves such requests and preferably has several years of currency exchange rates available for this purpose.

For fast response time, the Rate Server caches in memory all of the frequently and recently requested rates so as to minimize the number of disk accesses required.

(4) VAR (Value at Risk) server 320. This server obtains and serves Value at Risk information. Various methods of calculating VAR are known in the art. A preferred method
is disclosed in U.S. Provisional Patent Application No. 60/200,742, filed May 1, 2000, to Müller.

(5) Transaction Server **355**. This server encapsulates all transaction functionality and communicates the transactions to the Database **310** server (which runs on a separate host) after validating the transactions. The Transaction Server **355** also updates all other modules

25 that need to be informed of new transactions. Finally, the Transaction Server 355 informs the currently online traders when a transaction (that may have been issued by a stop-loss, take-profit, or limit order daemon or by the Margin Control Manager) takes place.

(6) Interest Rate Manager **360**. The Interest Rate Manager **360** periodically (for example, every few minutes, every few seconds, or tick-by-tick) goes through all trader

30 accounts to compute the interest rate due or owed based on the instruments currently in the portfolio, each resulting in a transaction of the trader account. The portfolio information is

obtained through the Transaction Server 355. The interest rates used are obtained from external sources, and the history of interest rates are stored on persistent storage. Because real-time (or near real-time) information is used, the Interest Rate Manager is capable of calculating, paying out, and collecting interest by the second. Interest calculation formulas

5 are known to those skilled in the art, and any appropriate formula can be used in the Interest Rate Manager without departing from the scope of the invention. An example is the formula

$$A = P\left(1 + \frac{r}{m}\right)^{m}$$

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- 10 where P is the principal, r is the annual interest rate, t is the time (in years) over which interest is earned, m is the number of times per year that interest is compounded, and A is the amount owed (principal plus interest). The interest earned during time t is A P. Thus, for example, if the annual interest rate is 3%, and the interest is compounded daily, then the interest I<sub>k</sub> earned over each time period T<sub>k</sub> = t<sub>k</sub> t<sub>k-1</sub>, where each t<sub>k</sub> is a clock-time (i.e., a
- 15 particular day-hour-minute-second-fraction-of-a-second) to the nearest second (thus  $T_k$  is in seconds), is calculated according to the formula  $I_k = A_k P_k$ , where  $P_k$  is the principal (the amount earning interest, not the "original" principal) at time  $t_{k-1}$ , and

$$A_{k} = P_{k} \left( 1 + \frac{0.03}{365} \right)^{\frac{365 T_{k}}{31,536,000}}$$
. Since there are 31,536,000 seconds per year,  $\frac{T_{k}}{31,536,000}$  is

the time in years over which the interest is being calculated. Similar formulas can be used when  $t_k$  is given to the nearest tenth, hundredth, or other fraction of a second. If interest is compounded continuously, those skilled in the art will recognize how to apply the wellknown formula  $A = Pe^{rt}$  appropriately. Thus, to calculate interest on a tick-by-tick basis, the above formulas can be used, with  $T_k$  representing time between ticks.

(7) Trade Manager **365**. The Trade Manager **365** continuously checks whether a trade should be executed on behalf of a trader, and if so executes the trade by interacting with the transaction server. The Trade Manager **365** consists of multiple subcomponents: (a) a stop-loss daemon continuously checks to see whether stop-loss orders should be executed

30 and, if so, executes them through the Transaction Server 355; (b) a take-profit daemon continuously checks to see whether take-profit orders should be executed and, if so, executes them through the Transaction Server 355; and (c) a limit-order daemon continuously checks to see whether a limit order should be executed and, if so, executes it through the Transaction Server 355.

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The daemons continuously monitor the current rates to determine whether action is required. Moreover, each of the daemons caches in memory all of the orders that it may need to execute. They keep the orders suitably sorted so that they can take fast action when necessary; for example, the stop-loss daemon sorts the orders in descending order of stop-loss price, the take-profit in ascending order of take-profit price.

- (8) Margin Control Manager 350. This module continuously monitors the margin requirements of all trader accounts. When necessary, the Margin Control Manager 350 will liquidate some (or all) of a trader's holdings. It caches in memory all of the information necessary for this computation, sorted in decreasing order of risk, so that it can take swift action when necessary. Holdings are liquidated through the Transaction Server 355, when necessary.
- (9) Trading System Monitor 330. This module continuously monitors the current state of the Trading System. Among others, state parameters include: (a) current Trading System currency positions; (b) current margin situation; (c) a summary of stop-loss, take-profit, and limit orders that exist; (d) the number of currently online users; (e) the number, size and type of trades executed per second; and (f) a summary of the account positions held by the users.

20 positions held by the users.

This information is made available (a) to the Pricing Engine **325** (where it is used to set the currency exchange rates made available to the traders), (b) to the Hedging Engine **340** so that it can determine when to issue trades with the Partner Bankend Bank, and (c) to system operators and Trading System financial engineers in real time via a feature-rich Web

25 interface. Moreover, this information is logged on persistent storage for later, off-line analysis.

(10) Hedging Engine **340**. This module continuously monitors current Trading System currency positions, the positions held in the trader accounts, recent trading activity, and the market direction and volatility to determine when to issue a trade with the backend

30 Partner Bank. Various methods of performing such calculations are known to those skilled in the art. The Hedging Engine 340 preferably uses the hedging tool described in U.S. Patent Application No. 09/764,366, filed January 18, 2001, to Müller et al., the contents of which are incorporated herein by reference.

(11) Partner Bank Interface **335**. This module communicates directly with the backend Partner Bank to issue trades and obtain account information.

(12) Computer Systems Monitor **345**. This module continuously monitors the operation and state of the computer systems on which the Trading System is running. Besides error conditions, such metrics as memory, processor, disk, and network utilization; paging activity; the number of packets sent over the various networks; the number of transactions; and the number of processes and threads are of interest. This information is made available to system operators in real time via a feature-rich Web interface and local

consoles. In addition, it is stored on persistent storage for later, off-line analysis.

The Server modules described above are structured so that they can run independently as separate processes that can be independently mapped onto an arbitrary computer within a cluster. Moreover, each of the modules can run in replicated form, providing both fault

15 tolerance and increased throughput.

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#### Preferred physical organization of the Trading System Server

A Trading System Server of a preferred embodiment runs on a hardware base consisting of a cluster of hosts and disk farms connected by networks. All of the hardware components are preferably replicated for fault tolerance, as depicted in **FIG. 4**.

The cluster is connected to multiple ISPs so that if one ISP goes down, traders can still communicate with the server. The ISPs are connected to the Server through a pair of routers **410** that monitor each other; if one of them goes down, then the other will automatically take over.

For security reasons, the Database **310** is on a separate back-end network; this way, it is not connected directly to the Internet and can only be accessed by the Transaction Server **355**. The Database **310** is setup in a dual configuration, so that the system can continue operating with a single database failure. All disks are mirrored, again, so that any single disk failure will not result in a loss of data.

All of the other server processes run on a cluster of servers **420**, connected to the 30 Internet routers **410** on the one side, and connected to the backend database **430** on the other side. A virtually unlimited number of servers can be used in the cluster, allowing the system

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to scale up to support a large number of users. The servers can be partitioned by functionality, allowing specialized servers to be used, optimized for the particular functionality. For example, the Rate Servers **325** need minimal CPU power, and only a limited amount of memory. They also can be replicated easily without the introduction of any complexity or overhead. Hence, smaller, less costly hardware can be used for this purpose.

After login, traders typically communicate with a particular server in "sessions" for performance reasons. Using sessions improves cache locality, resulting in far fewer database accesses, and it allows the cost of creating session encryption keys to be amortized over many communication actions. For load balancing purposes, the trader software is directed to

10 henceforth communicate with the least loaded server at the time when the trader first logs in. In case of severe load imbalances, individual traders are redirected to new, less loaded servers. If any of the servers crashes, then the client software that was communicating with the crashed server will detect the failure and automatically (transparently to the user) go through a new login procedure.

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## **User Interface Description**

## Overview

The following is a description of a preferred user interface of a preferred Trading System. The main user interface display is called a "Trading Station," and it is used for all interactions with the trading system by a trader, such as analyzing changes in currency exchange rates, reviewing the trader's current currency positions, reviewing the trader's past transactions, or issuing buy and sell requests. The key features of the Trading Station are that: (1) it runs on any of the popular Web browsers connected to the Internet; (2) it displays continuously updated currency exchange rates in real-time; (3) it displays all pertinent information in one

25 window; and (4) all interaction with the server occurs over fully-encrypted Internet connections.

# System Requirements

The User Interface is preferably implemented in Java so as to run on any browser with JDK1.2 support, which includes all Netscape Navigators versions 4.2 and up as well as

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30 Microsoft's Internet Explorer versions 5.0 and up. The Trading Station is preferably

supported for Windows 95, Windows 98, Windows 2000, Windows NT, Linux, Sun Solaris, and other Unix-based operating systems.

If operated from behind a firewall, then the Trading Station may operate properly only if the firewall allows HTTP requests to Port 90. Many corporations have firewalls that

- 5 restrict access to the corporate network to well-known services such as email. Typically this restriction is accomplished by restricting the ports that may be used. For example, Port 80 is typically used for http (Web-based) traffic. Some firewalls inspect traffic going through Port 80 to ensure that the port is being used only for Web-based traffic. This is problematic for trading systems that do not use http messages -- it causes users behind corporate firewalls to
- 10 be inaccessible. However, a preferred embodiment of the present invention overcomes this obstacle by prefacing Trading System messages with standard http headers to make them appear to be http requests and responses, even though they are not.

## Log In Procedure

In order to log in, a trader must be a registered user. Registering is preferably free and can be accomplished by clicking on a "new users" link on a login page. Logging in requires a user to provide a user-ID and password. If a trader forgets her password, she can click on the "forgot your password" link and fill in the information requested; her password will be then be emailed to her.

- If user-ID and password are entered correctly, a small window appears indicating that the Trading Station is being loaded. After a short time, a larger window appears with the Trading Station Graphical User Interface shown in **FIG. 5**. Once the Trading Station is properly loaded, the contents of the small window is changed to include a number of useful links. It is important that this small window not be closed while the Trading Station is to remain in operation, although it may be minimized so as not to be in the trader's way. (This
- 25 small window is necessary due to the limitations of typical Java implementations on most browsers that would otherwise not allow a trader to continue browsing the Web while the User Interface is active.)

## Main Window of Trading Station

The Trading Station user interface is shown in **FIG. 5**. It can be resized to a 30 convenient size, by using the standard resizing mechanisms supported by the trader's operating system's windowing system. The Trading Station is preferably partitioned into a number of components that each serve a different purpose:

(A) Action buttons: a vertical panel located on the left hand side of the Trading Station contains a set of action buttons that allow a user to perform the most common operations.

(B) Menus: a set of pull-down menus across the top allows a user to invoke additional operations.

(C) Account summary: an area in the middle of the Trading Station that gives a summary of the user's account.

(D) Table: an area located across the top of the Trading Station that is used to display various information in tabular format. The information displayed depends on the most recently clicked Action Button. It might display currently held instruments, current open positions, or a history of recent transactions.

(E) Currency rates: an area at the bottom left that displays various currency rates.

15 These rates are continuously updated in real time.

(F) Graph: located at the bottom-right corner, graphs display currency rates over time. The graphs are also updated in real-time as new rates become available.

Subsequent sections describe each of these components in detail.

# **Action Buttons**

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20 The Trading Station preferably has the following action buttons in a panel on the left side. Clicking the appropriate button will invoke the described operation:

Buy/Sell: Pops up a Buy/Sell window, from which a trader can issue trade requests.

(See the description of the buy/sell window (FIG. 13) for more information.)

Positions: Displays the currently open positions in a table. (See the description of the

25 Open Positions Table (FIG. 8) for the contents of the table.)

Trades: Displays the currently open trades in a table. (See the description of the

Open Trades Table (FIG. 7) for the contents of the table.)

Orders: Displays the open orders (that may be executed some time in the future) in a

table. (See the description of the Open Orders Table (FIG. 9) for the contents of the table.)

30 History: Displays a recent history of the trader's transactions in the table. (See the description of the History Table (FIG. 10) for contents of the table.)

Analysis: Pops up a new browser window with access to a number of analysis tools that might help in making trading decisions.

News: Pops up a new browser window with the latest currency news.

Forums: Pops up a new browser window with access to a number of forums (sometimes known as newsgroups) that allow a trader to participate in discussions with other traders and currency trading experts.

## **Pull-down Menus**

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There are preferably 5 pull-down menus (not shown), each offering different operations or services:

10 Connection Menu: (1) Disconnect: disconnects the Trading Station from the Trading System server. The Trading Station will remain open, but currency rates will no longer be updated, and transactions will not be possible. (2) Connect: connect the Trading Station to the server, so the trader is back on line. (3) Quit: quit and exit this application.

Account Menu: (1) Transaction history: pop up a new browser window to display an extensive list of all transactions that occurred on a trader's account. See the Transaction History section (relating to **FIG. 10**) for a description of what is displayed. (2) Clear account balance and P/L: for those who have incurred large losses on their account, this operation allows a trader to start over again with a cleared P/L and new funds in the account. This feature is primarily useful when an account on the Trading System is used as a game - i.e., no

- 20 real money changes hands. (3) Add funds to account: for a game account, add funds to the account: for a real-money account, transfer money into the account from the trader's credit card or obtain instructions on how to wire transfer money into the trader's account. (4) Buy/Sell: issue a trade or market order (see FIG. 13). (5) Open positions: display the open positions in a table (see FIG. 8). (6) Open trades: display all open trades in a table (see FIG.
- 7). (7) Open orders: display all open orders in a table (see FIG. 9). (8) Recent transaction history: display the most recent transactions in a table (see FIG. 10).

Commands Menu: (1) Change passwords. (2) Graph: specify the currency pair to be displayed in the graph.

Information Menu: (1) Interest rates: display interest rate information in a separate
browser window. (2) Market News: display up-to-date currency market news in a separate
browser window. (3) Analysis tools: use an analysis tool in a separate window. (4) Forum:

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participate in various forums related to currency trading. (5) Rankings: see a list of the most successful currency traders using the Trading System.

Help Menu: (1) Documentation: links to descriptive documents. (2) About: display software version number and credits. (3) Debug: display debugging information in a new window.

## Account Summary

The account summary display (see **FIG. 6** for an example) is a small table that provides a summary of the trader's account status. It preferably shows: (1) Account Balance: the amount of the trader's cash holding in the trader's account. (2) Realized P/L: the amount

10 of profit or loss the trader has incurred with the trader's trading activity to date. (3) Unrealized P/L: the amount of profit or loss that the trader holds with the trader's current open positions. If the trader clears all of his open positions, then this amount would be added to the Realized P/L amount. (4) Margin Used: the amount of the trader's account balance and unrealized P/L tied up for margin purposes.(5) Margin Available: the amount of the trader's

15 account balance and unrealized P/L available as margin for new trading transactions.

This information is preferably continuously updated in real-time to take current market conditions into account. Moreover, the information is always shown in the trader's home currency.

### Tables

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The table area of the Trading Station shows different information depending on the last Action Button selected. It can include: (1) open trades; (2) open positions; (3) open orders; and (4) transaction history. The default is open positions.

How the information in the table is displayed can be controlled in two ways: (1) Scroll bars are used to scroll the table up or down, allowing a trader to see information that is hidden

25 from view. (2) Sorting can be achieved by clicking on a column header, which causes the table to be sorted so that the column is in increasing or decreasing order. Clicking once sorts the column in increasing order; clicking again sorts it in decreasing order.

For all tables except Transaction history, clicking on a row of the table will cause a pop-up window to appear, offering further actions for that open trade, position, or order.

30 **Open Trades Table** 

The open trades table (see FIG. 7) shows a list of the trader's currently open trades. The table preferably has 9 columns, described from left to right (not all are depicted in FIG.

7): (1) Short/Long: Indicates whether the position is short or long.

(2) Ticket Number: a number that uniquely identifies an open trade. A trader can use
this number as a reference for inquiries to the Trading System or its operators, or to search for particular entries in the transaction history table.

(3) Currency pair: the pair of currencies involved in this trade. The first currency of the pair is referred to as the base currency, while the second one is referred to as the quote currency.

10 (4) Units: the number of transacted units for this trade, expressed in the base currency.

(5) S/L: the trader's stop-loss for this trade. This trade will be closed automatically as soon as the currency exchange rate for this currency pair crosses the S/L value. A stop-loss limit is used to limit the loss a trader may incur with this trade.

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(6) T/P: the trader's take-profit for this trade. This trade will be closed automatically as soon as the currency exchange rate for this currency pair crosses the T/P value. A take-profit limit is used to realize the trader's profit as soon as it reaches the T/P value.

(7) Rate: the exchange rate obtained when the trade got executed.

(8) Market: the current exchange rate for this currency pair.

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(9) Profit: the unrealized profit (when positive) or loss (when negative) expressed in base currency and on a per unit basis.

Clicking on the scroll buttons will cause the table to scroll up or down. Clicking on a column header will sort the table so that the contents of the column are displayed in increasing or decreasing order. Clicking on a row with an open trade will cause a pop-up

25 window to appear offering two operations: (1) Close trade. (2) Modify trade. This is used to modify the S/L or the T/P limits.

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# **Open Positions Table**

The Open Positions Table (see **FIG. 8**) displays a list of the trader's open positions. It is similar to the Open Trades table, except that all trades of the same currency pair are aggregated into one line.

The table preferably has 6 columns, described from left to right (not all are shown in **FIG. 8**):

(1) Short/Long: Indicates whether the position is short or long.

(2) Currency pair: the pair of currencies the position refers to. The first currency ofthe pair is referred to as the base currency, while the second one is referred to as the quote currency:

(3) Units: the number of units held in this position, expressed in the base currency.

(4) Rate: the average exchange rate obtained for the trades in this position.

(5) Market: the current exchange rate for this currency pair.

10 (6) Profit: the unrealized profit (when positive) or loss (when negative) expressed in base currency and on a per unit basis.

Clicking on the scroll buttons will cause the table to scroll up or down. Clicking on a column header will sort the table so that the contents of the column displayed in increasing or decreasing order. Clicking on a row with an open position will cause a pop-up window to appear offering the option to close the position

15 appear offering the option to close the position.

## **Open Orders Table**

The Open Orders Table (see **FIG. 9**) shows a list of the trader's currently open orders. An open order is a request that a particular trade should be made automatically when the exchange rate of the specified currency pair crosses a specified threshold.

20 The table preferably has 9 columns, described from left to right (not all are shown in FIG. 9).

(1) Short/Long: indicates whether the position is short or long.

(2) Order ID: a number that uniquely identifies the order. A trader can use this number as a reference for inquiries to the Trading System.

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(3) Currency pair: the pair of currencies to be traded.

(4) Units: the number of units to be traded, expressed in the base currency.

(5) S/L: the stop-loss for this trade. This trade, once executed, will be closed automatically as soon as the currency exchange rate for this currency pair crosses the S/L value. A stop-loss limit is used to limit the loss a trader may incur with this trade.

30 (6) T/P: the trader's take-profit for this trade. This trade, once executed, will be closed automatically as soon as the currency exchange rate for this currency pair crosses the

T/P value. A take-profit limit is used to realize the trader's profit as soon as it reaches the T/P value.

(7) Rate: specifies that the trade should be executed as soon as the exchange rate for the specified currency pair crosses this value.

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(8) Market: the current exchange rate for this currency pair.

(9) Duration: specifies the amount of time an order should stand, until it is automatically canceled.

Clicking on the scroll buttons will cause the table to scroll up or down. Clicking on a column header will sort the table so that the contents of the column are displayed in

10 increasing or decreasing order. Clicking on a row with an order will cause a pop-up window to appear offering two operations: (1) Cancel order. (2) Modify order. This is used to modify the exchange rate threshold at which the trade is to be executed, or the S/L or T/P limits.

# **Transactions** Table

The Transactions (or Transaction History) Table (see **FIG. 10**) shows a list of the most recent transactions on the account. For access to a full list of past transactions, a user selects the Information pull-down menu and then selects Transaction History.

The Transaction History Table preferably has 6 columns, described from left to right:

(1) Transaction ID: uniquely identifies the transaction.

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(2) Type: identifies the type of transaction.

(3) Currency pair the pair of currencies associated with the transaction.

(4) Units: the number of units to traded in the transaction, expressed in the base currency.

(5) Price: the currency exchange rate applied when buying or selling a currency pair.

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(6) Date/Time: the date and time of the transaction.

Clicking on the scroll buttons will cause the table to scroll up or down. Clicking on a column header will sort the table so that the contents of the column are displayed in increasing or decreasing order.

## **Currency Rates**

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The Currency Rates Table (see FIG. 11) shows the current exchange rate for the currency pairs supported by the Trading System. They are preferably updated in real time,

approximately every 5 seconds. When there is a significant exchange rate movement for a currency pair, up/down indicators show the direction of the rate change in order to alert a trader, should a trader not currently have the currency pair displayed in the graph.

Clicking on the scroll buttons will cause the table to scroll up or down. Clicking on a currency pair's ask price will pop up a buy window for that currency pair. Clicking on a currency pair's bid price will pop up a sell window for that currency pair.

# Graphs

Graphs (see **FIG. 12**) show how currency exchange rates change over a period of time, ranging from minutes to months. All graphs are updated in real-time, as new currency rates arrive.

At any given time, the difference between the lower boundary and the upper boundary of the curve represents the difference between the bid and the ask price, and the difference may vary over time depending on market conditions. Thus, the top part of the curve indicates the ask price, and the bottom of the curve indicates the bid price.

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As a mouse cursor **1220** is moved over the graph, a sub-area **1230** in the graph shows precise exchange rate information for the target currency pair corresponding to the time instance represented by the position of the mouse cursor.

The graph may also display Buy or Sell widgets that indicate at which point in time a trader bought or sold a currency pair. Downward pointing red arrows indicate a sold currency pair (where a trader is hoping the rates will go down after that point), and upward pointing green arrows indicate a bought currency pair (where a trader is hoping the rates will go up after that point).

A trader can adjust what is shown in the graph: (1) The currency pair displayed is selected using the pull-down menu **1240** at the bottom left. (2) The granularity of the graph is selected using the pull-down menu **1250** at the bottom right of the graph. Selecting a fine granularity, such as 5 seconds (where each point on the horizontal axis represents 5 seconds of time), will display a relatively short time interval (less than an hour, in this case). Selecting a larger granularity, such as one day, will display longer-term trends (9 months of exchange rate information in this case).

Scroll buttons **1260** at the top right of the graph area allow a trader to shift the time interval shown to the left or to the right (backward or forward in time). Clicking on the graph with the mouse will hide the Buy/Sell widgets. Clicking again will cause them to reappear.

# **Buy/Sell Window**

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A Buy/Sell pop-up window (see FIG. 13) allows a trader to issue buy or sell orders. The window can be caused to pop up either by: (1) clicking on the Buy/Sell action button (see FIG. 5); (2) clicking on the bid or ask price in the Currency Rates Table (see FIG. 11); or (3) clicking on an existing trade, position, or order in the Table area of the Trading Station display (see FIG. 5).

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Two types of orders are supported: (1) Market Orders are orders that are transacted immediately based on market exchange rates. (2) Entry Orders are orders that are executed when the exchange rate crosses a certain threshold.

The type of order can be selected by clicking on the appropriate tab in the Buy/Sell Window (see FIG. 13). Market order comes up as the default order.

Issuing a Market Order. To issue a market order with the Buy/Sell Window and the Market Tab selected, a number of fields must be filled out (although most of the fields are pre-initialized with reasonable values):

(1) ACTION: choose between buy and sell.

(2) CURRENCY: choose the currency pair the trader wishes to buy or sell. By

20 default, this field will be initialized as follows: (A) If the Buy/Sell button was used to obtain the window, the currency pair currently shown in the graph. (B) If the bid or ask price was clicked to obtain the window, the currency pair for which the price was clicked. (C) If a trade or position was clicked in the Table area, the currency pair corresponding to the trade or position. The pull-down menu can be used to select another currency pair.



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(3) UNITS: the number of units of the currency pair the trader wishes to buy or sell, with units expressed in terms of the base currency.

(4) Lower Limit: the order will result in a trade only if a price is obtained that does not lie below this limit. By default, no limit is selected, but one can be set by checking the check box. If the check box is checked, then the field is automatically initialized with a reasonable value; however the value can be changed either by modifying the number directly or by using the +/- buttons to increase or decrease the value, respectively. (5) Upper Limit: the order will result in a trade only if a price is obtained that does not lie above this limit. By default, no limit is selected, but one can be set by checking the check box. If the check box is checked, then the field is automatically initialized with a reasonable value; however, the value can be changed either by modifying the number directly or by using the +/- buttons to increase or decrease the value, respectively.

(6) Stop Loss: if the order results in a trade, then the stop-loss value given will be associated with the trade. By default, no stop-loss limit is selected, but one can be set by checking the check box. If the check box is checked, then the field is automatically initialized with a reasonable value; however, the value can be changed either by modifying the number directly or by using the +/- buttons to increase or decrease the value, respectively.

(7) Take Profit: if the order results in a trade, then the stop-loss value given will be associated with the trade. By default, no take profit limit is selected, but one can be set by checking the check box. If the check box is checked, then the field is automatically initialized with a reasonable value; however, the value can be changed either by modifying the number directly or by using the +/- buttons to increase or decrease the value, respectively.

The RATE field is set by the Trading Station and corresponds to the most recent exchange rate for the selected currency pair.

To issue the order, a Submit button 1310 must be selected. If the order is successful, and a trade occurs, then an acknowledgment window (see FIG. 14) pops up with a Ticket number that can be used for future reference. Moreover, the Open Trades Table (see FIG. 7) will be updated to reflect the new trade, as will the Open Positions Table (see FIG. 8) and the Transaction History Table (see FIG. 10).

Several issues are important to note:

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(1) If an order is successful and a trade occurs, then the exchange rate obtained for the
 trade will correspond to the most current exchange rate maintained at the Trading System
 servers and not necessarily the rate displayed in the Buy/Sell window.

(2) An order without Lower and Upper Limits will always result in a trade.

(3) An order with both Lower and Upper Limits will result in a trade if and only if the exchange rate for the potential trade lies between the two limits.

Issuing an Entry Order. To issue an entry order with the Buy/Sell Window and the Entry Tab selected (see **FIG. 15**), a number of fields must be filled out (although most of the fields are pre-initialized with reasonable values):

(1) ACTION: choose between buy and sell.

- (2) CURRENCY: choose the currency pair the trader wishes to buy or sell. By default, this field will be initialized as follows: (A) if the Buy/Sell button was used to obtain the window, the currency pair currently shown in the graph; (B) if the bid or ask price was clicked to obtain the window, the currency pair for which the price was clicked. The pull-down menu can be used to select another currency pair.
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(3) UNITS: the number of units of the currency pair the trader wishes to buy or sell, with units expressed in terms of the base currency.

(4) RATE: the order will result in a trade as soon as the exchange rate for the selected currency pair crosses the given value; that is, for buy orders, if the rate goes below this value, and for sell orders if the rate goes above the given value

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(5) Duration: this value is used to limit the amount of time an outstanding order will remain effective. By default, the order remains effective indefinitely. However, the duration can be set to the end of the day or for an hour.

(6) Stop Loss: if the order results in a trade, then the stop-loss value given will be associated with the trade. By default, no stop-loss limit is selected, but one can be set by checking the check box. If the check box is checked, then the field is automatically initialized with a reasonable value; however, the value can be changed either by modifying the number directly or by using the +/- buttons to increase or decrease the value, respectively.

(7) Take Profit: if the order results in a trade, then the stop-loss value given will be associated with the trade. By default, no take profit limit is selected, but one can be set by

25 checking the check box. If the check box is checked, then the field is automatically initialized with a reasonable value; however, the value can be changed either by modifying the number directly or by using the +/- buttons to increase or decrease the value, respectively.

To issue the order, a Submit button 1510 must be selected. This results in an acknowledgment window (see FIG. 14) popping up with a Ticket number that can be used

- 25 -

30 for future reference. Moreover, the Open Orders Table (see **FIG. 9**) will be updated to reflect the new order. Note that a trader can modify the parameters of an open order (including the

rate representing the trade threshold, or the S/L and T/P) by clicking on the order in the Open Orders Table.

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CLAIMS

What is claimed is:

A system for trading currencies over a computer network, comprising:

 (a) a server front-end;

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(c) a transaction server;

(b) a database;

- (d) a rate server; and
- (e) a pricing engine.

10 2. A system as in claim 1, further comprising an interest rate manager.

3. A system as in claim 2, wherein said interest rate manager is operative to calculate, pay out, and collect interest by the second.

A system as in claim 2, wherein said interest rate manager is operative to calculate, pay out, and collect interest on a tick-by-tick basis.

5. A system as in claim 1, further comprising a trade manager.

20 6. A system as in claim 5, wherein said trade manager comprises a stop-loss daemon that (a) continuously checks whether stop-loss orders should be executed, and (b) if a stop-loss order should be executed, executes it through said transaction server.

A system as in claim 5, wherein said trade manager comprises a take-profit
 daemon that (a) continuously checks whether take-profit orders should be executed, and (b) if
 a take-profit order should be executed, executes it through said transaction server.

A system as in claim 5, wherein said trade manager comprises a limit-order daemon that (a) continuously checks whether limit orders should be executed, and (b) if a
 limit order should be executed, executes it through said transaction server.

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9. A system as in claim 1, further comprising a value at risk server.

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10. A system as in claim 1, further comprising a margin control manager.

11. A system as in claim 1, further comprising a trading system monitor.

12. A system as in claim 1, further comprising a hedging engine.

13. A method of trading currency over a computer network, comprising the steps10 of:

(a) transmitting currency market information over a computer network to an end user;

(b) receiving a currency trade order from said end user, wherein said currency trade order comprises limits within which the currency trade will be acceptable to said end
 user;

(c) calculating a market exchange rate for said currency trade order; and(d) executing said order if said market exchange rate is within said limits.

14. A method as in claim 13, wherein said market information and said trade order20 are prefaced with http headers.

15. A method of trading currency over a computer network, comprising the steps of:

(a) transmitting currency market information over a computer network to anend user;

(b) receiving a currency trade order from said end user, wherein said currency trade order comprises a threshold exchange rate;

(c) calculating a market exchange rate for said currency trade order; and

(d) executing said order (1) if said market exchange rate is or becomes above

30 said threshold exchange rate and said order is a sell order, and (2) if said market exchange rate is or becomes below said threshold exchange rate and said order is a buy order.

16. A method as in claim 15, wherein said market information and said trade order are prefaced with http headers.

17. A method of trading currency over a computer network, comprising the steps5 of:

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(a) receiving currency market information over a computer network from a trading system server;

(b) transmitting a currency trade order to said trading system server, wherein said currency trade order comprises limits within which the currency trade will be acceptable;
 and

(c) if a market exchange rate is within said limits, receiving information from said trading system server indicating that said currency trade order has been executed.

18. A method as in claim 17, wherein said market information and said trade order15 are prefaced with http headers.

19. A method of trading currency over a computer network, comprising the steps of:

(a) receiving currency market information over a computer network from atrading system server;

(b) transmitting a currency trade order to said trading system server, wherein said currency trade order comprises a threshold exchange rate; and

(c) if (1) the applicable market exchange rate is or becomes above said threshold exchange rate and said order is a sell order, or (2) the applicable market exchange

25 rate is or becomes below said threshold exchange rate and said order is a buy order, receiving information from said trading system server indicating that said currency trade order has been executed.

20. A method as in claim 19, wherein said market information and said trade order30 are prefaced with http headers.

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- 21. Software for currency trading over a computer network, comprising:
  - (a) software for receiving data over a computer network from a trading system

server;

(b) software for displaying a first graphical user interface display that:

5 (i) displays continuously updated currency exchange rates in real-time based on data received from said trading system server; and

(ii) displays a plurality of action buttons, including at least one buy/sell button;

(c) software for displaying, in response to a user clicking said buy/sell action

button, a buy/sell window display that:

(i) comprises trade order parameter fields; and

(ii) accepts trade order data entered into said fields by a user; and

(d) software for transmitting said trade order data to said trading system server over said computer network.

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22. Software as in claim 21, wherein said trade order parameter fields comprise fields for upper and lower limits on acceptable trade market exchange rates.

23. Software as in claim 21, wherein said trade order parameter fields comprise afield for a threshold market rate above or below which a trade should be executed.

- 24. Software for currency trading over a computer network, comprising:
  - (a) a database management module;
  - (b) a transaction server module;
- 25 (c) a rate server and pricing engine module; and
  - (d) a transaction server module.

25. Software as in claim 24, further comprising a bank interface module.

30 26. Software as in claim 24, further comprising a trade manager module.

27. Software as in claim 24, further comprising a hedging engine module.

28. Software as in claim 24, further comprising an interest rate manager module.

5 29. Software as in claim 28, wherein said interest rate manager module is operative to calculate, pay out, and collect interest by the second.

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30. Software as in claim 28, wherein said interest rate manager module is operative to calculate, pay out, and collect interest on a tick-by-tick basis.

# Abstract

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In one aspect, the present invention comprises a system for trading currencies over a computer network. A preferred embodiment comprises: (a) a server front-end; (b) at least one database; (c) a transaction server; (d) a rate server; (e) a pricing engine; (f) an interest rate

5 manager; (g) a trade manager; (h) a value at risk server; (i) a margin control manager; (j) a trading system monitor; and (k) a hedging engine. In another aspect, the present invention comprises methods for trading currency over a computer network. In another aspect, the present invention comprises software for currency trading over a computer network.

#### DECLARATION FOR NON-PROVISIONAL PATENT APPLICATION'

As a below named inventor, I hereby declare that:

My residence, post office address and citizenship are as stated below at 201 et seq. beneath my name.

I believe I am the original, first and sole inventor if only one name is listed at 201 below, or an original, first and joint inventor if plural names are listed at 201 et seq. below, of the subject matter which is claimed and for which a patent is sought on the invention entitled

#### CURRENCY TRADING SYSTEM, METHODS, AND SOFTWARE

and for which a patent application:

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is attached hereto and includes amendment(s) filed on (if applicable)

was filed in the United States on May 16, 2001 as Application No. 09/858,610

with amendment(s) filed on (if applicable)

was filed as PCT international Application No. on and was amended under PCT Article 19 on (fapplicable)

I hereby state that I have reviewed and understand the contents of the above identified application, including the claims, as amended by any amendment referred to above.

I acknowledge the duty to disclose information known to me to be material to patentability as defined in Title 37, Code of Federal Regulations, §1.56.

I hereby claim foreign priority benefits under Title 35, United States Code, §119(a)-(d) of any foreign application(s) for patent or inventor's certificate listed below and have also identified below any foreign application for patent or inventor's certificate having a filing date before that of the application on which priority is claimed:

| EARLIEST FOREIGN APPLICA | TION(S), IF ANY, FILED PRIOR | TO THE FILING DATE O                 | OF THE APPLICATION  |
|--------------------------|------------------------------|--------------------------------------|---------------------|
| APPLICATION NUMBER       | COUNTRY                      | DATE OF EILING<br>(day, month, year) | PRIORITY<br>CLAIMED |
|                          |                              | <i>].</i>                            | YES D NO D          |
|                          |                              |                                      | YES D NO D          |
|                          |                              |                                      | YES D NO D          |

I hereby claim the benefit under Title 35, United States Code, §119(e) of any United States provisional application(s) listed below.

| PROVISIONAL APPLICATION NUMBER | FILING DATE   |
|--------------------------------|---------------|
| 60/274,174                     | March 8, 2001 |
|                                |               |
|                                |               |

I hereby claim the benefit under Title 35, United States Code, §120 of any United States application(s) listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States application in the manner provided by the first paragraph of Title 35, United States Code §112, I acknowledge the duty to disclose information known to me which is material to patentability as defined in Title 37, Code of Federal Regulations, §1.56 which became available between the filing date of the prior application and the national or PCT international filing date of this application:

| NON-PROVISIONAL        |             | STATUS   |         |           |  |  |  |
|------------------------|-------------|----------|---------|-----------|--|--|--|
| APPLICATION SERIAL NO. | FILING DATE | PATENTED | PENDING | ABANDONED |  |  |  |
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I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issuing thereon.

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|             | FULL NAME<br>OF INVENTOR   | last name<br>Olsen                     | FIRST NAME<br>Richard                       | MIDDLE NAME<br>B.                    |                     |  |  |  |
|-------------|----------------------------|--|---|--------------------------------------|---------------------|--|--|--|
| 2<br>0<br>1 | RESIDENCE &<br>CITIZENSHIP | спу<br>Zurich                          | STATE OR FOREIGN COUNTRY<br>Switzerland     | COUNTRY OF CITIZENSHI<br>Switzerland | P                   |  |  |  |
|             | POST OFFICE<br>ADDRESS     | street<br>Wehrenbachhalde 46           | спу<br>8053 Zurich                          | state or country<br>Switzerland      | ZIP CODE            |  |  |  |
|             |                            | SIGNATURE OF INVENTOR 201              |   | DATE                                 |                     |  |  |  |
|             |                            | D.OC                                   |   | 29/3/01                              |                     |  |  |  |
|             | FULL NAME<br>OF INVENTOR   | LAST NAME<br>Stumm                     | first name<br>Michael                       | MIDDLE NAME                          |                     |  |  |  |
| 2<br>0<br>2 | RESIDENCE &<br>CITIZENSHIP | стту<br>Toronto                        | state or foreign country<br>Ontario, Canada | COUNTRY OF CITIZENSHI<br>Canada      | P                   |  |  |  |
|             | POST OFFICE<br>ADDRESS     | STREET<br>30 St. Patrick St. Suite 300 | спу<br>Toronto, ON                          | STATE OR COUNTRY<br>Canada           | zip code<br>M5T 3A3 |  |  |  |
|             |                            | SIGNATURE OF INVENTOR 202              | •   | DATE                                 |                     |  |  |  |
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|             | FULL NAME<br>OF INVENTOR   | LAST NAME                              | FIRST NAME                                  | MIDDLE NAME                          |                     |  |  |  |
| 2<br>0<br>3 | RESIDENCE &<br>CITIZENSHIP | СПУ                                    | STATE OR FOREIGN COUNTRY                    | COUNTRY OF CITIZENSHI                | P                   |  |  |  |
|             | POST OFFICE<br>ADDRESS     | STREBT                                 | СПУ   | STATE OR COUNTRY                     | ZIP CODE            |  |  |  |
|             |                            | SIGNATURE OF INVENTOR 203              |   | DATE                                 |                     |  |  |  |
|             | FULL NAME<br>OF INVENTOR   | LAST NAME                              | FIRST NAME                                  | MIDDLE NAME                          |                     |  |  |  |
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|             |                            | SIGNATURE OF INVENTOR 204              |   | DATE                                 |                     |  |  |  |
|             | FULL NAME<br>OF INVENTOR   | LAST NAME                              | FIRST NAME                                  | MIDDLE NAME                          |                     |  |  |  |
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|             |                            | SIGNATURE OF INVENTOR 205              |   | DATE                                 |                     |  |  |  |
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# PATENT APPLICATION SERIAL NO.

# U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE FEE RECORD SHEET

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This collection of information is required by 37 CFR 1.16. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450, DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1460, Alexandria, VA 22313-1450.

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# IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Application of: Olsen et al.

Group Art Unit: To be assigned

Application No.: To Be Assigned

Examiner: To be assigned

Filed: Herewith

Attorney Docket No. 060967-0020-US01

# For: CURRENCY TRADING SYSTEM, METHOD, AND SOFTWARE

## PRELIMINARY AMENDMENT

Commissioner for Patents P. O. Box 1450 Alexandria, VA 22313-1450

Sir:

This preliminary amendment accompanies the above-identified continuation patent

application which is filed simultaneously herewith.

# **IN THE SPECIFICATION:**

Please amend paragraph [0001] to read as follows:

This The present application is a continuation of Application Serial No. 09/858,610 filed May 16, 2001 which claims priority to U.S. provisional application no 60/274,174, filed March 8, 2001, and incorporates the entire contents thereof herein by reference.

## IN THE CLAIMS:

Please amend the claims to read as follows:

1.-12. (Canceled)

13. (Original) A method of trading currency over a computer network, comprising the steps of:

(a) transmitting currency market information over a computer network to an end user;

(b) receiving a currency trade order from said end user, wherein said currency trade order comprises limits within which the currency trade will be acceptable to said end user;

(c) calculating a market exchange rate for said currency trade order; and

(d) executing said order if said market exchange rate is within said limits.

14. (Original) A method as in claim 13, wherein said market information and said trade order are prefaced with http headers.

15. (Original) A method of trading currency over a computer network, comprising the steps of:

(a) transmitting currency market information over a computer network to an end user;

(b) receiving a currency trade order from said end user, wherein said currency trade order comprises a threshold exchange rate;

(c) calculating a market exchange rate for said currency trade order; and

(d) executing said order (1) if said market exchange rate is or becomes above said threshold exchange rate and said order is a sell order, and (2) if said market exchange rate is or becomes below said threshold exchange rate and said order is a buy order.

16. (Original) A method as in claim 15, wherein said market information and said trade order are prefaced with http headers.

17. (Original) A method of trading currency over a computer network, comprising the steps of:

(a) receiving currency market information over a computer network from a trading system server;

(b) transmitting a currency trade order to said trading system server, wherein said currency trade order comprises limits within which the currency trade will be acceptable; and

(c) if a market exchange rate is within said limits, receiving information from said trading system server indicating that said currency trade order has been executed.

18. (Original) A method as in claim 17, wherein said market information and said trade order are prefaced with http headers.

19. (Original) A method of trading currency over a computer network, comprising the steps of:

(a) receiving currency market information over a computer network from a trading system server;

(b) transmitting a currency trade order to said trading system server, wherein said currency trade order comprises a threshold exchange rate; and

(c) if (1) the applicable market exchange rate is or becomes above said threshold exchange rate and said order is a sell order, or (2) the applicable market exchange rate is or becomes below said threshold exchange rate and said order is a buy order, receiving information from said trading system server indicating that said currency trade order has been executed.

20. (Original) A method as in claim 19, wherein said market information and said trade order are prefaced with http headers.

21. (Original) Software for currency trading over a computer network, comprising:

(a) software for receiving data over a computer network from a trading system server;

(b) software for displaying a first graphical user interface display that:

(i) displays continuously updated currency exchange rates in real-time based on data received from said trading system server; and

(ii) displays a plurality of action buttons, including at least one buy/sell button;

(c) software for displaying, in response to a user clicking said buy/sell action button, a buy/sell window display that:

(i) comprises trade order parameter fields; and

(ii) accepts trade order data entered into said fields by a user; and

(d) software for transmitting said trade order data to said trading system server over said computer network.

22. (Original) Software as in claim 21, wherein said trade order parameter fields comprise fields for upper and lower limits on acceptable trade market exchange rates.

23. (Original) Software as in claim 21, wherein said trade order parameter fields comprise a field for a threshold market rate above or below which a trade should be executed.

24. (Original) Software for currency trading over a computer network, comprising:

(a) a database management module;

(b) a transaction server module;

(c) a rate server and pricing engine module; and

(d) a transaction server module.

25. (Original) Software as in claim 24, further comprising a bank interface module.

26. (Original) Software as in claim 24, further comprising a trade manager module.

27. (Original) Software as in claim 24, further comprising a hedging engine module.

28. (Original) Software as in claim 24, further comprising an interest rate manager

module.

29. (Original) Software as in claim 28, wherein said interest rate manager module is operative to calculate, pay out, and collect interest by the second.

30. (Original) Software as in claim 28, wherein said interest rate manager module is operative to calculate, pay out, and collect interest on a tick-by-tick basis.

31. (New) Software as in claim 21, wherein said continuously updated currency exchange rates are displayed via a curve with an upper boundary and a lower boundary for each point in time, wherein a difference between said upper boundary and said lower boundary represents a difference between bid and ask prices for said point in time.

32. (New) Software as in claim 31, wherein mousing over said curve with a mouse cursor causes a sub-area of said display to show precise exchange rate information for a target currency pair, said sub-area corresponding to a time period corresponding to said mouse cursor's position.

33. (New) Software as in claim 31, further comprising software for displaying indicators that graphically indicate points in time at which a user has bought or sold a currency pair.

34. (New) Software as in claim 33, wherein said indicators comprise upward pointing indicators to indicate bought currency pairs and downward pointing indicators to indicate sold currency pairs.

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# **REMARKS**

Applicants request the Examiner to contact the undersigned at 212-309-6632 if there are any questions concerning this amendment.

Date: December 4, 2006

Respectfully submitted,

Francis E. Morris Reg. No. 24,615 Morgan, Lewis & Bockius LLP Customer No. 009629 (212) 309-6632

1-NY/2081601.1

|   |  | 4<br>014                |
|---|--|-------------------------|
| UTILITY 4   | torney Docket No. 060967-0020-US01   |                         |
|   | tal Pages: 57  | <u>ං ල</u><br>ගල        |
|   | rst Named Inventor: Olsen et al.   | 1/2                     |
|   | press Mail No. EV 907 292 767 US   |                         |
| APPLICATION ELEMENTS<br>See MPEP chapter 600 concerning utility patent application contents.  | Mail Stop Patent Applic<br>Commissioner for Patents<br>P.O. Box 1450   |                         |
| 1. E Fee Transmittal Form [Total Pages: 2]  | ADDRESS TO:         Alexandria, VA 22313-1450           7.         CD-ROM or CD-R in duplicate, large  |                         |
| (Submit an original, and a duplicate for fee processing)  | Computer Program (Appendix)  |                         |
| <ul> <li>2. Applicant claims Small Entity status, see 37 C.F.R. § 1.27</li> <li>3. Specification [32 Pages]<br/>(preferred arrangement set forth below)</li> <li>- Descriptive title of the Invention</li> </ul>  | <ul> <li>8. Nucleotide and/or Amino Acid Sequer<br/>(<i>if applicable, all necessary</i>)</li> <li>a. Computer Readable Copy</li> <li>b. Paper Copy (identical to computer</li> <li>c. Statement verifying identity of abo</li> </ul>  | сору)                   |
| - Cross Reference to Related Applications<br>- Statement Regarding Fed sponsored R&D  | ACCOMPANYING APPLICATION   | PARTS                   |
| - Reference to Microfiche Appendix  | 9. Assignment Papers (incl. 2 cover shee   | ts) [ Pages]            |
| - Background of the Invention<br>- Brief Summary of the Invention   | 10. 🛛 37 CFR 3.73(b) Statement 🗆 Powe  | r of Attorney           |
| - Brief Description of the Drawings (if filed)  | (when there is an assignee) [Pages]  |                         |
| <ul> <li>Detailed Description of the Invention (including drawings, if file</li> <li>Claim(s)</li> </ul>  | 11. English Translation Document (if appl  | licable)                |
| - Abstract of the Disclosure  | 12.  Information Disclosure  Copies of the second s | of IDS                  |
| 4. E Drawing(s) (35 USC 113) [14 Pages]   | Citations  |                         |
| 5. 🗵 Oath or Declaration [2 Pages]  | Statement (IDS)/PTO-1449   |                         |
|   | 13. 🗷 Preliminary Amendment [7 pages]  |                         |
| a. Newly executed (original/copy)   | 14. E Return Receipt Postcard (MPEP 503)   |                         |
| b. 🛛 Unexecuted   | (Should be specifically itemized)  |                         |
| c. B Copy from a prior application (37 CFR 1.63(d))<br>for continuation/divisional with Box 18 completed)   | 15. Certified Copy of Priority Document(s (if foreign priority is claimed).  | 5)                      |
| i. DELETION OF INVENTORS(S)<br>Signed statement attached deleting inventor(s) named i   | the 16. □ Nonpublication Request under 35 U.S.   | .C.                     |
| prior application, see 37 CFR 1.63(d)(2) and 1.33 (b).<br>6.  | 17. □ Other:   |                         |
| <ul> <li>18. If a CONTINUING APPLICATION, check appropriate box and suspecification following the title, or in an Application Data Sheet under 37 (</li> <li>Continuation Divisional Continuation-in-part (CIP) of priority to U.S. Provisional Application No. 60/274,174.</li> <li>For CONTINUATION OR DIVISIONAL APPS only; The entire disclosure</li> </ul> | FR 1.76:<br>prior Application No. 09/858,610 filed May 16, 2001 wh<br>ure of the prior application, from which an oath or declar   | ich claims<br>ration is |
| supplied under Box 5b, is considered a part of the disclosure of the accomp<br>by reference. The incorporation <u>can only</u> be relied upon when a portion ha<br>19. CORRESPOND   | been inadvertently omitted from the submitted applicati<br>NCE ADDRESS   |                         |
| E Customer Nun  | ber: 009629  |                         |
| Name (Print/Type) / Francis E. Morris   | Registration No. 24,615  |                         |
| $\sim \sim $   |  |                         |

#### Express Mail No. EV 907 292 767 US Attorney Docket No. 060967-0020-US01

# MORGAN, LEWIS & BOCKIUS LLP COUNSELORS AT LAW

1111 Pennsylvania Avenue, NW Washington, DC 20004 (202) 739-3000

Mail Stop PATENT APPLICATION Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Sir:

The following utility patent application is enclosed for filing:

Applicants(s): Olsen et al. Executed on: Title of Invention: CURRENCY TRADING SYSTEM, METHOD, AND SOFTWARE

|              |             | PAII           | ENT APPLICATION FEE VALU            |                   |            |
|--------------|-------------|----------------|-------------------------------------|-------------------|------------|
| ТҮРЕ         | NO.         | LESS           | EXTRA                               | EXTRA RATE        | FEE        |
|              | FILED       |                |                                     |                   |            |
| Total Claims | 22          | -20            | 2                                   | \$50.00 each      | \$ 100.00  |
| Independent  | 6           | -3             | 3                                   | \$200.00 each     | \$ 600.00  |
|              |             |                | Minimum Fee                         | \$300.00          | \$ 300.00  |
|              |             |                | Search Fee                          | \$500.00          | \$ 500.00  |
|              |             |                | Examination Fee                     | \$200.00          | \$ 200.00  |
| Total Sheets | 46          | -100 sheets    | Each additional set of 50 sheets    | \$250.00 each set | \$ 000.00  |
|              |             | N              | Iultiple Dependency Fee If applical | ble (\$360)       |            |
|              |             |                | Total                               |                   | \$1,700.00 |
| 50% Reductio | n for Indep | endent Invento | r, Nonprofit Organization or Small  | Business Concern  | - \$       |
|              |             |                | Total Filing Fee                    |                   | \$1,700.00 |

#### PATENT APPLICATION FEE VALUE

**DO NOT PUBLISH**. I hereby certify that the invention disclosed in the attached application has not and will not be the subject of an application filed in another country, or under a multilateral agreement, that requires publication at eighteen months after filing. I hereby request that the attached application not be published under 35 U.S.C. 122(b).

Priority of application no. \_\_\_\_\_\_ is claimed under 35 U.S.C. § 119.

The certified copy of the priority application has been filed in application no. filed

Amend the specification by inserting before the first line the following sentence: The present application is a continuation of prior Application No. 09/858,610 filed May 16, 2001 which claims priority to U.S. Provisional Application No. 60/274,174, filed March 8, 2001.

Please charge the required fee to Morgan, Lewis & Bockius LLP Deposit Account No. 50-0310. A copy of this sheet is enclosed.

Date: December 4, 2006

Respectfully submitted

Francis E. Morris, Esq. Registration No. 24,615 MORGAN, LEWIS & BOCKIUS LLP Customer No. 009629 (212) 309-6632

Partner Bank Trading System Servers Participant Participant Participant

Fig. 1

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|           | Open Trades         |                 |        |                               |                     |          |        |        |       |
|-----------|---------------------|-----------------|--------|-------------------------------|---------------------|----------|--------|--------|-------|
| Positions | TICKET              | CURR            | UNITS  | MARGIN                        | S/L T               | /P P     | RICE   | MARKET | PROFI |
| Trades    | <b>9</b> 142        | EUR/USD         | 3500   | 226.78                        |                     |          | 1.2960 | 1.2946 | -0.00 |
| Orders    |                     |                 |        |                               |                     |          |        |        |       |
| History   |                     |                 |        |                               |                     |          |        |        |       |
| News      |                     |                 |        | · · · · • · · · · · · · · · · | ·                   |          |        |        |       |
|           | Account Sun         |                 |        | /CAD - Dec 24                 | , 1999 -            |          |        |        |       |
| (1) Chat  | Balance             | 99,70           | 1 -    | 107                           |                     | T        |        |        |       |
| (D) Halo  | Total Profits       | -               |        | 47.16 / 48                    |                     |          |        |        | 1.47  |
|           | Margin Used         |                 | 28.78  |                               |                     | 1        |        |        |       |
| Buy/Sell  | Margin Availab      | le 99,74        | 52.67  |                               |                     |          |        |        | 1.47  |
|           | <b>Current</b> Rate | S               |        | ነለ -                          |                     |          |        |        |       |
|           | EUR/USD             | 1.2946          | 3/48   | ᢞᢧᢔ                           | _                   |          | -      |        | 1.47  |
|           | GEP/USD             | 1.844           | 9/51   |                               | veliter +           | 4-674    | ᠴᢧᡘᡰ   | -      | 1.4   |
|           | USD/JPY             | 104.3           | 5/37   |                               | $\sim 0$ $\sim - 1$ |          |        | -t     | "."   |
|           | USD/CHF             | + 1.5214        | 1/18   |                               | 1                   |          |        |        | 1.4   |
|           | USD/CAD             | ♦ 1.4714        | 1/16   |                               |                     |          |        |        | 1.4   |
|           | EUR/GBP             | 0,7866          | 9/71   |                               |                     |          |        |        | 1.4   |
|           | EUR/JPY             | 135.09          | 9/14   |                               |                     |          |        |        |       |
| 3         | GBP/JPY             | 171.65          | 5/70 L | 40.55                         | 44.00               |          |        |        |       |
|           | EUR/CHF             | + 1.9897        | 7/03   | 13:65                         | 14:00 14:           | ບວ 1     | 4:10   | 14 15  | 1     |
| 4         | EUR/CAD             | <b>♦</b> 1.9050 |        | stency                        | -                   | Interval |        |        |       |

Fig. 2

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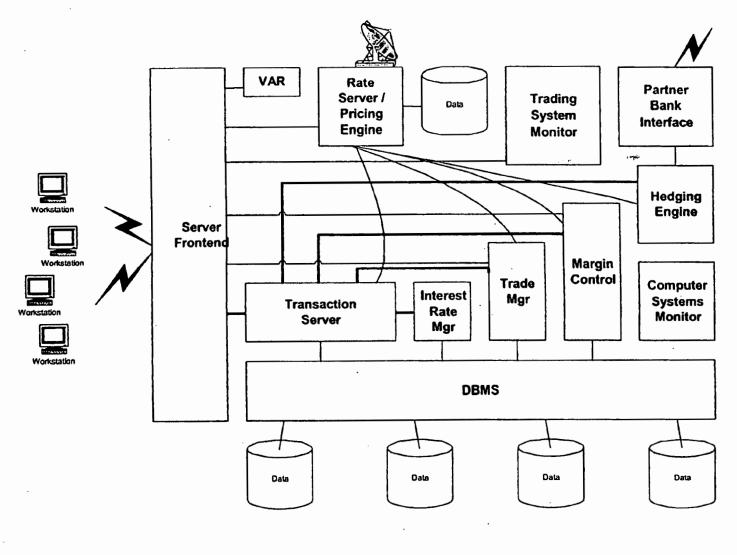


Fig. 3

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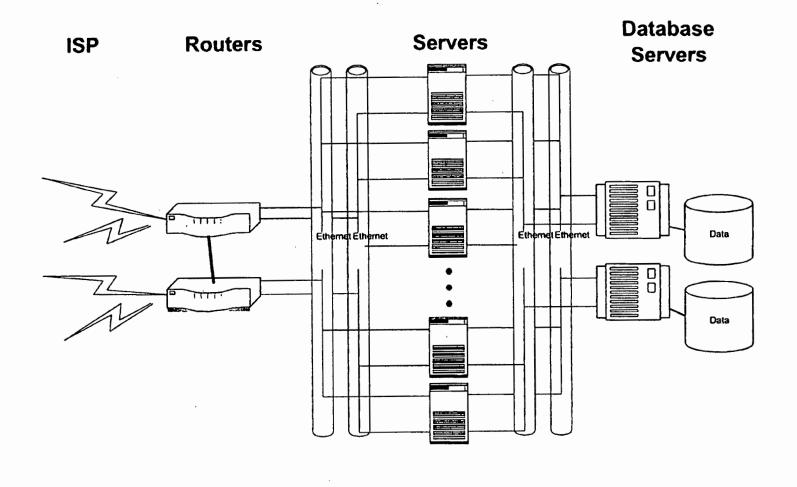


Fig. 4

| Connection E | dit www        | Help   |          |            |                                       |              |                      |      |
|--------------|----------------|--|----------|------------|---------------------------------------|--------------|----------------------|------|
|              | OPEN TRA       | DEE  |          |            |                                       |              |                      | [    |
| Buy/Sell     | TICKET         | CURR   | UNITS    | S/L        | T/P                                   | PRICE        | MARKET               | PRO  |
|              | 8 33705        | GBP/USD  | 100000   | 1.4451     | 1.4517                                | 1.4486       | 1.4484               | -0.  |
| Positions    | B 33704        | EUR/USD  | 10000    | 0.8657     | 0.8710                                | 0.8684       | 0.8682               | -0.0 |
| Trades       |                |  |          |            |                                       | · · · ·      |                      |      |
| Orders       | ACCOUNT        | BUMMARY  | E        | UR/USO -   | Oar 9, 20                             | . 000        |                      | [    |
|              | Balance        | 100  | .000.00  | 113:00     | 14:00                                 | 15;00        | 118:00               | 117  |
| History      | Total Profits  |  | -22.00   |            |                                       |              |                      | 0.8  |
| History      | Margin Used    | and the second sec | ,676.10  |            |                                       |              |                      |      |
| 2            | Margin Availab |  | ,301.90  |            |                                       |              | -Ai F                | .e   |
| Analysis     | CURRENT F      | <b>EATEB</b>   |          | wapage.    | UL A                                  | Thus Act the | <b>∃4 4 4 - ₽</b> ₽. | HA.  |
|              | EUR/USD        | 0.80   | 82 / 84  | , P        | <sup>୲୶</sup> "ୄ <sub>୴</sub> ୷୵୲ୢୄ୳⊭ |              |                      | 0.8  |
| News         | GBP/USD        | 1.44   | 84/86    | AN         |                                       |              |                      |      |
|              | USD/JPY        | 108  | 80 / 83  | ₩-¥-0.     |                                       |              |                      | 0.8  |
| 53           | USD/CHF        | 1.75   | 511 / 15 |            |                                       |              |                      |      |
| Forums       | USD/CAD        |  | 32/38    |            |                                       |              |                      | 0.8  |
|              | EUR/GBP        |  | 02/04    | -          |                                       |              |                      |      |
|              | EUR/JPY        | 94.4   | 180 / 99 | Currency E | UR/USD ·                              | 🕶 Interval   | 1 min                |      |

#### ACCOUNT SUMMARY

| Balance          |  |  |  |  |  |
|------------------|--|--|--|--|--|
| Total Profits    |  |  |  |  |  |
| Margin Used      |  |  |  |  |  |
| Margin Available |  |  |  |  |  |

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| 100,000.00 |
|------------|
| -22.00     |
| 7,676.10   |
| 92,301.90  |

Fig. 6

|   | TICKET | CURR    | UNITS  | SAL    | T/P    | PRICE  | MARKET | PROFIT  |
|---|--------|---------|--------|--------|--------|--------|--------|---------|
| S | 33760  | USD/CHF | 100000 |        |        | 1.7415 | 1.7413 | 0.0002  |
| S | 33759  | EUR/USD | 65000  | 0.8715 | 0.8668 | 0.8689 | 0.8692 | -0.0003 |

| 0.000  | 1.7407 | 1.7415 | 100000 | USD/CHF | 5 |
|--------|--------|--------|--------|---------|---|
| -0.000 | 0.8697 | 0.8689 | 65000  | EUR/USD | 6 |
| _      | 0.8697 | 0.8689 | 65000  | EUR/USD | s |

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| OPEN ORDERS |       |         |        |        |        |        |        |           |  |
|-------------|-------|---------|--------|--------|--------|--------|--------|-----------|--|
|             | ORDER | CURR    | UNITS  | S/L    | T/P    | PRICE  | MARKET | DURATION  |  |
| Ð           | 245   | EUR/JPY | 200000 | 93.203 | 93.789 | 93.512 | 93.509 | Undefined |  |
| -           |       | EUNJFI  | 200000 | 93.203 | 83.768 | 83.512 | 83.308 | Undefine  |  |
|             |       |         |        |        |        |        |        |           |  |
|             |       |         |        |        |        |        |        |           |  |
|             |       |         |        |        |        |        |        |           |  |
|             |       |         |        |        |        |        |        |           |  |
|             |       |         |        |        |        |        |        |           |  |

Fig. 9

,

| RECENT HISTOR | ×           |         |        |        | -                   |
|---------------|-------------|---------|--------|--------|---------------------|
| TRANSACTION   | TYPE        | CURR    | UNITS  | PRICE  | DATE/TIME           |
| 56958         | Buy Market  | EUR/USD | 10000  | 0.8684 | Oct 9, 2000, 16:42  |
| 56959         | Buy Market  | GBP/USD | 100000 | 1.4486 | Oct 9, 2000, 18:43  |
| 57001         | Take Profit | GBP/USD | 100000 | 1.4804 | Oct 11, 2000, 12:38 |
| 57021         | Buy Market  | EUR/USD | 25000  | 0.8688 | Oct 11, 2000, 15:04 |
| 57022         | Sell Market | EUR/USD | 25000  | 0.8689 | Oct 11, 2000, 15:07 |

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# Fig. 10

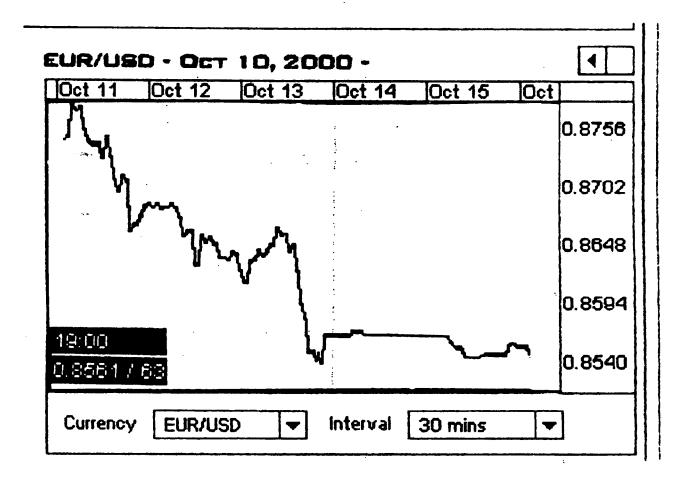
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| CURRENT RATE |             |
|--------------|-------------|
| EUR/USD      | 0.8545 / 46 |
| GBP/USD      | 1.4515 / 18 |
| USD/JPY      | 107.66 / 68 |
| USD/CHF      | 1.7663 / 67 |
| USD/CAD      | 1.5070 / 74 |
| EUR/GBP      | 0.5890/92   |
| EUR/JPY      | 92.230 / 49 |



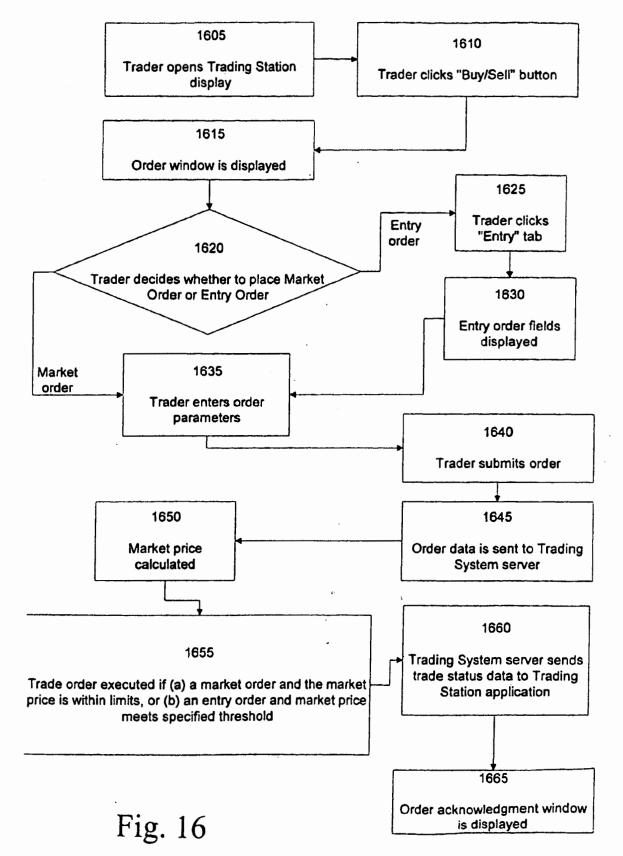
| - R Market   | Drder              |         | _ 🗆 X  |
|--------------|--------------------|---------|--------|
| FOREX        | CHANGE             |         |        |
|              | MARKET             | ENTRY   | $\sum$ |
|              | ACTION             | BUY     |        |
|              | CURRENCY           | EUR/USD |        |
|              | UNITS              | 10000   | []     |
|              | RATE               | 0.8546  |        |
|              | 🔽 Lower Limit      | 0.8533  | +      |
|              | Vpper Limit        | 0.8558  | ± -    |
|              | <b>₩</b> Stop Loss | 0.8520  |        |
|              | Take Profit        |         | ╧╧╧╡   |
|              | You are buying E   | UR      |        |
|              | and selling USD    |         |        |
|              | [                  | Submit  | Cancel |
| Warning: App | let Window         |         |        |

ł

| Market Or   | der  | ×  |
|-------------|--|----|
|             | <b>INFO</b><br>Server accepted market order.<br>Ticket number: O |    |
|             |  | ОК |
| Warning: Ap | oplet Window   |    |

•

| - CEntry Or  | der              |               |
|--------------|------------------|---------------|
| FOREX        | CHANGE           |               |
|              | MARKET           | ENTRY         |
|              | ACTION           | BUY -         |
|              | CURRENCY         | EUR/USD -     |
|              | UNITS            | 100           |
|              | RATE             | 0.8546 + .    |
|              | Duration         | Today 🚽       |
|              | Stop Loss        | 0.8520 + -    |
|              | Take Profit      | 0.8571 + .    |
|              | You are buying f | EUR           |
|              | and selling USD  |               |
|              |                  |               |
|              |                  | Submit Cancel |
| Warning: App | let Window       |               |



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|  | FOR   | N   | UMBER FIL            | ED NUM                                      | IBER EXTRA                                  |        | RATE (\$)             | FEE (\$)                   |  | RATE (\$)             | FEE (\$)               |
|  | BASIC FEE<br>(37 CFR 1.16(a), (b), c                            | or (c))                                   | N/A                  |   | N/A   |        | N/A                   |                            |  | N/A                   |                        |
|  | SEARCH FEE<br>(37 CFR 1.16(k), (i), c                           | or (m))                                   | N/A                  |   | N/A   |        | N/A                   |                            |  | N/A                   |                        |
|  | EXAMINATION FE<br>(37 CFR 1.16(o), (p), o                       |   | N/A                  |   | N/A   |        | N/A                   |                            |  | N/A                   |                        |
|  | TAL CLAIMS<br>CFR 1.16(i))                                      |   | min                  | us 20 = *                                   |   |        | X \$ =                |                            | OR   | X \$ =                |                        |
| INDEPENDENT CLAIMS<br>(37 CFR 1.16(h)) minus 3 = *   |   |   |                      |   |   | X \$ = |                       |                            | X \$ =   |                       |                        |
| APPLICATION SIZE FEE<br>(37 CFR 1.16(s)) If the specification and drawings exceed 100<br>sheets of paper, the application size fee due<br>is \$250 (\$125 for small entity) for each<br>additional 50 sheets or fraction thereof. See<br>35 U.S.C. 41(a)(1)(G) and 37 CFR 1.16(s). |   |   |                      |   |   |        |                       |                            |  |                       |                        |
|  | MULTIPLE DEPENDENT CLAIM PRESENT (37 CFR 1.16(j))               |   |                      |   |   |        |                       |                            |  |                       |                        |
| * If the difference in column 1 is less than zero, enter "0" in column 2. TOTAL  |   |   |                      |   |   |        |                       |                            |  | TOTAL                 |                        |
|  | APPI  | LICATION AS<br>(Column 1)                 | AMEND                | ED - PART II<br>(Column 2)                  | (Column 3)                                  |        | SMAL                  | L ENTITY                   | OR   |                       | ER THAN<br>LL ENTITY   |
| AMENDMENT  | 12/04/2006  | CLAIMS<br>REMAINING<br>AFTER<br>AMENDMENT |                      | HIGHEST<br>NUMBER<br>PREVIOUSLY<br>PAID FOR | PRESENT<br>EXTRA                            |        | RATE (\$)             | ADDITIONAL<br>FEE (\$)     |  | RATE (\$)             | ADDITIONAL<br>FEE (\$) |
| OME  | Total (37 CFR<br>1.16(i))                                       | * 22                                      | Minus                | ** 22                                       | = 0   |        | X \$ =                |                            | OR   | X \$50=               | 0                      |
| IN I   | Independent<br>(37 CFR 1.16(h))                                 | * 6                                       | Minus                | ***6  | = 0   |        | X \$ =                |                            | OR   | X \$200=              | 0                      |
| AMI  | Application Si  | ze Fee (37 CFR 1                          | .16(s))              |   |   |        |                       |                            |  |                       |                        |
|  | FIRST PRESEN  | ITATION OF MULTI                          | PLE DEPEN            | DENT CLAIM (37 CFF                          | R 1.16(j))                                  |        |                       |                            | OR   |                       |                        |
|  |   |   |                      |   |   | • •    | TOTAL<br>ADD'L<br>FEE |                            | OR   | TOTAL<br>ADD'L<br>FEE | 0                      |
|  |   | (Column 1)                                |                      | (Column 2)                                  | (Column 3)                                  |        |                       |                            |  |                       |                        |
| L_   |   | CLAIMS<br>REMAINING<br>AFTER<br>AMENDMENT |                      | HIGHEST<br>NUMBER<br>PREVIOUSLY<br>PAID FOR | PRESENT<br>EXTRA                            |        | RATE (\$)             | additional<br>Fee (\$)     |  | RATE (\$)             | ADDITIONAL<br>FEE (\$) |
| Ľ  | Total (37 CFR<br>1.16(i))                                       | *   | Minus                | **  | =   |        | X \$ =                |                            | OR   | X \$ =                |                        |
| DM   | Independent<br>(37 CFR 1.16(h))                                 | *   | Minus                | ***   | =   |        | X \$ =                |                            | OR   | X \$ =                |                        |
| AMENDMENT  | Application Si  | ze Fee (37 CFR 1                          | .16(s))              |   |   |        |                       |                            |  |                       |                        |
| AM   | FIRST PRESEN  | ITATION OF MULTI                          | PLE DEPEN            | DENT CLAIM (37 CFF                          | R 1.16(j))                                  |        |                       |                            | OR   |                       |                        |
| * 15 1   | ho ontry in column  | t is loss than th-                        | antry in act         | umn 2 weite "0" :                           | column 2                                    |        | TOTAL<br>ADD'L<br>FEE |                            | OR   | total<br>Add'l<br>Fee |                        |
| ** lf<br>*** li  | he entry in column<br>the "Highest Numbe<br>f the "Highest Numb | er Previously Paid<br>er Previously Pai   | For" IN TH           | IIS SPACE is less<br>HIS SPACE is less      | than 20, enter "20"<br>s than 3, enter "3". |        | DONNA                 | nstrument Ex<br>D. SMALLS- | LOGA   |                       |                        |
|  | "Highest Number P<br>collection of informat                     | -   |                      |   | -   |        |                       | •                          |  | to file (and b        | v the LISPTO to        |

process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.16. The information is required to obtain of retain a benefit by the public which is to the quite by the quite by the public which is to the quite by the q

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|--|---|---|---------------------|---|---------------------|------|--|------------------------|----------|-----------------------|---------------------------------------|--|
| PATENT APPLICATION FEE DETERMINATION RECORD<br>Substitute for Form PTO-875   |   |   |                     |   |                     |      | Application or Docket Number<br>11/634,014 |                        |          | ing Date<br>)4/2006   | To be Mailed                          |  |
| APPLICATION AS FILED – PART I<br>(Column 1) (Column 2)   |   |   |                     |   |                     |      | OTHER THAN                                 |                        |          |                       |                                       |  |
| FOR  |   |   | NUMBER FIL          | ED NU                                       | NUMBER EXTRA        |      | RATE (\$)                                  | FEE (\$)               |          | RATE (\$)             | FEE (\$)                              |  |
| BASIC FEE<br>(37 CFR 1.16(a), (b), or (c))   |   |   | , <del>11/4</del> - |   | N/A                 |      |  | 150                    |          | <del>N/Ar</del>       | 300                                   |  |
|  | SEARCH FEE<br>(37 CFR 1.16(k), (),  | or (m))                                 | - <del>N/A</del> -> |   | _N/A                |      | ,N/A=                                      | 250                    |          | -N#47                 | 500                                   |  |
|  | EXAMINATION FE<br>(37 CFR 1.16(o), (p),                                   |   |                     | ~   |                     |      | N <del>/A-</del>                           | 100                    |          | ₩ <b>A</b>            | 200                                   |  |
| TOTAL CLAIMS<br>(37 CFR 1.16(i))   |   |   | 27 min              | us 20 =   •                                 | · 2                 |      | × \$25=                                    | L                      | OR       | ×\$50=                | 100                                   |  |
| INDEPENDENT CLAIMS<br>(37 CFR 1.16(h))   |   |   | 🖉 minus 3 =         |   | · 3                 |      | × \$/00=                                   |                        |          | × \$780=              | 600                                   |  |
| APPLICATION SIZE FEE<br>(37 CFR 1.16(s)) If the specification and drawings exceed 100<br>sheets of paper, the application size fee due<br>is \$250 (\$125 for small entity) for each<br>additional 50 sheets or fraction thereof. See<br>35 U.S.C. 41(a)(1)(G) and 37 CFR 1.16(s). |   |   |                     |   |                     |      |  |                        |          |                       |                                       |  |
|  | MULTIPLE DEPENDENT CLAIM PRESENT (37 CFR 1.16(j))                         |   |                     |   |                     |      | 180  |                        |          | 360                   |                                       |  |
| • If t   | * If the difference in column 1 is less than zero, enter "0" in column 2. |   |                     |   |                     |      | TOTAL                                      |                        |          | TOTAL                 | 1700                                  |  |
|  |   | (Column 1<br>CLAIMS<br>REMAINING        |                     | (Column 2)<br>HIGHEST<br>NUMBER             | ST                  |      |  |                        | OR       | SMA                   | ER THAN                               |  |
| AMENDMENT  | 12/04/2006  | AFTER<br>AMENDMEN                       |                     | PREVIOUSLY<br>PAID FOR                      | EXTRA               |      | RATE (\$)                                  | FEE (\$)               |          | RATE (\$)             | FEE (\$)                              |  |
| δ  | Total (37 CFR<br>1.16(i))   | · 22                                    | Minus               | <b>⊷</b> 22                                 | = 0                 |      | × \$%5=                                    |                        | OR       | X \$50=               | 0                                     |  |
| Ш  | (37 CFR 1.16(h))  | • 6                                     | Minus               | ***6  | = 0                 |      | × \$100=                                   |                        | OR       | X \$200=              | 0 -                                   |  |
| A  | Application Size Fee (37 CFR 1.16(s))                                     |   |                     |   |                     |      |  |                        |          |                       |                                       |  |
|  | FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))           |   |                     |   |                     |      | 180  |                        | OR       | 360                   |                                       |  |
|  |   |   |                     |   |                     | -    | TOTAL<br>ADD'L<br>FEE                      |                        | OR       | total<br>Add'l<br>Fee | 0                                     |  |
|  |   | (Column 1                               | )                   | (Column 2)                                  | (Column 3)          |      |  |                        | -        | •                     |                                       |  |
| ٢  |   | CLAIMS<br>REMAININ<br>AFTER<br>AMENDMEN |                     | HIGHEST<br>NUMBER<br>PREVIOUSLY<br>PAID FOR | PRESENT<br>EXTRA    |      | RATE (\$)                                  | ADDITIONAL<br>FEE (\$) |          | RATE (\$)             | ADDITIONAL<br>FEE (\$)                |  |
| Ľ  | Total (37 CFR<br>1.16())  | •                                       | Minus               | #1  | =                   |      | × \$25;=                                   |                        | OR       | ×\$50=                |                                       |  |
| AMENDMEN   | Independent<br>(37 CFR 1.16(h))   | *                                       | Minus               | <b>\$</b> 84                                | =                   |      | ×\$100F                                    |                        | OR       | ×\$00)=               |                                       |  |
| EN I   | Application Size Fee (37 CFR 1.16(s))                                     |   |                     |   |                     |      |  |                        |          |                       |                                       |  |
| A  | FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.18(j))           |   |                     |   |                     |      | 180  |                        | OR       | 360                   |                                       |  |
|  |   |   |                     |   |                     |      | total<br>Add'l<br>Fee                      |                        | OR       | TOTAL<br>ADD'L<br>FEE |                                       |  |
| •• If  | the entry in column<br>the "Highest Numb<br>f the "Highest Num!           | er Previously P                         | aid For" IN TH      | IIS SPACE is less                           | than 20, enter *20  |      | Legal li                                   | nstrument Ex           |          | er:                   |                                       |  |
| The  | "Highest Number F   | reviously Paid                          | For" (Total or      | Independent) is th                          | e highest number    | foun |  | •                      |          |                       |                                       |  |
| This c   | collection of informa   | tion is required                        | by 37 CFR 1.        | 16. The informatio                          | n is required to ob | tain | or retain a bei                            | efit by the public     | which is | to file (and b        | y the USPTO to<br>including gathering |  |

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preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, Alexandria, VA 22313-1450, If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.