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APPLICATION NO.	ISSUE DATE	PATENT NO.	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/800,295	08/24/2010	7783556	04-225	8245

39310 7590 08/04/2010  
MBHB/TRADING TECHNOLOGIES  
300 SOUTH WACKER DRIVE  
SUITE 3200  
CHICAGO, IL 60606

**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 1131 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):

Scott F. Singer, Lake Bluff, IL;  
Michael J. Burns, Chicago, IL;  
Fred Monroe, Silver Springs, MD;



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Bib Data Sheet

CONFIRMATION NO. 8245

Table with 5 columns: SERIAL NUMBER (10/800,295), FILING OR 371(c) DATE (03/12/2004), CLASS (705), GROUP ART UNIT (3695), ATTORNEY DOCKET NO. (04-225)

APPLICANTS
Scott F. Singer, Lake Bluff, IL;
Michael J. Burns, Chicago, IL;
Fred Monroe, Silver Springs, MD;
\*\* CONTINUING DATA \*\*\*\*\*
\*\* FOREIGN APPLICATIONS \*\*\*\*\*
IF REQUIRED, FOREIGN FILING LICENSE GRANTED
\*\* 05/28/2004

Table with 5 columns: Foreign Priority claimed, 35 USC 119 (a-d) conditions met, STATE OR COUNTRY (IL), SHEETS DRAWING (10), TOTAL CLAIMS (27), INDEPENDENT CLAIMS (2)

ADDRESS
39310

TITLE
SYSTEM AND METHOD FOR DISPLAYING ORDER INFORMATION IN RELATION TO A DERIVATIVE OF PRICE

Table with 2 columns: FILING FEE RECEIVED (448), FEES: Authority has been given in Paper No. \_\_\_\_\_ to charge/credit DEPOSIT ACCOUNT No. \_\_\_\_\_ for following: (List of fee options: All Fees, 1.16 Fees ( Filing ), 1.17 Fees ( Processing Ext. of time ), 1.18 Fees ( Issue ), Other, Credit)

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

**Complete and send this form, together with applicable fee(s), to: Mail Mail Stop ISSUE FEE  
 Commissioner for Patents  
 P.O. Box 1450  
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**INSTRUCTIONS:** This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 5 should be completed where appropriate. All further correspondence including the Patent, advance orders and notification of maintenance fees will be mailed to the current correspondence address as indicated unless corrected below or directed otherwise in Block 1, by (a) specifying a new correspondence address; and/or (b) indicating a separate "FEE ADDRESS" for maintenance fee notifications.

CURRENT CORRESPONDENCE ADDRESS (Note: Use Block 1 for any change of address)

MBHB/Trading Technologies  
 300 South Wacker Drive  
 Suite 3200  
 Chicago, IL 60606

Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission.

**Certificate of Mailing or Transmission**

I hereby certify that this Fee(s) Transmittal is being deposited with the United States Postal Service with sufficient postage for first class mail in an envelope addressed to the Mail Stop ISSUE FEE address above, or being facsimile transmitted to the USPTO (571) 273-2885, on the date indicated below.

_____ (Depositor's name)
_____ (Signature)
_____ (Date)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/800,295	03/12/2004	Scott F. Singer	04-225	8245

TITLE OF INVENTION:

APPLN. TYPE	SMALL ENTITY	ISSUE FEE	PUBLICATION FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1510	\$0	\$1510	07/16/2010

EXAMINER	ART UNIT	CLASS-SUBCLASS

1. Change of correspondence address or indication of "Fee Address" (37 CFR 1.363).  
 Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached.  
 "Fee Address" indication (or "Fee Address" Indication form PTO/SB/47; Rev 03-02 or more recent) attached. **Use of a Customer Number is required.**

2. For printing on the patent front page, list  
 (1) the names of up to 3 registered patent attorneys or agents OR, alternatively,  
 (2) the name of a single firm (having as a member a registered attorney or agent) and the names of up to 2 registered patent attorneys or agents. If no name is listed, no name will be printed.

- 1.    McDonnell Boehnen
- 2.    Hulbert & Berghoff LLP
- 3.    \_\_\_\_\_

3. ASSIGNEE NAME AND RESIDENCE DATA TO BE PRINTED ON THE PATENT (print or type)  
 PLEASE NOTE: Unless an assignee is identified below, no assignee data will appear on the patent. If an assignee is identified below, the document has been filed for recordation as set forth in 37 CFR 3.11. Completion of this form is NOT a substitute for filing an assignment.

(A) NAME OF ASSIGNEE: **Trading Technologies International, Inc.**  
 (B) RESIDENCE: (CITY and STATE OR COUNTRY) **Chicago, IL**

Please check the appropriate assignee category or categories (will not be printed on the patent):  Individual  Corporation or other private group entity  Government

4a. The following fee(s) are enclosed:  
 Issue Fee  
 Publication Fee (No small entity discount permitted)  
 Advance Order - # of Copies   

4b. Payment of Fee(s):  
 A check in the amount of the fee(s) is enclosed.  
 Payment by credit card. Form PTO-2038 is attached.  
 The Director is hereby authorized by charge the required fee(s), or credit any overpayment, to Deposit Account Number **132490**

5. Change in Entity Status (from status indicated above)  
 a. Applicant claims SMALL ENTITY status. See 37 CFR 1.27.  b. Applicant is no longer claiming SMALL ENTITY status. See 37 CFR 1.27(g)(2).

The Director of the USPTO is requested to apply the Issue Fee and Publication Fee (if any) or to re-apply any previously paid issue fee to the application identified above.  
 NOTE: The Issue Fee and Publication Fee (if required) will not be accepted from anyone other than the applicant; a registered attorney or agent; or the assignee or other party in interest as shown by the records of the United States Patent and Trademark Office.

Authorized Signature /Thomas J. Loos/ Date **July 8, 2010**  
 Typed or printed name **Thomas J. Loos** Registration No. **60,161**

This collection of information is required by 37 CFR 1.311. 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, 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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## Privacy Act Statement

**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.

The information provided by you in this form will be subject to the following routine uses:

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.



**PATENT**

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**  
**(Case No. 04-225)**

In re Application of:	)	
	)	
Scott F. Singer et al.	)	Group Art Unit: 3695
	)	
Serial No.: 10/800,295	)	Confirmation No.: 8245
	)	
Filed: March 12, 2004	)	Examiner: Liu, Chia-Yi
	)	

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

**NOTICE OF CHANGE OF STATUS TO LARGE ENTITY**  
**(37 C.F.R. § 1.27(g)(2))**

Dear Sir:

Notice is hereby given under 37 C.F.R. § 1.27(g)(2) that small entity status is no longer claimed by the applicant.

Respectfully submitted,

Date: July 8, 2010

By: /Thomas J. Loos/  
Thomas J. Loos  
Registration No. 60,161

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE  
(MBHB Case No. 04-225)**

In re Application of:	)	
	)	
Scott F. Singer et al.	)	Group Art Unit: 3695
	)	
Serial No.: 10/800,295	)	Confirmation No.: 8245
	)	
Filed: March 12, 2004	)	Examiner: Liu, Chia-Yi
	)	

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

**COMMENTS ON STATEMENT OF REASONS FOR ALLOWANCE**

Applicant thanks Examiner Liu for the thorough examination and for recognizing the allowability of the subject matter of the claims. Applicant respectfully submits that the characterization of the invention of the claims in the Examiner's Statements for Reasons for Allowance in the Notices of Allowance mailed January 6, 2010 and April 16, 2010 may not take into account the entirety of the features of the invention reflected in the claims, the specification, and the prosecution history of the application. To that end, Applicant points out that the claims, specification, and prosecution history in their entirety provide an adequate basis for allowability.

Applicant also notes that there may be additional reasons for allowance that have not been specifically stated. Applicant respectfully submits that, notwithstanding the Examiner's Statements of Reasons for Allowance, each of the allowed claims is patentable in its own right, for other reasons raised during prosecution and/or explained in the application.

To the extent that specific parts of the examiner's statement of reasons for allowance may pertain to features appearing in some but not all claims, Applicant respectfully submits that the Examiner has thoroughly examined the claims, recognized the features appearing or not appearing in each of the claims, and properly found each of the claims to be allowable. To the extent that the Examiner has paraphrased claim features, Applicant respectfully submits that the claims have been construed in view of their language in light of the specification and not limited by any of the Examiner's statements or by the recitation therein of any specific claim features.

Further, the statement of reasons for allowance includes statements regarding the disclosure of certain pieces of art. While Applicant does not necessarily agree with these characterizations of what is disclosed by the art, Applicant agrees with Examiner that the application is allowable over the disclosure of the cited art.

Respectfully submitted,

Dated: July 8, 2010

By: /Thomas J. Loos/  
Thomas J. Loos  
Reg. No. 60,161

## Electronic Patent Application Fee Transmittal

<b>Application Number:</b>	10800295				
<b>Filing Date:</b>	12-Mar-2004				
<b>Title of Invention:</b>	SYSTEM AND METHOD FOR DISPLAYING ORDER INFORMATION IN RELATION TO A DERIVATIVE OF PRICE				
<b>First Named Inventor/Applicant Name:</b>	Scott F. Singer				
<b>Filer:</b>	Thomas J. Loos				
<b>Attorney Docket Number:</b>	04-225				
Filed as Large Entity					
<b>Utility under 35 USC 111(a) Filing Fees</b>					
<b>Description</b>	<b>Fee Code</b>	<b>Quantity</b>	<b>Amount</b>	<b>Sub-Total in USD(\$)</b>	
<b>Basic Filing:</b>					
<b>Pages:</b>					
<b>Claims:</b>					
<b>Miscellaneous-Filing:</b>					
<b>Petition:</b>					
<b>Patent-Appeals-and-Interference:</b>					
<b>Post-Allowance-and-Post-Issuance:</b>					
Utility Appl issue fee	1501	1	1510	1510	
<b>Extension-of-Time:</b>					

Description	Fee Code	Quantity	Amount	Sub-Total in USD(\$)
<b>Miscellaneous:</b>				
<b>Total in USD (\$)</b>				<b>1510</b>

## Electronic Acknowledgement Receipt

<b>EFS ID:</b>	7976164
<b>Application Number:</b>	10800295
<b>International Application Number:</b>	
<b>Confirmation Number:</b>	8245
<b>Title of Invention:</b>	SYSTEM AND METHOD FOR DISPLAYING ORDER INFORMATION IN RELATION TO A DERIVATIVE OF PRICE
<b>First Named Inventor/Applicant Name:</b>	Scott F. Singer
<b>Customer Number:</b>	39310
<b>Filer:</b>	Thomas J. Loos
<b>Filer Authorized By:</b>	
<b>Attorney Docket Number:</b>	04-225
<b>Receipt Date:</b>	08-JUL-2010
<b>Filing Date:</b>	12-MAR-2004
<b>Time Stamp:</b>	14:52:23
<b>Application Type:</b>	Utility under 35 USC 111(a)

### Payment information:

Submitted with Payment	yes
Payment Type	Deposit Account
Payment was successfully received in RAM	\$1510
RAM confirmation Number	1045
Deposit Account	132490
Authorized User	

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**File Listing:**

Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1	Issue Fee Payment (PTO-85B)	04-225_IssueFee_070810.pdf	260086 6e60dd726bfb0e28a48723c41f3942a95835a22	no	2
<b>Warnings:</b>					
<b>Information:</b>					
2	Miscellaneous Incoming Letter	04-225_change_of_entity_status_070810.pdf	72661 6ff2d60643746d77385209b001161244e30b6945	no	1
<b>Warnings:</b>					
<b>Information:</b>					
3	Miscellaneous Incoming Letter	04-225_Comments_on_Reasons_for_Allowance.pdf	75960 6cf997ca68558df68a21f6169c37a602ab56ede0	no	2
<b>Warnings:</b>					
<b>Information:</b>					
4	Fee Worksheet (PTO-875)	fee-info.pdf	30034 a2180dbc5e78ff953e79f26bc430b9b14e278972	no	2
<b>Warnings:</b>					
<b>Information:</b>					
<b>Total Files Size (in bytes):</b>			438741		

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**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**

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NOTICE OF ALLOWANCE AND FEE(S) DUE

39310 7590 04/16/2010

MBHB/TRADING TECHNOLOGIES
300 SOUTH WACKER DRIVE
SUITE 3200
CHICAGO, IL 60606

EXAMINER
LIU, CHIA-YI
ART UNIT PAPER NUMBER
3695
DATE MAILED: 04/16/2010

Table with 5 columns: APPLICATION NO., FILING DATE, FIRST NAMED INVENTOR, ATTORNEY DOCKET NO., CONFIRMATION NO.

10/800,295 03/12/2004 Scott F. Singer 04-225 8245

TITLE OF INVENTION: SYSTEM AND METHOD FOR DISPLAYING ORDER INFORMATION IN RELATION TO A DERIVATIVE OF PRICE

Table with 7 columns: APPLN. TYPE, SMALL ENTITY, ISSUE FEE DUE, PUBLICATION FEE DUE, PREV. PAID ISSUE FEE, TOTAL FEE(S) DUE, DATE DUE

nonprovisional YES \$755 \$0 \$0 \$755 07/16/2010

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. 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 THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. 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:

- A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.
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

If the SMALL ENTITY is shown as NO:

- A. Pay TOTAL FEE(S) DUE 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.



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

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 or Fax (571)-273-2885**

**INSTRUCTIONS:** This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 5 should be completed where appropriate. All further correspondence including the Patent, advance orders and notification of maintenance fees will be mailed to the current correspondence address as indicated unless corrected below or directed otherwise in Block 1, by (a) specifying a new correspondence address; and/or (b) indicating a separate "FEE ADDRESS" for maintenance fee notifications.

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39310                      7590                      04/16/2010

**MBHB/TRADING TECHNOLOGIES**  
**300 SOUTH WACKER DRIVE**  
**SUITE 3200**  
**CHICAGO, IL 60606**

Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission.

**Certificate of Mailing or Transmission**

I hereby certify that this Fee(s) Transmittal is being deposited with the United States Postal Service with sufficient postage for first class mail in an envelope addressed to the Mail Stop ISSUE FEE address above, or being facsimile transmitted to the USPTO (571) 273-2885, on the date indicated below.

(Depositor's name)
(Signature)
(Date)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/800,295                      03/12/2004                      Scott F. Singer                      04-225                      8245

TITLE OF INVENTION: SYSTEM AND METHOD FOR DISPLAYING ORDER INFORMATION IN RELATION TO A DERIVATIVE OF PRICE

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
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nonprovisional                      YES                      \$755                      \$0                      \$0                      \$755                      07/16/2010

EXAMINER	ART UNIT	CLASS-SUBCLASS
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LIU, CHIA-YI                      3695                      705-037000

1. Change of correspondence address or indication of "Fee Address" (37 CFR 1.363). <input type="checkbox"/> Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached. <input type="checkbox"/> "Fee Address" indication (or "Fee Address" Indication form PTO/SB/47; Rev 03-02 or more recent) attached. <b>Use of a Customer Number is required.</b>	2. For printing on the patent front page, list (1) the names of up to 3 registered patent attorneys or agents OR, alternatively, _____ 1 _____ (2) the name of a single firm (having as a member a registered attorney or agent) and the names of up to 2 registered patent attorneys or agents. If no name is listed, no name will be printed. _____ 2 _____ _____ 3 _____
--	--

3. ASSIGNEE NAME AND RESIDENCE DATA TO BE PRINTED ON THE PATENT (print or type)  
 PLEASE NOTE: Unless an assignee is identified below, no assignee data will appear on the patent. If an assignee is identified below, the document has been filed for recordation as set forth in 37 CFR 3.11. Completion of this form is NOT a substitute for filing an assignment.  
 (A) NAME OF ASSIGNEE \_\_\_\_\_ (B) RESIDENCE: (CITY and STATE OR COUNTRY) \_\_\_\_\_

Please check the appropriate assignee category or categories (will not be printed on the patent) :  Individual  Corporation or other private group entity  Government

4a. The following fee(s) are submitted: <input type="checkbox"/> Issue Fee <input type="checkbox"/> Publication Fee (No small entity discount permitted) <input type="checkbox"/> Advance Order - # of Copies _____	4b. Payment of Fee(s): ( <b>Please first reapply any previously paid issue fee shown above</b> ) <input type="checkbox"/> A check is enclosed. <input type="checkbox"/> Payment by credit card. Form PTO-2038 is attached. <input type="checkbox"/> The Director is hereby authorized to charge the required fee(s), any deficiency, or credit any overpayment, to Deposit Account Number _____ (enclose an extra copy of this form).
--	--

5. **Change in Entity Status** (from status indicated above)  
 a. Applicant claims SMALL ENTITY status. See 37 CFR 1.27.                       b. Applicant is no longer claiming SMALL ENTITY status. See 37 CFR 1.27(g)(2).

NOTE: The Issue Fee and Publication Fee (if required) will not be accepted from anyone other than the applicant; a registered attorney or agent; or the assignee or other party in interest as shown by the records of the United States Patent and Trademark Office.

Authorized Signature \_\_\_\_\_ Date \_\_\_\_\_  
 Typed or printed name \_\_\_\_\_ Registration No. \_\_\_\_\_

This collection of information is required by 37 CFR 1.311. 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, 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.**

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.



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

Table with 5 columns: APPLICATION NO., FILING DATE, FIRST NAMED INVENTOR, ATTORNEY DOCKET NO., CONFIRMATION NO.
Row 1: 10/800,295, 03/12/2004, Scott F. Singer, 04-225, 8245
Row 2: 39310, 7590, 04/16/2010, (Empty), (Empty)
Text: MBHB/TRADING TECHNOLOGIES, 300 SOUTH WACKER DRIVE, SUITE 3200, CHICAGO, IL 60606
Text: EXAMINER, LIU, CHIA-YI
Text: ART UNIT, PAPER NUMBER, 3695
Text: DATE MAILED: 04/16/2010

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 733 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 733 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).

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 Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

<b>Notice of Allowability</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/800,295	SINGER ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	CHIA-YI LIU	3695	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY 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.

1.  This communication is responsive to the RCE filed 3/30/2010.
2.  The allowed claim(s) is/are 28-49.
3.  Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a)  All    b)  Some\*    c)  None    of the:
    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)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4.  A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5.  CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.
  - (a)  including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached
    - 1)  hereto or 2)  to Paper No./Mail Date \_\_\_\_\_.
  - (b)  including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.

**Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).**

6.  DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

- |  |  |
|--|--|
| <ol style="list-style-type: none"> <li>1. <input type="checkbox"/> Notice of References Cited (PTO-892)</li> <li>2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)</li> <li>3. <input checked="" type="checkbox"/> Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date _____</li> <li>4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit of Biological Material</li> </ol> | <ol style="list-style-type: none"> <li>5. <input type="checkbox"/> Notice of Informal Patent Application</li> <li>6. <input type="checkbox"/> Interview Summary (PTO-413), Paper No./Mail Date _____.</li> <li>7. <input type="checkbox"/> Examiner's Amendment/Comment</li> <li>8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance</li> <li>9. <input type="checkbox"/> Other _____.</li> </ol> |
|--|--|

### **DETAILED ACTION**

This communication is in response to a Request for Continued Examination (RCE) submitted 3/30/2010. Claims 28-49 are pending in this application.

#### ***Allowable Subject Matter***

The following is a statement of reasons for the indication of allowable subject matter: The prior art of record (Burns US 2003/0004852 A1) teaches receiving by a computing device a current highest bid price and a current lowest ask price for a tradable object from an electronic exchange and displaying via the computing device the plurality of values along a value axis. Even though, the prior art of record teaches a method for displaying market information on a graphical user interface performing the above mentioned steps, the prior art of record fails to teach computing a plurality of values based on a long or short position wherein each of the values represents a profit or loss if the long or short position is closed at a price level and displaying a first indicator at a first location corresponding to a first value along the value axis wherein the first indicator represents a particular price and the first value represents a profit or loss incurred by the user if the long or short position is closed at the particular price and moving the first indicator relative to the value axis to a second location corresponding to a second value along the value axis responsive to receipt of an update to the particular price. For these reasons claims 28 and 39 are deemed to be allowable over the prior art of record, and claims 29-38 and 40-49 are allowed by dependency.

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

**Conclusion**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to CHIA-YI LIU whose telephone number is (571)270-1573. The examiner can normally be reached on Mon-Thurs alternating Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Charles Kyle can be reached on (571) 272-6746. 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.

CHIA-YI LIU  
Examiner  
Art Unit 3695

/Thu Thao Havan/  
Primary Examiner, Art Unit 3695

<b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b> ( Not for submission under 37 CFR 1.99)	Application Number	10800295
	Filing Date	2004-03-12
	First Named Inventor	Scott F. Singer
	Art Unit	3696
	Examiner Name	Chia-Yi Liu
	Attorney Docket Number	04-225

**U.S. PATENTS**

Examiner Initial*	Cite No	Patent Number	Kind Code <sup>1</sup>	Issue Date	Name of Patentee or Applicant of cited Document	Pages, Columns, Lines where Relevant Passages or Relevant Figures Appear
/J.L./	1	6772132		2004-08-03	Kemp II	
/J.L./	2	6938011		2005-08-30	Kemp II	
/J.L./	3	7127424		2006-10-24	Kemp II	

If you wish to add additional U.S. Patent citation information please click the Add button.

**U.S. PATENT APPLICATION PUBLICATIONS**

Examiner Initial*	Cite No	Publication Number	Kind Code <sup>1</sup>	Publication Date	Name of Patentee or Applicant of cited Document	Pages, Columns, Lines where Relevant Passages or Relevant Figures Appear
	1					

If you wish to add additional U.S. Published Application citation information please click the Add button.

**FOREIGN PATENT DOCUMENTS**

Examiner Initial*	Cite No	Foreign Document Number <sup>3</sup>	Country Code <sup>2</sup> i	Kind Code <sup>4</sup>	Publication Date	Name of Patentee or Applicant of cited Document	Pages, Columns, Lines where Relevant Passages or Relevant Figures Appear	T <sup>5</sup>
	1							<input type="checkbox"/>

<b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b> ( Not for submission under 37 CFR 1.99)	Application Number	10800295
	Filing Date	2004-03-12
	First Named Inventor	Scott F. Singer
	Art Unit	3696
	Examiner Name	Chia-Yi Liu
	Attorney Docket Number	04-225

If you wish to add additional Foreign Patent Document citation information please click the Add button

**NON-PATENT LITERATURE DOCUMENTS**

Examiner Initials*	Cite No	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc), date, pages(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>5</sup>
	1		<input type="checkbox"/>


If you wish to add additional non-patent literature document citation information please click the Add button

**EXAMINER SIGNATURE**

Examiner Signature	/Chia-yi Liu/	Date Considered	04/06/2010
--------------------	---------------	-----------------	------------

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through a citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup> See Kind Codes of USPTO Patent Documents at [www.USPTO.GOV](http://www.USPTO.GOV) or MPEP 901.04. <sup>2</sup> Enter office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>3</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>4</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. <sup>5</sup> Applicant is to place a check mark here if English language translation is attached.

<b>Index of Claims</b> 	<b>Application/Control No.</b> 10800295	<b>Applicant(s)/Patent Under Reexamination</b> SINGER ET AL.
	<b>Examiner</b> CHIA-YI LIU	<b>Art Unit</b> 3696

✓	<b>Rejected</b>
=	<b>Allowed</b>

-	<b>Cancelled</b>
÷	<b>Restricted</b>


N	<b>Non-Elected</b>
I	<b>Interference</b>

A	<b>Appeal</b>
O	<b>Objected</b>

Claims renumbered in the same order as presented by applicant
  CPA
  T.D.
  R.1.47

CLAIM		DATE							
Final	Original	08/23/2007	04/25/2008	01/21/2009	11/24/2009	12/08/2009	04/06/2010		
	1	✓	✓	-	-		-		
	2	✓	✓	-	-		-		
	3	✓	✓	-	-		-		
	4	✓	✓	-	-		-		
	5	✓	✓	-	-		-		
	6	✓	-	-	-		-		
	7	✓	✓	-	-		-		
	8	✓	✓	-	-		-		
	9	✓	✓	-	-		-		
	10	✓	✓	-	-		-		
	11	✓	✓	-	-		-		
	12	✓	✓	-	-		-		
	13	✓	✓	-	-		-		
	14	✓	✓	-	-		-		
	15	✓	✓	-	-		-		
	16	✓	✓	-	-		-		
	17	✓	✓	-	-		-		
	18	✓	✓	-	-		-		
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	20	✓	✓	-	-		-		
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	27	✓	✓	-	-		-		
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2	29			✓	✓	=	=		
3	30			✓	✓	=	=		
4	31			✓	✓	=	=		
5	32			✓	✓	=	=		
6	33			✓	✓	=	=		
7	34			✓	✓	=	=		
8	35			✓	✓	=	=		
9	36			✓	✓	=	=		



<b>Index of Claims</b>  	<b>Application/Control No.</b> 10800295	<b>Applicant(s)/Patent Under Reexamination</b> SINGER ET AL.
	<b>Examiner</b> CHIA-YI LIU	<b>Art Unit</b> 3696

✓	<b>Rejected</b>
=	<b>Allowed</b>


-	<b>Cancelled</b>
÷	<b>Restricted</b>

N	<b>Non-Elected</b>
I	<b>Interference</b>

A	<b>Appeal</b>
O	<b>Objected</b>

Claims renumbered in the same order as presented by applicant
  CPA
  T.D.
  R.1.47


CLAIM		DATE							
Final	Original	08/23/2007	04/25/2008	01/21/2009	11/24/2009	12/08/2009	04/06/2010		
10	37			✓	✓	=	=		
11	38			✓	✓	=	=		
12	39			✓	✓	=	=		
13	40			✓	✓	=	=		
14	41			✓	✓	=	=		
15	42			✓	✓	=	=		
16	43			✓	✓	=	=		
17	44			✓	✓	=	=		
18	45			✓	✓	=	=		
19	46			✓	✓	=	=		
20	47			✓	✓	=	=		
21	48			✓	✓	=	=		
22	49			✓	✓	=	=		

<b>Issue Classification</b> 	<b>Application/Control No.</b> 10800295	<b>Applicant(s)/Patent Under Reexamination</b> SINGER ET AL.
	<b>Examiner</b> CHIA-YI LIU	<b>Art Unit</b> 3696

ORIGINAL					INTERNATIONAL CLASSIFICATION														
CLASS		SUBCLASS			CLAIMED					NON-CLAIMED									
705		37			G	0	6	Q	40 / 00 (2006.01.01)										
<b>CROSS REFERENCE(S)</b>																			
CLASS	SUBCLASS (ONE SUBCLASS PER BLOCK)																		

<input checked="" type="checkbox"/> <b>Claims renumbered in the same order as presented by applicant</b> <input type="checkbox"/> <b>CPA</b> <input type="checkbox"/> <b>T.D.</b> <input type="checkbox"/> <b>R.1.47</b>															
Final	Original	Final	Original	Final	Original	Final	Original	Final	Original	Final	Original	Final	Original	Final	Original
1	28	17	44												
2	29	18	45												
3	30	19	46												
4	31	20	47												
5	32	21	48												
6	33	22	49												
7	34														
8	35														
9	36														
10	37														
11	38														
12	39														
13	40														
14	41														
15	42														
16	43														

/CHIA-YI LIU/ Examiner.Art Unit 3696 (Assistant Examiner)	4/6/2010 (Date)	<b>Total Claims Allowed:</b> 22	
/THU-THAO HAVAN/ Primary Examiner.Art Unit 3695 (Primary Examiner)	04/09/2010 (Date)	O.G. Print Claim(s) 1	O.G. Print Figure 8

<b>Search Notes</b>  	<b>Application/Control No.</b>  110800295	<b>Applicant(s)/Patent Under Reexamination</b>  SINGER ET AL.
	<b>Examiner</b>  LIU, CHIA-YI	<b>Art Unit</b>  3609

<b>SEARCHED</b>			
<b>Class</b>	<b>Subclass</b>	<b>Date</b>	<b>Examiner</b>
705	39-41	8/23/2007	C.L.
705	39-41	4/24/2008	C.L.

<b>SEARCH NOTES</b>			
<b>Search Notes</b>		<b>Date</b>	<b>Examiner</b>
East Search		8/23/2007	C.L.
East Search		4/24/2008	C.L.
Forward/Backward Citation		12/8/2009	C.L.
Inventor/Assignee Search		12/8/2009	C.L.
STICS Search		12/8/2009	C.L.

<b>INTERFERENCE SEARCH</b>			
<b>Class</b>	<b>Subclass</b>	<b>Date</b>	<b>Examiner</b>
705	39-41	12/8/2009	C.L.

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<b>REQUEST FOR CONTINUED EXAMINATION(RCE)TRANSMITTAL (Submitted Only via EFS-Web)</b>							
Application Number	10800295	Filing Date	2004-03-12	Docket Number (if applicable)	04-225	Art Unit	3696
First Named Inventor	Scott F. Singer			Examiner Name	Chia-Yi Liu		
<p><b>This is a Request for Continued Examination (RCE) under 37 CFR 1.114 of the above-identified application.</b>            Request for Continued Examination (RCE) practice under 37 CFR 1.114 does not apply to any utility or plant application filed prior to June 8, 1995, or to any design application. The Instruction Sheet for this form is located at WWW.USPTO.GOV</p>							
<b>SUBMISSION REQUIRED UNDER 37 CFR 1.114</b>							
<p>Note: If the RCE is proper, any previously filed unentered amendments and amendments enclosed with the RCE will be entered in the order in which they were filed unless applicant instructs otherwise. If applicant does not wish to have any previously filed unentered amendment(s) entered, applicant must request non-entry of such amendment(s).</p>							
<p><input type="checkbox"/> Previously submitted. If a final Office action is outstanding, any amendments filed after the final Office action may be considered as a submission even if this box is not checked.</p> <p style="margin-left: 40px;"><input type="checkbox"/> Consider the arguments in the Appeal Brief or Reply Brief previously filed on _____</p> <p style="margin-left: 40px;"><input type="checkbox"/> Other _____</p> <p><input checked="" type="checkbox"/> Enclosed</p> <p style="margin-left: 40px;"><input type="checkbox"/> Amendment/Reply</p> <p style="margin-left: 40px;"><input checked="" type="checkbox"/> Information Disclosure Statement (IDS)</p> <p style="margin-left: 40px;"><input type="checkbox"/> Affidavit(s)/ Declaration(s)</p> <p style="margin-left: 40px;"><input type="checkbox"/> Other _____</p>							
<b>MISCELLANEOUS</b>							
<p><input type="checkbox"/> Suspension of action on the above-identified application is requested under 37 CFR 1.103(c) for a period of months _____            (Period of suspension shall not exceed 3 months; Fee under 37 CFR 1.17(i) required)</p> <p><input type="checkbox"/> Other _____</p>							
<b>FEES</b>							
<p><input checked="" type="checkbox"/> <b>The RCE fee under 37 CFR 1.17(e) is required by 37 CFR 1.114 when the RCE is filed.</b>            The Director is hereby authorized to charge any underpayment of fees, or credit any overpayments, to            Deposit Account No <u>132490</u></p>							
<b>SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT REQUIRED</b>							
<p><input checked="" type="checkbox"/> Patent Practitioner Signature</p> <p><input type="checkbox"/> Applicant Signature</p>							

Doc code: RCEX

Doc description: Request for Continued Examination (RCE)

PTO/SB/30EFS (07-09)

Approved for use through 07/31/2012. OMB 0651-0031

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Signature of Registered U.S. Patent Practitioner			
Signature	/Thomas J. Loos/	Date (YYYY-MM-DD)	2010-03-30
Name	Thomas J. Loos	Registration Number	60161

This collection of information is required by 37 CFR 1.114. 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 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.

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

## Privacy Act Statement

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.

The information provided by you in this form will be subject to the following routine uses:

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 the Freedom of Information Act requires disclosure of these records.
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 inspections 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.

## Electronic Patent Application Fee Transmittal

<b>Application Number:</b>	10800295			
<b>Filing Date:</b>	12-Mar-2004			
<b>Title of Invention:</b>	SYSTEM AND METHOD FOR DISPLAYING ORDER INFORMATION IN RELATION TO A DERIVATIVE OF PRICE			
<b>First Named Inventor/Applicant Name:</b>	Scott F. Singer			
<b>Filer:</b>	Thomas J. Loos			
<b>Attorney Docket Number:</b>	04-225			
Filed as Large Entity				
<b>Utility under 35 USC 111(a) Filing Fees</b>				
<b>Description</b>	<b>Fee Code</b>	<b>Quantity</b>	<b>Amount</b>	<b>Sub-Total in USD(\$)</b>
<b>Basic Filing:</b>				
<b>Pages:</b>				
<b>Claims:</b>				
<b>Miscellaneous-Filing:</b>				
<b>Petition:</b>				
<b>Patent-Appeals-and-Interference:</b>				
<b>Post-Allowance-and-Post-Issuance:</b>				
<b>Extension-of-Time:</b>				

Description	Fee Code	Quantity	Amount	Sub-Total in USD(\$)
<b>Miscellaneous:</b>				
Request for continued examination	1801	1	810	810
<b>Total in USD (\$)</b>				<b>810</b>



## Electronic Acknowledgement Receipt

<b>EFS ID:</b>	7316306
<b>Application Number:</b>	10800295
<b>International Application Number:</b>	
<b>Confirmation Number:</b>	8245
<b>Title of Invention:</b>	SYSTEM AND METHOD FOR DISPLAYING ORDER INFORMATION IN RELATION TO A DERIVATIVE OF PRICE
<b>First Named Inventor/Applicant Name:</b>	Scott F. Singer
<b>Customer Number:</b>	39310
<b>Filer:</b>	Thomas J. Loos
<b>Filer Authorized By:</b>	
<b>Attorney Docket Number:</b>	04-225
<b>Receipt Date:</b>	30-MAR-2010
<b>Filing Date:</b>	12-MAR-2004
<b>Time Stamp:</b>	15:04:22
<b>Application Type:</b>	Utility under 35 USC 111(a)

### Payment information:

Submitted with Payment	yes
Payment Type	Deposit Account
Payment was successfully received in RAM	\$810
RAM confirmation Number	1329
Deposit Account	132490
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)

Charge any Additional Fees required under 37 C.F.R. Section 1.19 (Document supply fees)

Charge any Additional Fees required under 37 C.F.R. Section 1.21 (Miscellaneous fees and charges)

**File Listing:**

Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1	Information Disclosure Statement (IDS) Filed (SB/08)	04-225_IDS_033010.pdf	1121785 56412415c5e8267611c6dcb6de4ec01195ffa38	no	4

**Warnings:**

**Information:**

2	Request for Continued Examination (RCE)	04-225_RCE_033010.pdf	1031589 5c880713a5c03045540463e36af1a0399606867e	no	3
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**Warnings:**

**Information:**

3	Fee Worksheet (PTO-875)	fee-info.pdf	30205 266d069f463a60596ad00d274d9641e2100a4477	no	2
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**Warnings:**

**Information:**

**Total Files Size (in bytes):** 2183579

**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 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.

<b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b> ( Not for submission under 37 CFR 1.99)	Application Number	10800295
	Filing Date	2004-03-12
	First Named Inventor	Scott F. Singer
	Art Unit	3696
	Examiner Name	Chia-Yi Liu
	Attorney Docket Number	04-225

U.S. PATENTS							Remove
Examiner Initial*	Cite No	Patent Number	Kind Code <sup>1</sup>	Issue Date	Name of Patentee or Applicant of cited Document	Pages, Columns, Lines where Relevant Passages or Relevant Figures Appear	
	1	6772132		2004-08-03	Kemp II		
	2	6938011		2005-08-30	Kemp II		
	3	7127424		2006-10-24	Kemp II		

If you wish to add additional U.S. Patent citation information please click the Add button. Add

U.S. PATENT APPLICATION PUBLICATIONS							Remove
Examiner Initial*	Cite No	Publication Number	Kind Code <sup>1</sup>	Publication Date	Name of Patentee or Applicant of cited Document	Pages, Columns, Lines where Relevant Passages or Relevant Figures Appear	
	1						

If you wish to add additional U.S. Published Application citation information please click the Add button. Add

FOREIGN PATENT DOCUMENTS								Remove
Examiner Initial*	Cite No	Foreign Document Number <sup>3</sup>	Country Code <sup>2</sup> j	Kind Code <sup>4</sup>	Publication Date	Name of Patentee or Applicant of cited Document	Pages, Columns, Lines where Relevant Passages or Relevant Figures Appear	T <sup>5</sup>
	1							<input type="checkbox"/>

<b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b> ( Not for submission under 37 CFR 1.99)	Application Number	10800295
	Filing Date	2004-03-12
	First Named Inventor	Scott F. Singer
	Art Unit	3696
	Examiner Name	Chia-Yi Liu
	Attorney Docket Number	04-225

If you wish to add additional Foreign Patent Document citation information please click the Add button

**NON-PATENT LITERATURE DOCUMENTS**

Examiner Initials*	Cite No	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc), date, pages(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>5</sup>
	1		<input type="checkbox"/>

If you wish to add additional non-patent literature document citation information please click the Add button

**EXAMINER SIGNATURE**

Examiner Signature		Date Considered	
--------------------	--	-----------------	--

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through a citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup> See Kind Codes of USPTO Patent Documents at [www.USPTO.GOV](http://www.USPTO.GOV) or MPEP 901.04. <sup>2</sup> Enter office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>3</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>4</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. <sup>5</sup> Applicant is to place a check mark here if English language translation is attached.

**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**  
( Not for submission under 37 CFR 1.99)

Application Number	10800295
Filing Date	2004-03-12
First Named Inventor	Scott F. Singer
Art Unit	3696
Examiner Name	Chia-Yi Liu
Attorney Docket Number	04-225

**CERTIFICATION STATEMENT**

Please see 37 CFR 1.97 and 1.98 to make the appropriate selection(s):

That each item of information contained in the information disclosure statement was first cited in any communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of the information disclosure statement. See 37 CFR 1.97(e)(1).

**OR**

That no item of information contained in the information disclosure statement was cited in a communication from a foreign patent office in a counterpart foreign application, and, to the knowledge of the person signing the certification after making reasonable inquiry, no item of information contained in the information disclosure statement was known to any individual designated in 37 CFR 1.56(c) more than three months prior to the filing of the information disclosure statement. See 37 CFR 1.97(e)(2).

- See attached certification statement.
- Fee set forth in 37 CFR 1.17 (p) has been submitted herewith.
- None

**SIGNATURE**

A signature of the applicant or representative is required in accordance with CFR 1.33, 10.18. Please see CFR 1.4(d) for the form of the signature.

Signature	/Thomas J. Loos/	Date (YYYY-MM-DD)	2010-03-30
Name/Print	Thomas J. Loos	Registration Number	60161

This collection of information is required by 37 CFR 1.97 and 1.98. 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 1 hour 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.**

## Privacy Act Statement

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.

The information provided by you in this form will be subject to the following routine uses:

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 the Freedom of Information Act requires disclosure of these records.
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 inspections 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.



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

39310 7590 01/06/2010

MBHB/TRADING TECHNOLOGIES
300 SOUTH WACKER DRIVE
SUITE 3200
CHICAGO, IL 60606

EXAMINER

LIU, CHIA-YI

ART UNIT PAPER NUMBER

3696

DATE MAILED: 01/06/2010

Table with 5 columns: APPLICATION NO., FILING DATE, FIRST NAMED INVENTOR, ATTORNEY DOCKET NO., CONFIRMATION NO.

10/800,295 03/12/2004 Scott F. Singer 04-225 8245

TITLE OF INVENTION: SYSTEM AND METHOD FOR DISPLAYING ORDER INFORMATION IN RELATION TO A DERIVATIVE OF PRICE

Table with 7 columns: APPLN. TYPE, SMALL ENTITY, ISSUE FEE DUE, PUBLICATION FEE DUE, PREV. PAID ISSUE FEE, TOTAL FEE(S) DUE, DATE DUE

nonprovisional YES \$755 \$0 \$0 \$755 04/06/2010

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. 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 THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. 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:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

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

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE 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.

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

**Complete and send this form, together with applicable fee(s), to: Mail Mail Stop ISSUE FEE  
 Commissioner for Patents  
 P.O. Box 1450  
 Alexandria, Virginia 22313-1450  
 or Fax (571)-273-2885**

**INSTRUCTIONS:** This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 5 should be completed where appropriate. All further correspondence including the Patent, advance orders and notification of maintenance fees will be mailed to the current correspondence address as indicated unless corrected below or directed otherwise in Block 1, by (a) specifying a new correspondence address; and/or (b) indicating a separate "FEE ADDRESS" for maintenance fee notifications.

CURRENT CORRESPONDENCE ADDRESS (Note: Use Block 1 for any change of address)

39310                      7590                      01/06/2010

**MBHB/TRADING TECHNOLOGIES**  
**300 SOUTH WACKER DRIVE**  
**SUITE 3200**  
**CHICAGO, IL 60606**

Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission.

**Certificate of Mailing or Transmission**

I hereby certify that this Fee(s) Transmittal is being deposited with the United States Postal Service with sufficient postage for first class mail in an envelope addressed to the Mail Stop ISSUE FEE address above, or being facsimile transmitted to the USPTO (571) 273-2885, on the date indicated below.

(Depositor's name)
(Signature)
(Date)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/800,295                      03/12/2004                      Scott F. Singer                      04-225                      8245

TITLE OF INVENTION: SYSTEM AND METHOD FOR DISPLAYING ORDER INFORMATION IN RELATION TO A DERIVATIVE OF PRICE

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	YES	\$755	\$0	\$0	\$755	04/06/2010

EXAMINER	ART UNIT	CLASS-SUBCLASS
LIU, CHIA-YI	3696	705-037000

1. Change of correspondence address or indication of "Fee Address" (37 CFR 1.363). <input type="checkbox"/> Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached. <input type="checkbox"/> "Fee Address" indication (or "Fee Address" Indication form PTO/SB/47; Rev 03-02 or more recent) attached. <b>Use of a Customer Number is required.</b>	2. For printing on the patent front page, list (1) the names of up to 3 registered patent attorneys or agents OR, alternatively, _____ 1 _____ (2) the name of a single firm (having as a member a registered attorney or agent) and the names of up to 2 registered patent attorneys or agents. If no name is listed, no name will be printed. _____ 2 _____ _____ 3 _____
--	--

3. ASSIGNEE NAME AND RESIDENCE DATA TO BE PRINTED ON THE PATENT (print or type)  
 PLEASE NOTE: Unless an assignee is identified below, no assignee data will appear on the patent. If an assignee is identified below, the document has been filed for recordation as set forth in 37 CFR 3.11. Completion of this form is NOT a substitute for filing an assignment.  
 (A) NAME OF ASSIGNEE \_\_\_\_\_ (B) RESIDENCE: (CITY and STATE OR COUNTRY) \_\_\_\_\_

Please check the appropriate assignee category or categories (will not be printed on the patent) :  Individual  Corporation or other private group entity  Government

4a. The following fee(s) are submitted: <input type="checkbox"/> Issue Fee <input type="checkbox"/> Publication Fee (No small entity discount permitted) <input type="checkbox"/> Advance Order - # of Copies _____	4b. Payment of Fee(s): (Please first reapply any previously paid issue fee shown above) <input type="checkbox"/> A check is enclosed. <input type="checkbox"/> Payment by credit card. Form PTO-2038 is attached. <input type="checkbox"/> The Director is hereby authorized to charge the required fee(s), any deficiency, or credit any overpayment, to Deposit Account Number _____ (enclose an extra copy of this form).
--	---

5. **Change in Entity Status** (from status indicated above)  
 a. Applicant claims SMALL ENTITY status. See 37 CFR 1.27.  b. Applicant is no longer claiming SMALL ENTITY status. See 37 CFR 1.27(g)(2).

NOTE: The Issue Fee and Publication Fee (if required) will not be accepted from anyone other than the applicant; a registered attorney or agent; or the assignee or other party in interest as shown by the records of the United States Patent and Trademark Office.

Authorized Signature \_\_\_\_\_ Date \_\_\_\_\_  
 Typed or printed name \_\_\_\_\_ Registration No. \_\_\_\_\_

This collection of information is required by 37 CFR 1.311. 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, 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.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.





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

Table with 5 columns: APPLICATION NO., FILING DATE, FIRST NAMED INVENTOR, ATTORNEY DOCKET NO., CONFIRMATION NO.
Row 1: 10/800,295, 03/12/2004, Scott F. Singer, 04-225, 8245
Row 2: 39310, 7590, 01/06/2010, (Empty), (Empty)
Text: MBHB/TRADING TECHNOLOGIES, 300 SOUTH WACKER DRIVE, SUITE 3200, CHICAGO, IL 60606
Text: EXAMINER, LIU, CHIA-YI
Text: ART UNIT, PAPER NUMBER, 3696, DATE MAILED: 01/06/2010

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 733 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 733 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).

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 Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

<b>Notice of Allowability</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/800,295	SINGER ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	CHIA-YI LIU	3696	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY 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.

1.  This communication is responsive to the RCE filed 11/19/2009.
2.  The allowed claim(s) is/are 28-49.
3.  Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a)  All    b)  Some\*    c)  None    of the:
    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)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.  
**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4.  A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5.  CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.
  - (a)  including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached
    - 1)  hereto or 2)  to Paper No./Mail Date \_\_\_\_\_.
  - (b)  including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.

**Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).**
6.  DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

- |  |   |
|--|---|
| 1. <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 5. <input type="checkbox"/> Notice of Informal Patent Application                       |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 6. <input type="checkbox"/> Interview Summary (PTO-413),<br>Paper No./Mail Date _____ . |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO/SB/08),<br>Paper No./Mail Date _____    | 7. <input type="checkbox"/> Examiner's Amendment/Comment                                |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit<br>of Biological Material | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance    |
|  | 9. <input type="checkbox"/> Other _____.  |

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

### **DETAILED ACTION**

This communication is in response to a Request for Continued Examination (RCE) submitted 11/19/2009. Claims 28-49 are pending in this application.

#### ***Allowable Subject Matter***

The following is a statement of reasons for the indication of allowable subject matter: The prior art of record (Burns US 2003/0004852 A1) teaches receiving by a computing device a current highest bid price and a current lowest ask price for a tradable object from an electronic exchange and displaying via the computing device the plurality of values along a value axis. Even though, the prior art of record teaches a method for displaying market information on a graphical user interface performing the above mentioned steps, the prior art of record fails to teach computing a plurality of values based on a long or short position wherein each of the values represents a profit or loss if the long or short position is closed at a price level and displaying a first indicator at a first location corresponding to a first value along the value axis wherein the first indicator represents a particular price and the first value represents a profit or loss incurred by the user if the long or short position is closed at the particular price and moving the first indicator relative to the value axis to a second location corresponding to a second value along the value axis responsive to receipt of an update to the particular price. For these reasons claims 28 and 39 are deemed to be allowable over the prior art of record, and claims 29-38 and 40-49 are allowed by dependency.

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

**Conclusion**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to CHIA-YI LIU whose telephone number is (571)270-1573. The examiner can normally be reached on Mon-Thur alternating Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, HANI KAZIMI can be reached on (571) 272-6745. 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.

CHIA-YI LIU  
Examiner  
Art Unit 3696

/Hani M. Kazimi/

Primary Examiner, Art Unit 3691

<b>Notice of References Cited</b>	Application/Control No. 10/800,295	Applicant(s)/Patent Under Reexamination SINGER ET AL.	
	Examiner CHIA-YI LIU	Art Unit 3696	Page 1 of 1

**U.S. PATENT DOCUMENTS**

*	Document Number Country Code-Number-Kind Code	Date MM-YYYY	Name	Classification
	A US-			
	B US-			
	C US-			
	D US-			
	E US-			
	F US-			
	G US-			
	H US-			
	I US-			
	J US-			
	K US-			
	L US-			
	M US-			


**FOREIGN PATENT DOCUMENTS**

*	Document Number Country Code-Number-Kind Code	Date MM-YYYY	Country	Name	Classification
	N				
	O				
	P				
	Q				
	R				
	S				
	T				

**NON-PATENT DOCUMENTS**

*	Include as applicable: Author, Title Date, Publisher, Edition or Volume, Pertinent Pages)
U	Star Research Inc, "Profit Loss vs Price," April 19, 2001, pages 1-24
V	QBL Software, "Radar Screen," April 13, 2000, pages 1-4
W	
X	

\*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.

<b>Issue Classification</b> 	<b>Application/Control No.</b> 10800295	<b>Applicant(s)/Patent Under Reexamination</b> SINGER ET AL.
	<b>Examiner</b> CHIA-YI LIU	<b>Art Unit</b> 3696

ORIGINAL					INTERNATIONAL CLASSIFICATION														
CLASS		SUBCLASS			CLAIMED					NON-CLAIMED									
705		37			G	0	6	Q	40 / 00 (2006.01.01)										
<b>CROSS REFERENCE(S)</b>																			
CLASS	SUBCLASS (ONE SUBCLASS PER BLOCK)																		

<input checked="" type="checkbox"/> <b>Claims renumbered in the same order as presented by applicant</b> <input type="checkbox"/> <b>CPA</b> <input type="checkbox"/> <b>T.D.</b> <input type="checkbox"/> <b>R.1.47</b>															
Final	Original	Final	Original	Final	Original	Final	Original	Final	Original	Final	Original	Final	Original	Final	Original
1	28	17	44												
2	29	18	45												
3	30	19	46												
4	31	20	47												
5	32	21	48												
6	33	22	49												
7	34														
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14	41														
15	42														
16	43														


/CHIA-YI LIU/ Examiner.Art Unit 3696 (Assistant Examiner)	12/08/2009 (Date)	<b>Total Claims Allowed:</b> 22	
/Hani Kazimi/ Primary Examiner.Art Unit 3691 (Primary Examiner)	12/13/2009 (Date)	O.G. Print Claim(s) 1	O.G. Print Figure 8

**EAST Search History**

**EAST Search History (Prior Art)**

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L1	32	((SCOTT) near2 (SINGER)).INV.	USPAT	OR	OFF	2009/12/08 16:55
L2	147	((MICHAEL) near2 (BURNS)).INV.	USPAT	OR	OFF	2009/12/08 16:55
L3	9	((FRED) near2 (MONROE)).INV.	USPAT	OR	OFF	2009/12/08 16:55

**12/ 8/ 2009 4:58:18 PM**

<b>Index of Claims</b> 	<b>Application/Control No.</b> 10800295	<b>Applicant(s)/Patent Under Reexamination</b> SINGER ET AL.
	<b>Examiner</b> CHIA-YI LIU	<b>Art Unit</b> 3696

✓	<b>Rejected</b>
=	<b>Allowed</b>

-	<b>Cancelled</b>
÷	<b>Restricted</b>


N	<b>Non-Elected</b>
I	<b>Interference</b>

A	<b>Appeal</b>
O	<b>Objected</b>

Claims renumbered in the same order as presented by applicant
  CPA
  T.D.
  R.1.47

CLAIM		DATE									
Final	Original	08/23/2007	04/25/2008	01/21/2009	11/24/2009	12/08/2009					
	1	✓	✓	-	-						
	2	✓	✓	-	-						
	3	✓	✓	-	-						
	4	✓	✓	-	-						
	5	✓	✓	-	-						
	6	✓	-	-	-						
	7	✓	✓	-	-						
	8	✓	✓	-	-						
	9	✓	✓	-	-						
	10	✓	✓	-	-						
	11	✓	✓	-	-						
	12	✓	✓	-	-						
	13	✓	✓	-	-						
	14	✓	✓	-	-						
	15	✓	✓	-	-						
	16	✓	✓	-	-						
	17	✓	✓	-	-						
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	26	✓	✓	-	-						
	27	✓	✓	-	-						
1	28			✓	✓	=					
2	29			✓	✓	=					
3	30			✓	✓	=					
4	31			✓	✓	=					
5	32			✓	✓	=					
6	33			✓	✓	=					
7	34			✓	✓	=					
8	35			✓	✓	=					
9	36			✓	✓	=					



<b>Index of Claims</b>  	<b>Application/Control No.</b>  10800295	<b>Applicant(s)/Patent Under Reexamination</b>  SINGER ET AL.
	<b>Examiner</b>  CHIA-YI LIU	<b>Art Unit</b>  3696

✓	<b>Rejected</b>
=	<b>Allowed</b>


-	<b>Cancelled</b>
÷	<b>Restricted</b>

N	<b>Non-Elected</b>
I	<b>Interference</b>

A	<b>Appeal</b>
O	<b>Objected</b>

Claims renumbered in the same order as presented by applicant
  CPA
  T.D.
  R.1.47

CLAIM		DATE								
Final	Original	08/23/2007	04/25/2008	01/21/2009	11/24/2009	12/08/2009				
10	37			✓	✓	=				
11	38			✓	✓	=				
12	39			✓	✓	=				
13	40			✓	✓	=				
14	41			✓	✓	=				
15	42			✓	✓	=				
16	43			✓	✓	=				
17	44			✓	✓	=				
18	45			✓	✓	=				
19	46			✓	✓	=				
20	47			✓	✓	=				
21	48			✓	✓	=				
22	49			✓	✓	=				

<b>Search Notes</b>  	<b>Application/Control No.</b>  10800295	<b>Applicant(s)/Patent Under Reexamination</b>  SINGER ET AL.
	<b>Examiner</b>  LIU, CHIA-YI	<b>Art Unit</b>  3609

SEARCHED			
Class	Subclass	Date	Examiner
705	39-41	8/23/2007	C.L.
705	39-41	4/24/2008	C.L.

SEARCH NOTES		
Search Notes	Date	Examiner
East Search	8/23/2007	C.L.
East Search	4/24/2008	C.L.
Forward/Backward Citation	12/8/2009	C.L.
Inventor/Assignee Search	12/8/2009	C.L.
STICS Search	12/8/2009	C.L.

INTERFERENCE SEARCH			
Class	Subclass	Date	Examiner
705	39-41	12/8/2009	C.L.

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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

Table with 5 columns: APPLICATION NO., FILING DATE, FIRST NAMED INVENTOR, ATTORNEY DOCKET NO., CONFIRMATION NO.
10/800,295 03/12/2004 Scott F. Singer 04-225 8245

39310 7590 11/27/2009
MBHB/TRADING TECHNOLOGIES
300 SOUTH WACKER DRIVE
SUITE 3200
CHICAGO, IL 60606

Table with 1 column: EXAMINER

LIU, CHIA-YI

Table with 2 columns: ART UNIT, PAPER NUMBER

3696

Table with 2 columns: NOTIFICATION DATE, DELIVERY MODE

11/27/2009

ELECTRONIC

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.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

docketing@mbhb.com
williamsd@mbhb.com

<b>Interview Summary</b>	<b>Application No.</b> 10/800,295	<b>Applicant(s)</b> SINGER ET AL.	
	<b>Examiner</b> CHIA-YI LIU	<b>Art Unit</b> 3696	

All participants (applicant, applicant's representative, PTO personnel):

- (1) CHIA-YI LIU. (3) MONICA DUDEK.  
(2) HANI KAZIMI. (4) \_\_\_\_\_.

Date of Interview: 11/18/2009.

Type: a)  Telephonic b)  Video Conference  
c)  Personal [copy given to: 1)  applicant 2)  applicant's representative]

Exhibit shown or demonstration conducted: d)  Yes e)  No.  
If Yes, brief description: \_\_\_\_\_.

Claim(s) discussed: Nov 18, 2009.

Identification of prior art discussed: \_\_\_\_\_.

Agreement with respect to the claims f)  was reached. g)  was not reached. h)  N/A.

Substance of Interview including description of the general nature of what was agreed to if an agreement was reached, or any other comments: Discussed 112 rejections. No agreement was reached. Examiner will wait until applicant submits amendments/arguments for review.

(A fuller description, if necessary, and a copy of the amendments which the examiner agreed would render the claims allowable, if available, must be attached. Also, where no copy of the amendments that would render the claims allowable is available, a summary thereof must be attached.)

THE FORMAL WRITTEN REPLY TO THE LAST OFFICE ACTION MUST INCLUDE THE SUBSTANCE OF THE INTERVIEW. (See MPEP Section 713.04). If a reply to the last Office action has already been filed, APPLICANT IS GIVEN A NON-EXTENDABLE PERIOD OF THE LONGER OF ONE MONTH OR THIRTY DAYS FROM THIS INTERVIEW DATE, OR THE MAILING DATE OF THIS INTERVIEW SUMMARY FORM, WHICHEVER IS LATER, TO FILE A STATEMENT OF THE SUBSTANCE OF THE INTERVIEW. See Summary of Record of Interview requirements on reverse side or on attached sheet.

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

## Summary of Record of Interview Requirements

### Manual of Patent Examining Procedure (MPEP), Section 713.04, Substance of Interview Must be Made of Record

A complete written statement as to the substance of any face-to-face, video conference, or telephone interview with regard to an application must be made of record in the application whether or not an agreement with the examiner was reached at the interview.

### Title 37 Code of Federal Regulations (CFR) § 1.133 Interviews Paragraph (b)

In every instance where reconsideration is requested in view of an interview with an examiner, a complete written statement of the reasons presented at the interview as warranting favorable action must be filed by the applicant. An interview does not remove the necessity for reply to Office action as specified in §§ 1.111, 1.135. (35 U.S.C. 132)

#### 37 CFR §1.2 Business to be transacted in writing.

All business with the Patent or Trademark Office should be transacted in writing. The personal attendance of applicants or their attorneys or agents at the Patent and Trademark Office is unnecessary. The action of the Patent and Trademark Office will be based exclusively on the written record in the Office. No attention will be paid to any alleged oral promise, stipulation, or understanding in relation to which there is disagreement or doubt.

The action of the Patent and Trademark Office cannot be based exclusively on the written record in the Office if that record is itself incomplete through the failure to record the substance of interviews.

It is the responsibility of the applicant or the attorney or agent to make the substance of an interview of record in the application file, unless the examiner indicates he or she will do so. It is the examiner's responsibility to see that such a record is made and to correct material inaccuracies which bear directly on the question of patentability.

Examiners must complete an Interview Summary Form for each interview held where a matter of substance has been discussed during the interview by checking the appropriate boxes and filling in the blanks. Discussions regarding only procedural matters, directed solely to restriction requirements for which interview recordation is otherwise provided for in Section 812.01 of the Manual of Patent Examining Procedure, or pointing out typographical errors or unreadable script in Office actions or the like, are excluded from the interview recordation procedures below. Where the substance of an interview is completely recorded in an Examiners Amendment, no separate Interview Summary Record is required.

The Interview Summary Form shall be given an appropriate Paper No., placed in the right hand portion of the file, and listed on the "Contents" section of the file wrapper. In a personal interview, a duplicate of the Form is given to the applicant (or attorney or agent) at the conclusion of the interview. In the case of a telephone or video-conference interview, the copy is mailed to the applicant's correspondence address either with or prior to the next official communication. If additional correspondence from the examiner is not likely before an allowance or if other circumstances dictate, the Form should be mailed promptly after the interview rather than with the next official communication.

The Form provides for recordation of the following information:

- Application Number (Series Code and Serial Number)
- Name of applicant
- Name of examiner
- Date of interview
- Type of interview (telephonic, video-conference, or personal)
- Name of participant(s) (applicant, attorney or agent, examiner, other PTO personnel, etc.)
- An indication whether or not an exhibit was shown or a demonstration conducted
- An identification of the specific prior art discussed
- An indication whether an agreement was reached and if so, a description of the general nature of the agreement (may be by attachment of a copy of amendments or claims agreed as being allowable). Note: Agreement as to allowability is tentative and does not restrict further action by the examiner to the contrary.
- The signature of the examiner who conducted the interview (if Form is not an attachment to a signed Office action)

It is desirable that the examiner orally remind the applicant of his or her obligation to record the substance of the interview of each case. It should be noted, however, that the Interview Summary Form will not normally be considered a complete and proper recordation of the interview unless it includes, or is supplemented by the applicant or the examiner to include, all of the applicable items required below concerning the substance of the interview.

A complete and proper recordation of the substance of any interview should include at least the following applicable items:

- 1) A brief description of the nature of any exhibit shown or any demonstration conducted,
- 2) an identification of the claims discussed,
- 3) an identification of the specific prior art discussed,
- 4) an identification of the principal proposed amendments of a substantive nature discussed, unless these are already described on the Interview Summary Form completed by the Examiner,
- 5) a brief identification of the general thrust of the principal arguments presented to the examiner,  
(The identification of arguments need not be lengthy or elaborate. A verbatim or highly detailed description of the arguments is not required. The identification of the arguments is sufficient if the general nature or thrust of the principal arguments made to the examiner can be understood in the context of the application file. Of course, the applicant may desire to emphasize and fully describe those arguments which he or she feels were or might be persuasive to the examiner.)
- 6) a general indication of any other pertinent matters discussed, and
- 7) if appropriate, the general results or outcome of the interview unless already described in the Interview Summary Form completed by the examiner.

Examiners are expected to carefully review the applicant's record of the substance of an interview. If the record is not complete and accurate, the examiner will give the applicant an extendable one month time period to correct the record.

### Examiner to Check for Accuracy

If the claims are allowable for other reasons of record, the examiner should send a letter setting forth the examiner's version of the statement attributed to him or her. If the record is complete and accurate, the examiner should place the indication, "Interview Record OK" on the paper recording the substance of the interview along with the date and the examiner's initials.

**REQUEST FOR CONTINUED EXAMINATION(RCE)TRANSMITTAL  
 (Submitted Only via EFS-Web)**

Application Number	10800295	Filing Date	2004-03-12	Docket Number (if applicable)	04-225	Art Unit	3696
First Named Inventor	Scott F. Singer			Examiner Name	Chia-Yi Liu		

**This is a Request for Continued Examination (RCE) under 37 CFR 1.114 of the above-identified application.**  
 Request for Continued Examination (RCE) practice under 37 CFR 1.114 does not apply to any utility or plant application filed prior to June 8, 1995, or to any design application. The Instruction Sheet for this form is located at WWW.USPTO.GOV

**SUBMISSION REQUIRED UNDER 37 CFR 1.114**

Note: If the RCE is proper, any previously filed unentered amendments and amendments enclosed with the RCE will be entered in the order in which they were filed unless applicant instructs otherwise. If applicant does not wish to have any previously filed unentered amendment(s) entered, applicant must request non-entry of such amendment(s).

- Previously submitted. If a final Office action is outstanding, any amendments filed after the final Office action may be considered as a submission even if this box is not checked.
- Consider the arguments in the Appeal Brief or Reply Brief previously filed on \_\_\_\_\_
- Other \_\_\_\_\_
- Enclosed
- Amendment/Reply
- Information Disclosure Statement (IDS)
- Affidavit(s)/ Declaration(s)
- Other \_\_\_\_\_

**MISCELLANEOUS**

- Suspension of action on the above-identified application is requested under 37 CFR 1.103(c) for a period of months \_\_\_\_\_  
 (Period of suspension shall not exceed 3 months; Fee under 37 CFR 1.17(i) required)
- Other \_\_\_\_\_

**FEES**

- The RCE fee under 37 CFR 1.17(e) is required by 37 CFR 1.114 when the RCE is filed.**  
 The Director is hereby authorized to charge any underpayment of fees, or credit any overpayments, to  
 Deposit Account No 132490

**SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT REQUIRED**

- Patent Practitioner Signature
- Applicant Signature

Doc code: RCEX

Doc description: Request for Continued Examination (RCE)

PTO/SB/30EFS (07-09)

Approved for use through 07/31/2012. OMB 0651-0031

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Signature of Registered U.S. Patent Practitioner			
Signature	/Thomas J. Loos/	Date (YYYY-MM-DD)	2009-11-19
Name	Thomas J. Loos	Registration Number	60161

This collection of information is required by 37 CFR 1.114. 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 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.

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

## Privacy Act Statement

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.

The information provided by you in this form will be subject to the following routine uses:

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 the Freedom of Information Act requires disclosure of these records.
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 inspections 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.



**PATENT**

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**  
**(Case No. 04-225)**

In re Application of:	)	
Scott F. Singer et al.	)	Group Art Unit: 3696
	)	
Serial No.: 10/800,295	)	Confirmation No.: 8245
	)	
Filed: March 12, 2004	)	Examiner: Liu, Chia-Yi
	)	

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

**RESPONSE FILED WITH REQUEST FOR CONTINUED EXAMINATION**

Dear Examiner:

Responsive to the Final Office Action mailed August 25, 2009 (“Office Action”), Applicants provide the following remarks filed with a Request for Continued Examination (RCE):

Listing of the Claims begins on page 2;  
Remarks begin on page 7 of this response.

### Listing of claims

1-27. (Cancelled)

28. (Previously Presented) A method for displaying market information on a graphical user interface, the method comprising:

receiving by a computing device a current highest bid price and a current lowest ask price for a tradeable object from an electronic exchange;

identifying by the computing device a long or short position taken by a user with respect to the tradeable object, wherein the long position is associated with a quantity of the tradeable object that has been bought by the user at a price, and wherein the short position is associated with a quantity of the tradeable object that has been sold by the user at a price;

computing by the computing device a plurality of values based on the long or short position, wherein each of the plurality of values represents a profit or loss if the long or short position is closed at a price level among a range of price levels for the tradeable object;

displaying via a the computing device the plurality of values along a value axis;

displaying via the computing device a first indicator at a first location corresponding to a first value along the value axis, wherein the first indicator represents a particular price based on any of the following prices: current best bid, current best ask, and a last traded price, and wherein the first value represents a profit or loss incurred by the user if the long or short position is closed at the particular price; and

moving the first indicator relative to the value axis to a second location corresponding to a second value along the value axis responsive to receipt of an update to the particular price, wherein the second value represents a profit or loss incurred by the user if the position is closed at the update to the particular price.

29. (Previously Presented) The method of claim 28, further comprising an order entry region in alignment with the value axis, the order entry region comprising a plurality of locations for receiving commands to send orders, each location corresponding to a value along the value axis.

30. (Previously Presented) The method of claim 29, further comprising:

in response to a selection of a location of the order entry region by a single action of a user input device, setting an order price based on the selected location.

31. (Previously Presented) The method of claim 28, further comprising displaying the range of price levels along the value axis, wherein each price level of the range of price levels corresponds to a different value along the value axis.

32. (Previously Presented) The method of claim 28, further comprising graphically indicating on the value axis whether a particular value of the plurality of values represents a profit or a loss.

33. (Previously Presented) The method of claim 28, wherein each of the plurality of values comprises a number to indicate a profit or loss.

34. (Previously Presented) The method of claim 28, wherein each of the plurality of values comprises a plus or minus sign to indicate a profit or loss.

35. (Previously Presented) The method of claim 28, wherein the user represents a single trader.

36. (Previously Presented) The method of claim 28, further comprising receiving a re-positioning command.

37. (Previously Presented) The method of claim 28, further comprising:  
identifying a new long or short position taken by the user with respect to the tradeable object, wherein the new long or short position is associated with a second quantity of the tradeable object that has been bought or sold by the user at a second price;  
computing a second plurality of values based on the new long or short position, wherein each of the second plurality of values represents a profit or loss if the new long or short position is closed at a price level among the range of price levels; and  
displaying via a computing device the second plurality of values along a value axis.

38. (Previously Presented) The method of claim 28, further comprising:

displaying via the computing device a second indicator at a third location corresponding to a third value along the value axis, wherein the second indicator represents a second particular price based on any of the following prices: current best bid, current best ask, and the last traded price, wherein the third value represents a profit or loss incurred by the user if the position is closed at the second particular price, and wherein the second particular price of the second indicator is different than the price of the first indicator; and

moving the second indicator relative to the value axis to a fourth location corresponding to a fourth value along the value axis responsive to receipt of an update to the second price, wherein the fourth value represents a profit or loss incurred by the user if the position is closed at the update to the second price.

39. (Previously Presented) A computer readable medium having program code recorded thereon for execution on a computer, the program code causing a machine to perform the method comprising:

receiving a current highest bid price and a current lowest ask price for a tradeable object from an electronic exchange;

identifying a long or short position taken by a user with respect to the tradeable object, wherein the long position is associated with a quantity of the tradeable object that has been bought by the user at a price, and wherein the short position is associated with a quantity of the tradeable object that has been sold by the user at a price;

computing a plurality of values based on the long or short position, wherein each of the plurality of values represents a profit or loss if the long or short position is closed at a price level among a range of price levels for the tradeable object;

displaying via a computing device the plurality of values along a value axis;  
displaying via the computing device a first indicator at a first location corresponding to a first value along the value axis, wherein the first indicator represents a particular price based on any of the following prices: current best bid, current best ask, and a last traded price, and wherein the first value represents a profit or loss incurred by the user if the long or short position is closed at the particular price; and

moving the first indicator relative to the value axis to a second location corresponding to a second value along the value axis responsive to receipt of an update to the price, wherein the second value represents a profit or loss incurred by the user if the position is closed at the update to the particular price.

40. (Previously Presented) The computer readable medium of claim 39, further comprising an order entry region in alignment with the value axis, the order entry region comprising a plurality of locations for receiving commands to send orders, each location corresponding to a value along the value axis.

41. (Previously Presented) The computer readable medium of claim 40, further comprising: in response to a selection of a location of the order entry region by a single action of a user input device, setting an order price based on the selected location.

42. (Previously Presented) The computer readable medium of claim 39, further comprising displaying the range of price levels along the value axis, wherein each price level of the range of price levels corresponds to a different value along the value axis.

43. (Previously Presented) The computer readable medium of claim 39, further comprising graphically indicating on the value axis whether a particular value of the plurality of values represents a profit or a loss.

44. (Previously Presented) The computer readable medium of claim 39, wherein each of the plurality of values comprises a number to indicate a profit or loss.

45. (Previously Presented) The computer readable medium of claim 39, wherein each of the plurality of values comprises a plus or minus sign to indicate a profit or loss.

46. (Previously Presented) The computer readable medium of claim 39, wherein the user represents a single trader.

47. (Previously Presented) The computer readable medium of claim 39, further comprising receiving a re-positioning command.

48. (Previously Presented) The computer readable medium of claim 39, further comprising:  
identifying a new long or short position taken by the user with respect to the tradeable object, wherein the new long or short position is associated with a second quantity of the tradeable object that has been bought or sold by the user at a second price;  
computing a second plurality of values based on the new long or short position, wherein each of the second plurality of values represents a profit or loss if the new long or short position is closed at a price level among the range of price levels; and  
displaying via a computing device the second plurality of values along a value axis.

49. (Previously Presented) The computer readable medium of claim 39, further comprising:  
displaying via the computing device a second indicator at a third location corresponding to a third value along the value axis, wherein the second indicator represents a second particular price based on any of the following prices: current best bid, current best ask, and the last traded price, wherein the third value represents a profit or loss incurred by the user if the position is closed at the second particular price, and wherein the second particular price of the second indicator is different than the price of the first indicator; and  
moving the second indicator relative to the value axis to a fourth location corresponding to a fourth value along the value axis responsive to receipt of an update to the second price, wherein the fourth value represents a profit or loss incurred by the user if the position is closed at the update to the second price.

## Remarks

### I. Status of the Claims

Claims 28-49 are currently pending. No amendments have been made.

### II. Interview

Applicants thank Examiners Liu and Kazimi for the courtesies extended during the telephone interview on November 18, 2009 with Applicants' representative, Monika Dudek. During the interview, Applicants' representative and Examiners discussed the rejections, and Examiners agreed to review the presently pending claims in view of the discussion and the arguments presented herein.

### III. Interview Request Prior to Mailing of Office Action

If the Examiner chooses to mail an office action in response to Applicant's remarks herein, Applicant believes that an interview prior to mailing such an office action will help achieve a mutual understanding of the terminology recited in the claims and advance prosecution of the application. Applicant requests the Examiner to contact Applicant's representative, Monika Dudek, at 312-476-1118 to schedule a time convenient for the Examiner prior to the mailing of a future office action.

### IV. Rejection under 35 U.S.C. §112, first paragraph

On page 2 of the Office Action, the Office rejected Claims 28-49 under 35 U.S.C. §112, first paragraph, for allegedly failing to comply with the written description requirement. More specifically, the Office contends that Applicants' disclosure does not sufficiently describe a number of elements of the claims. This contention is respectfully traversed.

Applicants respectfully submit that when a disclosure describes a claimed invention in a manner that permits one skilled in the art to reasonably conclude that the inventor possessed the claimed invention, the written description requirement is satisfied. (MPEP §2163). This possession may be shown in any number of ways and an applicant need not describe every claim feature exactly because there is no in haec verba requirement. (MPEP §2163). Rather, to satisfy

the written description requirement, all that is required is “reasonable clarity.” (MPEP §2163.02).

Applicants respectfully submit that one of ordinary skill in the art would reasonably conclude that Applicants’ disclosure adequately describes the claimed invention at least based on the following reasons:

a. Identifying a Long or Short Position Taken by a User

Applicants respectfully submit that one of ordinary skill in the art would reasonable conclude that Applicants’ disclosure provided at least in relation to the example on page 30 of Applicants’ specification adequately describes the feature of “identifying a long or short position taken by a user (...).”

According to Claim 28, the “long position” is associated with “a quantity of the tradeable object that has been bought by the user at a price,” and the “short position” is associated with “a quantity of the tradeable object that has been sold by the user at a price.”

The example at page 30 of Applicants’ specification is directed to using profit and loss, or P/L, as a derivative of price. As explained during the interview, a trader may buy a quantity of a product to create a “long position,” and sell a quantity of a product to create a “short position.” While Applicants’ specification provides the example of generating profit or loss while buying one lot of a tradeable object, and then selling one lot of the tradeable object, Applicants respectfully submit that one of ordinary skill in the art would understand that the terms “long position” and “short position” are not limited to buying one lot and selling one lot.

b. Computing a Plurality of Values Based on the Position

The feature of “computing a plurality of values based on the long or short position, wherein each of the plurality of the plurality of values represents a profit or loss if the long or short position is closed at a price level,” as claimed in Applicants’ Claim 28, is described at page 30 of Applicants’ specification as filed. More specifically, as described in the specification and explained during the interview, if a trader buys one lot of a particular tradeable object at “230,” thus creating a net position of “+1,” the value axis might include a value of “0” associated with the price of “230.” In other words, the value of “0” indicates the gross profit to be acquired if one lot of the tradeable object was sold, i.e., “the long position was closed,” at the associated



price, i.e., at the price of “230.” Similarly, the value axis might include “+1” associated with “231,” e.g., if one lot was sold at “231,” “+2” associated with “232,” e.g., if one lot was sold at “232,” and “-1” associated with “229,” e.g., if one lot was sold at “229,” and “-2” associated with “228,” e.g., if one lot was sold at “228.” Thus, Applicants respectfully submit that one of ordinary skill in the art would reasonably conclude that Applicants’ disclosure adequately describes the aforementioned feature.

c. Displaying a First Indicator Corresponding to a First Value

As explained during the interview, the feature of displaying indicators along the value axis, such as the current best bid indicator or the current best ask indicator, is described in relation to multiple figures of Applicants’ specification as filed. For example, Figure 8 illustrates the current best bid indicator “15” at the price of “230,” and the current best ask indicator at the price of “232.” (See also, page 30 of Applicants’ specification as filed). As explained at page 30, in the embodiment where P/L values are mapped to a value axis, the value axis might include a value of “0” associated with the price of “230,” as well as other values, as explained in the previous section. In such an embodiment, for example, if the current best bid is at the price of “230” corresponding to the value of “0” according to the provided example, a best bid indicator (“a first indicator”) may be displayed at a “first location” corresponding to the “first value” along the “value axis.” While the indicator is displayed in relation to the value axis, the value corresponding to the location of the indicator represents “a profit or loss incurred by the user if the long or short position is closed at the particular price.”

Accordingly, Applicants respectfully submit that the written description requirement is satisfied with respect to all features of the currently pending claims.

V. Rejection under 35 U.S.C. §112, second paragraph

Claims 28-49 are rejected under 35 U.S.C. §112, second paragraph, as being allegedly indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Applicants traverse the rejections.

Applicants respectfully submit that the essential question under 35 U.S.C. §112, second paragraph, is whether the claims do, in fact, set out and circumscribe a particular area with a reasonable degree of precision and particularity. Definiteness of claim language is analyzed, not

in a vacuum, but always in light of the teachings of the prior art and of the particular application disclosure as it would be interpreted by one possessing the ordinary level of skill in the pertinent art. (MPEP 2173.02).

As explained above and during the interview, Applicants respectfully submit that one of ordinary skill in the art would understand the meaning of a “short position,” a “long position,” and a “closed position.” Thus, Applicants respectfully request reconsideration and removal of the rejections.

VI. Conclusion

Applicant respectfully submits that pending Claims 28-49 are in condition for allowance. Applicants request favorable reconsideration. If Examiner believes that further dialog would expedite consideration of the application, Examiner is invited to contact Trading Technologies Patent Counsel Monika Dudek at 312-476-1118, or the undersigned attorney or agent.

Respectfully submitted,

Date: November 19, 2009

By: /Thomas J. Loos/  
Thomas J. Loos  
Reg. No. 60,161

## Electronic Patent Application Fee Transmittal

<b>Application Number:</b>	10800295			
<b>Filing Date:</b>	12-Mar-2004			
<b>Title of Invention:</b>	System and method for displaying order information in relation to a derivative of price			
<b>First Named Inventor/Applicant Name:</b>	Scott F. Singer			
<b>Filer:</b>	Thomas J. Loos			
<b>Attorney Docket Number:</b>	04-225			
Filed as Large Entity				
<b>Utility under 35 USC 111(a) Filing Fees</b>				
<b>Description</b>	<b>Fee Code</b>	<b>Quantity</b>	<b>Amount</b>	<b>Sub-Total in USD(\$)</b>
<b>Basic Filing:</b>				
<b>Pages:</b>				
<b>Claims:</b>				
<b>Miscellaneous-Filing:</b>				
<b>Petition:</b>				
<b>Patent-Appeals-and-Interference:</b>				
<b>Post-Allowance-and-Post-Issuance:</b>				
<b>Extension-of-Time:</b>				

Description	Fee Code	Quantity	Amount	Sub-Total in USD(\$)
<b>Miscellaneous:</b>				
Request for continued examination	1801	1	810	810
<b>Total in USD (\$)</b>				<b>810</b>

## Electronic Acknowledgement Receipt

<b>EFS ID:</b>	6490712
<b>Application Number:</b>	10800295
<b>International Application Number:</b>	
<b>Confirmation Number:</b>	8245
<b>Title of Invention:</b>	System and method for displaying order information in relation to a derivative of price
<b>First Named Inventor/Applicant Name:</b>	Scott F. Singer
<b>Customer Number:</b>	39310
<b>Filer:</b>	Thomas J. Loos
<b>Filer Authorized By:</b>	
<b>Attorney Docket Number:</b>	04-225
<b>Receipt Date:</b>	19-NOV-2009
<b>Filing Date:</b>	12-MAR-2004
<b>Time Stamp:</b>	17:53:31
<b>Application Type:</b>	Utility under 35 USC 111(a)

### Payment information:

Submitted with Payment	yes
Payment Type	Deposit Account
Payment was successfully received in RAM	\$810
RAM confirmation Number	4586
Deposit Account	132490
Authorized User	

The Director of the USPTO is hereby authorized to charge indicated fees and credit any overpayment as follows:

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Charge any Additional Fees required under 37 C.F.R. Section 1.19 (Document supply fees)

Charge any Additional Fees required under 37 C.F.R. Section 1.21 (Miscellaneous fees and charges)

**File Listing:**

Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1	Request for Continued Examination (RCE)	04-225_RCE_111909.pdf	1046572 31ff1c3a1331119db58987c701c8b094712a c734	no	3

**Warnings:**

**Information:**

2		04-225_response_with_RCE_111909.pdf	123701 72b0f0b90501f8d848457a7c0f1552bbe5e c662	yes	10
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**Multipart Description/PDF files in .zip description**

Document Description	Start	End
Amendment Submitted/Entered with Filing of CPA/RCE	1	1
Claims	2	6
Applicant Arguments/Remarks Made in an Amendment	7	10

**Warnings:**

**Information:**

3	Fee Worksheet (PTO-875)	fee-info.pdf	29589 464535ce69290bb0c62623b57d678a0c8d5 07fbc	no	2
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**Warnings:**

**Information:**

<b>Total Files Size (in bytes):</b>			1199862		
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**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 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.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

<b>PATENT APPLICATION FEE DETERMINATION RECORD</b> Substitute for Form PTO-875					Application or Docket Number <b>10/800,295</b>	Filing Date <b>03/12/2004</b>	<input type="checkbox"/> To be Mailed			
<b>APPLICATION AS FILED – PART I</b>										
(Column 1)			(Column 2)		SMALL ENTITY <input checked="" type="checkbox"/>	OR	OTHER THAN SMALL ENTITY			
FOR	NUMBER FILED	NUMBER EXTRA	RATE (\$)	FEE (\$)	OR	RATE (\$)	FEE (\$)			
<input type="checkbox"/> BASIC FEE <small>(37 CFR 1.16(a), (b), or (c))</small>	N/A	N/A	N/A			N/A				
<input type="checkbox"/> SEARCH FEE <small>(37 CFR 1.16(k), (l), or (m))</small>	N/A	N/A	N/A			N/A				
<input type="checkbox"/> EXAMINATION FEE <small>(37 CFR 1.16(o), (p), or (q))</small>	N/A	N/A	N/A			N/A				
TOTAL CLAIMS <small>(37 CFR 1.16(i))</small>	minus 20 =	*	X \$ =			X \$ =				
INDEPENDENT CLAIMS <small>(37 CFR 1.16(h))</small>	minus 3 =	*	X \$ =			X \$ =				
<input type="checkbox"/> APPLICATION SIZE FEE <small>(37 CFR 1.16(s))</small>	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).									
<input type="checkbox"/> MULTIPLE DEPENDENT CLAIM PRESENT <small>(37 CFR 1.16(j))</small>										
* If the difference in column 1 is less than zero, enter "0" in column 2.			TOTAL			TOTAL				
<b>APPLICATION AS AMENDED – PART II</b>										
(Column 1)		(Column 2)		(Column 3)		SMALL ENTITY	OR	OTHER THAN SMALL ENTITY		
<b>AMENDMENT</b>	<b>11/19/2009</b>	CLAIMS REMAINING AFTER AMENDMENT		HIGHEST NUMBER PREVIOUSLY PAID FOR	PRESENT EXTRA	RATE (\$)	ADDITIONAL FEE (\$)	RATE (\$)	ADDITIONAL FEE (\$)	
	Total <small>(37 CFR 1.16(i))</small>	* 22	Minus	** 27	= 0	X \$26 =	0	OR	X \$ =	
	Independent <small>(37 CFR 1.16(h))</small>	* 2	Minus	***3	= 0	X \$110 =	0	OR	X \$ =	
	<input type="checkbox"/> Application Size Fee <small>(37 CFR 1.16(s))</small>									
	<input type="checkbox"/> FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM <small>(37 CFR 1.16(j))</small>									
					TOTAL ADD'L FEE	<b>0</b>		OR	TOTAL ADD'L FEE	
<b>AMENDMENT</b>	Total <small>(37 CFR 1.16(i))</small>	*	Minus	**	=	X \$ =		OR	X \$ =	
	Independent <small>(37 CFR 1.16(h))</small>	*	Minus	***	=	X \$ =		OR	X \$ =	
	<input type="checkbox"/> Application Size Fee <small>(37 CFR 1.16(s))</small>									
	<input type="checkbox"/> FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM <small>(37 CFR 1.16(j))</small>									
						TOTAL ADD'L FEE			OR	TOTAL ADD'L FEE
* If the entry in column 1 is less than the entry in column 2, write "0" in column 3.					<b>Legal Instrument Examiner:</b>					
** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 20, enter "20".					//REGINA D. BALTIMORE//					
*** 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.										

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.**

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Table with 5 columns: APPLICATION NO., FILING DATE, FIRST NAMED INVENTOR, ATTORNEY DOCKET NO., CONFIRMATION NO.
Row 1: 10/800,295, 03/12/2004, Scott F. Singer, 04-225, 8245
Row 2: 39310, 7590, 08/25/2009, MBHB/TRADING TECHNOLOGIES, 300 SOUTH WACKER DRIVE, SUITE 3200, CHICAGO, IL 60606, EXAMINER LIU, CHIA-YI, ART UNIT 3696, PAPER NUMBER, NOTIFICATION DATE 08/25/2009, DELIVERY MODE ELECTRONIC

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.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

docketing@mbhb.com
williamsd@mbhb.com



### **DETAILED ACTION**

This action is in response to an amendment submitted 4/28/2009. Applicant has amended Claims 28, 37-39 and 48-49. After careful consideration of Applicant's amendments and arguments, new grounds of rejections for Claims 28-49 have been established as set forth in detail below.

#### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 28-49 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. No amendment shall introduce new matter into the disclosure of the invention. The added material which is not supported by the original disclosure is as follows: "identifying a long or short position taken by a user with respect to a tradable object, wherein a long position is associated with a quantity of the tradable object that has been bought by the user at a price, and wherein a short position is associated with a quantity of the tradable object that has been sold by the user at a price," "computing a plurality of values based on the long or short position, wherein each of the plurality of values represent a profit or loss if the long or short position is closed at a price level," and "the first value represents a profit or loss incurred by the user if the long or short position is closed at the particular price." Applicant's originally filed

specification only teaches "profit and loss values that represent the gross profit acquired if a tradable object is sold at the associated price", see page 30, lines 8-15 of Applicant's specification, and mentions nothing about "displaying indicator that correspond to a value that represents profit or loss incurred by a user if a long or short position is closed at a particular price" or even anything about "taking long and short position". Many dependent claims also have limitations associated with "long and short position" which are not described in the original specification. Removal of all the new matters is required.

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.

Where applicant acts as his or her own lexicographer to specifically define a term of a claim contrary to its ordinary meaning, the written description must clearly redefine the claim term and set forth the uncommon definition so as to put one reasonably skilled in the art on notice that the applicant intended to so redefine that claim term. *Process Control Corp. v. HydReclaim Corp.*, 190 F.3d 1350, 1357, 52 USPQ2d 1029, 1033 (Fed. Cir. 1999). The term "short position" in claims 28-49 are used by the claim to mean "selling one lot of tradable object" (as explained by the applicant in the remark sent 4/28/2009, Page 9- (e)), while the accepted meaning of "short position" is "a market position in which the investor has sold a financial instrument that he or she did not previously own, with the expectation of a decrease in value." The terms are indefinite because the specification does not clearly redefine the term.

Claims 28-49 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. It is not clear what the applicant meant by "a profit or loss incurred by the user if the long or short position is closed at the particular price."

(Closed position means the position is no longer available. It is unclear how profit and losses result from not able to buy and sell stocks. If a position is closed, there should not be any profit or loss because a person is unable to buy and sell.) Appropriate correction is required.

### **Response to Arguments**

Applicant argues that “when a trader sells one lot of a tradable object at a specific price”, it means a short position is established and therefore all of applicant’s added limitations regarding “long and short position” are not new matter. The Examiner disagrees. A short position means “the sale of a borrowed security, commodity or currency with the expectation that the asset will fail in value.” For example, an investor who borrows shares of stock from a broker and sells them on the open market is said to have a short position in the stock. Even though applicant’s specification teaches profits and loss, the specification does teach that the profit and loss is caused by taking “long and short positions” in stock and mentions nothing about “identifying a long or short position taken by a user with respect to a tradable object, wherein a long position is associated with a quantity of the tradable object that has been bought by the user at a price, and wherein a short position is associated with a quantity of the tradable object that has been sold by the user at a price,” “computing a plurality of values based on the long or short position, wherein each of the plurality of values represent a profit or loss if the long or short position is closed at a price level,” and “the first value represents a profit or loss incurred by the user if the long or short position is closed at the particular price.” It appears from Applicant's Specification (see at least page 30) that the profit/loss of Applicant's invention is calculated by the difference between buying price and the selling price (when the object is later sold to others). The specification does not teach “selling financial instrument that the seller does not own at the time of sale” (short position) or “displaying indicator that present profit/loss if a long/short position is closed

(no longer available) at a particular price.” Therefore, Applicant’s argument is not persuasive.

***Conclusion***

**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.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to CHIA-YI LIU whose telephone number is (571)270-1573. The examiner can normally be reached on Mon-Thur alternating Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner’s supervisor, TOM DIXON can be reached on (571) 272-6803. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Application/Control Number: 10/800,295  
Art Unit: 3696

Page 6

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.

/THOMAS A DIXON/  
Supervisory Patent Examiner, Art Unit 3696

CHIA-YI LIU  
Examiner  
Art Unit 3696

**PATENT**

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**  
**(Case No. 04-225)**

In re Application of:	)	
Scott F. Singer et al.	)	Group Art Unit: 3696
	)	
Serial No.: 10/800,295	)	Confirmation No.: 8245
	)	
Filed: March 12, 2004	)	Examiner: Liu, Chia-Yi
	)	

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

**RESPONSE OF THE OFFICE ACTION**  
**MAILED FEBRUARY 9, 2009**

Dear Examiner:

Responsive to the Office Action mailed February 9, 2009 (“Office Action”), Applicants provide the following amendments and remarks:

Claims begin on page 2 and

Remarks begin on page 7 of this response.



### Listing of claims

1-27. (Cancelled)

28. (Currently Amended) A method for displaying market information on a graphical user interface, the method comprising:

receiving by a computing device a current highest bid price and a current lowest ask price for a tradeable object from an electronic exchange;

identifying by the computing device a long or short position taken by a user with respect to the tradeable object, wherein ~~the~~ a long position is associated with a quantity of the tradeable object that has been bought ~~or sold~~ by the user at a price, and wherein a short position is associated with a quantity of the tradeable object that has been sold by the user at a price;

computing by the computing device a plurality of values based on the long or short position, wherein each of the plurality of values represents a profit or loss if the long or short position is closed at a price level among a range of price levels for the tradeable object;

displaying via ~~a~~ the computing device the plurality of values along a value axis;

displaying via the computing device a first indicator at a first location corresponding to a first value along the value axis, wherein the first indicator represents a particular price based on any of the following prices: current best bid, current best ask, and ~~the~~ a last traded price, and wherein the first value represents a profit or loss incurred by the user if the long or short position is closed at the particular price; and

moving the first indicator relative to the value axis to a second location corresponding to a second value along the value axis responsive to receipt of an update to the particular price, wherein the second value represents a profit or loss incurred by the user if the long or short position is closed at the update to the particular price.

29. (Previously Presented) The method of claim 28, further comprising an order entry region in alignment with the value axis, the order entry region comprising a plurality of locations for receiving commands to send orders, each location corresponding to a value along the value axis.

30. (Previously Presented) The method of claim 29, further comprising:

in response to a selection of a location of the order entry region by a single action of a user input device, setting an order price based on the selected location.

31. (Previously Presented) The method of claim 28, further comprising displaying the range of price levels along the value axis, wherein each price level of the range of price levels corresponds to a different value along the value axis.

32. (Previously Presented) The method of claim 28, further comprising graphically indicating on the value axis whether a particular value of the plurality of values represents a profit or a loss.

33. (Previously Presented) The method of claim 28, wherein each of the plurality of values comprises a number to indicate a profit or loss.

34. (Previously Presented) The method of claim 28, wherein each of the plurality of values comprises a plus or minus sign to indicate a profit or loss.

35. (Previously Presented) The method of claim 28, wherein the user represents a single trader.

36. (Previously Presented) The method of claim 28, further comprising receiving a re-positioning command.

37. (Currently Amended) The method of claim 28, further comprising:

identifying a new long or short position taken by the user with respect to the tradeable object, wherein the new long or short position is associated with a second quantity of the tradeable object that has been bought or sold by the user at a second price;

computing a second plurality of values based on the new long or short position, wherein each of the second plurality of values represents a profit or loss if the new long or short position is closed at a price level among the range of price levels; and

displaying via a computing device the second plurality of values along a value axis.

38. (Currently Amended) The method of claim 28, further comprising:

displaying via the computing device a second indicator at a third location corresponding to a third value along the value axis, wherein the second indicator represents a second particular price based on any of the following prices: current best bid, current best ask, and the last traded price, wherein the third value represents a profit or loss incurred by the user if the long or short position is closed at the second particular price, and wherein the second particular price of the second indicator is different than the price of the first indicator; and

moving the second indicator relative to the value axis to a fourth location corresponding to a fourth value along the value axis responsive to receipt of an update to the second price, wherein the fourth value represents a profit or loss incurred by the user if the long or short position is closed at the update to the second price.

39. (Currently Amended) A computer readable medium having program code recorded thereon for execution on a computer, the program code causing a machine to perform the method comprising:

receiving a current highest bid price and a current lowest ask price for a tradeable object from an electronic exchange;

identifying a long or short position taken by a user with respect to the tradeable object, wherein ~~the~~ a long position is associated with a quantity of the tradeable object that has been bought ~~or sold~~ by the user at a price, and wherein a short position is associated with a quantity of the tradeable object that has been sold by the user at a price;

computing a plurality of values based on the long or short position, wherein each of the plurality of values represents a profit or loss if the long or short position is closed at a price level among a range of price levels for the tradeable object;

displaying via a computing device the plurality of values along a value axis;  
displaying via the computing device a first indicator at a first location corresponding to a first value along the value axis, wherein the first indicator represents a particular price based on any of the following prices: current best bid, current best ask, and ~~the~~ a last traded price, and wherein the first value represents a profit or loss incurred by the user if the long or short position is closed at the particular price; and

moving the first indicator relative to the value axis to a second location corresponding to a second value along the value axis responsive to receipt of an update to the price, wherein the second value represents a profit or loss incurred by the user if the long or short position is closed at the update to the particular price.

40. (Previously Presented) The computer readable medium of claim 39, further comprising an order entry region in alignment with the value axis, the order entry region comprising a plurality of locations for receiving commands to send orders, each location corresponding to a value along the value axis.

41. (Previously Presented) The computer readable medium of claim 40, further comprising: in response to a selection of a location of the order entry region by a single action of a user input device, setting an order price based on the selected location.

42. (Previously Presented) The computer readable medium of claim 39, further comprising displaying the range of price levels along the value axis, wherein each price level of the range of price levels corresponds to a different value along the value axis.

43. (Previously Presented) The computer readable medium of claim 39, further comprising graphically indicating on the value axis whether a particular value of the plurality of values represents a profit or a loss.

44. (Previously Presented) The computer readable medium of claim 39, wherein each of the plurality of values comprises a number to indicate a profit or loss.

45. (Previously Presented) The computer readable medium of claim 39, wherein each of the plurality of values comprises a plus or minus sign to indicate a profit or loss.

46. (Previously Presented) The computer readable medium of claim 39, wherein the user represents a single trader.

47. (Previously Presented) The computer readable medium of claim 39, further comprising receiving a re-positioning command.

48. (Currently Amended) The computer readable medium of claim 39, further comprising:  
identifying a new long or short position taken by the user with respect to the tradeable object, wherein the new long or short position is associated with a second quantity of the tradeable object that has been bought or sold by the user at a second price;  
computing a second plurality of values based on the new long or short position, wherein each of the second plurality of values represents a profit or loss if the new long or short position is closed at a price level among the range of price levels; and  
displaying via a computing device the second plurality of values along a value axis.

49. (Currently Amended) The computer readable medium of claim 39, further comprising:  
displaying via the computing device a second indicator at a third location corresponding to a third value along the value axis, wherein the second indicator represents a second particular price based on any of the following prices: current best bid, current best ask, and the last traded price, wherein the third value represents a profit or loss incurred by the user if the long or short position is closed at the second particular price, and wherein the second particular price of the second indicator is different than the price of the first indicator; and  
moving the second indicator relative to the value axis to a fourth location corresponding to a fourth value along the value axis responsive to receipt of an update to the second price, wherein the fourth value represents a profit or loss incurred by the user if the long or short position is closed at the update to the second price.

## Remarks

### I. Status of the Claims

Claims 28-49 are currently pending. In the interest of expediting prosecution and per the Office's guidelines with respect to *In re Bilski*, Applicants have amended independent Claim 28 to more clearly recite that the claims are tied to another statutory class. In addition, Applicants respectfully submit that the claims transform underlying subject matter. Additionally, Applicants have amended Claims 28, 37-39, and 48-49 to further clarify the claimed embodiment.

Support for the amendments can be found throughout the application and therefore no new matter is added in this response.

### II. Rejection under 35 U.S.C. §112, first paragraph

On page 2 of the Office Action, the Office rejected Claims 28-49 under 35 U.S.C. §112, first paragraph, for allegedly failing to comply with the written description requirement. More specifically, the Office contends that Applicants' disclosure does not sufficiently describe a number of elements of the claims. This contention is respectfully traversed. Additionally, Applicants respectfully submit that the currently pending claims were amended, as shown above, to further clarify the claimed embodiment.

Applicants respectfully submit that when a disclosure describes a claimed invention in a manner that permits one skilled in the art to reasonably conclude that the inventor possessed the claimed invention, the written description requirement is satisfied. (MPEP §2163). This possession may be shown in any number of ways and an applicant need not describe every claim feature exactly because there is no *in haec verba* requirement. (MPEP §2163). Rather, to satisfy the written description requirement, all that is required is "reasonable clarity." (MPEP §2163.02).

Applicants respectfully submit that one of ordinary skill in the art would reasonably conclude that Applicants' disclosure adequately described the claimed invention at the time of filing at least based on the following.

a. Identifying a Position by a User

The feature of “identifying a position by a user ...” is described at page 30 of Applicants’ specification as filed. Applicants respectfully note that Claim 28 was amended to further clarify the claimed invention, as shown above, and currently recites “identifying ... a long or short position.” According to amended Claim 28, the “long position” is associated with “a quantity of the tradeable object that has been bought by the user at a price,” and the “short position” is associated with “a quantity of the tradeable object that has been sold by the user at a price.”

The example at page 30 of Applicants’ specification is directed to P/L being a derivative of price. According to the provided example, a trader has bought one lot of a particular tradeable object at the price of “230.” Applicants respectfully submit that one of ordinary skill in the art would understand that buying one lot of a tradeable object creates a long position that is “taken by a user with respect to the tradeable object,” as recited by Applicants’ Claim 1, and “wherein the position is associated with a quantity of the tradeable object that has been bought or sold by the user at a price,” i.e., according to the provided example, one lot of the tradeable object was bought at the price of “230.”

b. Computing a Plurality of Values Based on the Position

The feature of “computing a plurality of values based on the long or short position, wherein each of the plurality of the plurality of values represents a profit or loss if the long or short position is closed at a price level,” per amended Claim 28, is also described at page 30 of Applicants’ specification as filed. More specifically, as described in the specification, if a trader has bought one lot of a particular tradeable object at “230,” thus creating a net position of “+1,” the value axis might include a value of “0” associated with the price of “230.” In other words, the value of “0” indicates the gross profit to be acquired if one lot of the tradeable object was sold, i.e., “the long position was closed,” at the associated price, i.e., at the price of “230.” Similarly, the value axis might include “+1” associated with “231,” e.g., if one lot was sold at “231,” “+2” associated with “232,” e.g., if one lot was sold at “232,” and “-1” associated with “229,” e.g., if one lot was sold at “229,” and “-2” associated with “228,” e.g., if one lot was sold at “228.”

c. Displaying a First Indicator Corresponding to a First Value

The feature of displaying indicators along the value axis, such as the current best bid indicator or the current best ask indicator, is described in relation to multiple figures of Applicants' specification as filed. For example, Figure 8 illustrates the current best bid indicator "15" at the price of "230," and the current best ask indicator at the price of "232." (See also, page 30 of Applicants' specification as filed). As explained at page 30, in the embodiment where P/L values are mapped to a value axis, the value axis might include a value of "0" associated with the price of "230," as well as other values, as explained in the previous section.

d. Moving the First Indicator Relative to the Value Axis

The feature of moving indicators relative to the value axis is described in relation to Figure 2 of Applicants' specification as filed. (See, also, page 3 of Applicants' specification). Additional description of the screen can be found in U.S. Patent Application No. 09/590,692 (now U.S. Patent No. 6,772,132) and U.S. Patent Application No. 09/589,751 (now, U.S. Patent No. 6,938,011), both of which were incorporated by reference in Applicants' specification. (See, e.g., Applicants' specification page 7).

e. Position

The Office asserts that page 27 is the only place in Applicants' specification that mentions a "position." Furthermore, the "position" described on page 27 is related to a position of a cursor on a screen. Thus, the Office asserts that "a position associated with a quantity of the tradeable object that has been bought or sold by the user at a price" is the new matter. Applicants amended the currently pending claims to more clearly recite the claimed invention. Applicants respectfully traverse the rejection and submit that one of ordinary skill in the art would understand that when a trader buys one lot of a tradeable object, as explained on page 30 of Applicants' specification as filed, as well as the preceding sections, a long position of "+1" is established. Similarly, when a trader sells one lot of the tradeable object at a specific price, a short position of "-1" is established. Thus, Applicants respectfully submit that the disclosure describes the claimed invention in a manner that permits one skilled in the art to reasonably conclude that the inventor possessed the claimed invention at the time of filing of the application.



Accordingly, Applicants respectfully submit that the written description requirement is satisfied with respect to all features of the currently pending claims.

III. Rejection under 35 U.S.C. §112, second paragraph

Claims 28-49 are rejected under 35 U.S.C. §112, second paragraph, as being allegedly indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Applicants respectfully submit that the essential question under 35 U.S.C. §112, second paragraph, is whether the claims do, in fact, set out and circumscribe a particular area with a reasonable degree of precision and particularity. Definiteness of claim language is analyzed, not in a vacuum, but always in light of the teachings of the prior art and of the particular application disclosure as it would be interpreted by one possessing the ordinary level of skill in the pertinent art. (MPEP 2173.02).

The Office asserts that “if a position has already been taken [in association with a quantity of the tradeable object] and it is associated with something that has already been bought or sold at a price by the user, it is unclear what the Applicant meant by the position is closed at a price level.” Applicants respectfully traverse the rejection and refer the Office to the discussion of creating and closing long and short positions taken by a user in the preceding section. Additionally, Applicants respectfully submit that the claimed embodiment is even clearer based on the current amendment. Applicants respectfully submit that one of ordinary skill in the art of trading would understand that a trader can create a long or short position by buying or selling a quantity of a tradeable object, and that the trader can close the created position by selling or buying the same quantity, respectively. Thus, Applicants respectfully request reconsideration.

VI. Conclusion

Applicant respectfully submits that pending Claims 28-49 are in condition for allowance. Applicants request favorable reconsideration. If Examiner believes that further dialog would expedite consideration of the application, Examiner is invited to contact Trading Technologies Patent Counsel Monika Dudek at 312-476-1118, or the undersigned attorney or agent.

Respectfully submitted,

Date: April 28, 2009

By: /Thomas J. Loos/  
Thomas J. Loos  
Reg. No. 60,161

## Electronic Acknowledgement Receipt

<b>EFS ID:</b>	5231372
<b>Application Number:</b>	10800295
<b>International Application Number:</b>	
<b>Confirmation Number:</b>	8245
<b>Title of Invention:</b>	System and method for displaying order information in relation to a derivative of price
<b>First Named Inventor/Applicant Name:</b>	Scott F. Singer
<b>Customer Number:</b>	39310
<b>Filer:</b>	Thomas J. Loos
<b>Filer Authorized By:</b>	
<b>Attorney Docket Number:</b>	04-225
<b>Receipt Date:</b>	28-APR-2009
<b>Filing Date:</b>	12-MAR-2004
<b>Time Stamp:</b>	11:39:13
<b>Application Type:</b>	Utility under 35 USC 111(a)

### Payment information:

Submitted with Payment	no
------------------------	----

### File Listing:

Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1		04-225_NFOAR_022909_as_file d.pdf	111593 b64b8506579d71385985473310a7736031 c3dea0	yes	11

<b>Multipart Description/PDF files in .zip description</b>		
<b>Document Description</b>	<b>Start</b>	<b>End</b>
Amendment/Req. Reconsideration-After Non-Final Reject	1	1
Claims	2	6
Applicant Arguments/Remarks Made in an Amendment	7	11
<b>Warnings:</b>		
<b>Information:</b>		
<b>Total Files Size (in bytes):</b>	111593	
<p><b>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.</b></p> <p><b><u>New Applications Under 35 U.S.C. 111</u></b>  <b>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.</b></p> <p><b><u>National Stage of an International Application under 35 U.S.C. 371</u></b>  <b>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.</b></p> <p><b><u>New International Application Filed with the USPTO as a Receiving Office</u></b>  <b>If a new international application is being filed and the international application includes the necessary components for 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.</b></p>		

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

<b>PATENT APPLICATION FEE DETERMINATION RECORD</b> Substitute for Form PTO-875					Application or Docket Number <b>10/800,295</b>	Filing Date <b>03/12/2004</b>	<input type="checkbox"/> To be Mailed				
<b>APPLICATION AS FILED – PART I</b>					SMALL ENTITY <input checked="" type="checkbox"/> OR		OTHER THAN SMALL ENTITY				
(Column 1)		(Column 2)									
FOR	NUMBER FILED	NUMBER EXTRA			RATE (\$)	FEE (\$)	RATE (\$)	FEE (\$)			
<input type="checkbox"/> BASIC FEE <small>(37 CFR 1.16(a), (b), or (c))</small>	N/A	N/A			N/A		N/A				
<input type="checkbox"/> SEARCH FEE <small>(37 CFR 1.16(k), (l), or (m))</small>	N/A	N/A			N/A		N/A				
<input type="checkbox"/> EXAMINATION FEE <small>(37 CFR 1.16(o), (p), or (q))</small>	N/A	N/A			N/A		N/A				
TOTAL CLAIMS <small>(37 CFR 1.16(i))</small>	minus 20 =	*			X \$ =		X \$ =				
INDEPENDENT CLAIMS <small>(37 CFR 1.16(h))</small>	minus 3 =	*			X \$ =		X \$ =				
<input type="checkbox"/> APPLICATION SIZE FEE <small>(37 CFR 1.16(s))</small>	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).										
<input type="checkbox"/> MULTIPLE DEPENDENT CLAIM PRESENT <small>(37 CFR 1.16(j))</small>											
* If the difference in column 1 is less than zero, enter "0" in column 2.					TOTAL		TOTAL				
<b>APPLICATION AS AMENDED – PART II</b>					SMALL ENTITY OR		OTHER THAN SMALL ENTITY				
(Column 1)		(Column 2)		(Column 3)							
<b>AMENDMENT</b>	<b>04/28/2009</b>	CLAIMS REMAINING AFTER AMENDMENT		HIGHEST NUMBER PREVIOUSLY PAID FOR	PRESENT EXTRA		RATE (\$)	ADDITIONAL FEE (\$)	RATE (\$)	ADDITIONAL FEE (\$)	
	Total <small>(37 CFR 1.16(i))</small>	* 22	Minus	** 27	= 0		X \$26 =	0	OR	X \$ =	
	Independent <small>(37 CFR 1.16(h))</small>	* 2	Minus	***3	= 0		X \$110 =	0	OR	X \$ =	
	<input type="checkbox"/> Application Size Fee <small>(37 CFR 1.16(s))</small>										
	<input type="checkbox"/> FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM <small>(37 CFR 1.16(j))</small>										
					TOTAL ADD'L FEE	<b>0</b>	OR	TOTAL ADD'L FEE			
(Column 1)		(Column 2)		(Column 3)							
<b>AMENDMENT</b>		CLAIMS REMAINING AFTER AMENDMENT		HIGHEST NUMBER PREVIOUSLY PAID FOR	PRESENT EXTRA		RATE (\$)	ADDITIONAL FEE (\$)	RATE (\$)	ADDITIONAL FEE (\$)	
	Total <small>(37 CFR 1.16(i))</small>	*	Minus	**	=		X \$ =		OR	X \$ =	
	Independent <small>(37 CFR 1.16(h))</small>	*	Minus	***	=		X \$ =		OR	X \$ =	
	<input type="checkbox"/> Application Size Fee <small>(37 CFR 1.16(s))</small>										
	<input type="checkbox"/> FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM <small>(37 CFR 1.16(j))</small>										
					TOTAL ADD'L FEE		OR	TOTAL ADD'L FEE			
* If the entry in column 1 is less than the entry in column 2, write "0" in column 3.					Legal Instrument Examiner: /phyllis canty/						
** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 20, enter "20".											
*** 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.											

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.



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Table with 5 columns: APPLICATION NO., FILING DATE, FIRST NAMED INVENTOR, ATTORNEY DOCKET NO., CONFIRMATION NO.
10/800,295 03/12/2004 Scott F. Singer 04-225 8245

39310 7590 02/09/2009
MBHB/TRADING TECHNOLOGIES
300 SOUTH WACKER DRIVE
SUITE 3200
CHICAGO, IL 60606

Table with 1 column: EXAMINER

LIU, CHIA-YI

Table with 2 columns: ART UNIT, PAPER NUMBER

3696

Table with 2 columns: MAIL DATE, DELIVERY MODE

02/09/2009

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.

<b>Office Action Summary</b>	<b>Application No.</b> 10/800,295	<b>Applicant(s)</b> SINGER ET AL.	
	<b>Examiner</b> CHIA-YI LIU	<b>Art Unit</b> 3696	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- 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.
- 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.
- 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).

**Status**

- 1)  Responsive to communication(s) filed on 10/29/2008.
- 2a)  This action is **FINAL**.
- 2b)  This 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) 28-49 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) 28-49 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).
    - 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(s)**

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date <u>10/29/2008</u> . | 6) <input type="checkbox"/> Other: _____  |

### **DETAILED ACTION**

This action is in response to a RCE submitted 10/29/2008. Applicant has canceled Claims 1-27 and added new Claims 28-49. After careful considerations, Claims 28-49 has been rejected as set forth in detail below.

#### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 28-49 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. No amendment shall introduce new matter into the disclosure of the invention. The added material which is not supported by the original disclosure is as follows: "identifying a position taken by a user with respect to the tradeable object, wherein the position is associated with a quantity of the tradeable object that has been bought or sold by the user at a price," "computing a plurality of values based on the position, wherein each of the plurality of values represents a profit or loss if the position is closed at a price level," "displaying a first indicator corresponding to a first value... wherein the first value represents a profit or loss incurred by the user if the position is closed at the price," and "moving the first indicator .....wherein second value represents a profit or loss incurred by the user



Art Unit: 3696

if the position is closed at the update to the price.” (The Examiner notes that the only place "position" was mentioned in Applicant’s Specification is on Page 27, lines 11-12 and it’s talking about position of a cursor and has nothing to do with “a position associated with a quantity of the tradeable object that has been bought or sold by the user at a price.”) Applicant is required to cancel the new matter in the reply to this Office Action.

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 28-49 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. More specifically, independent claim 28 states “identify a position taken by a user... wherein the position is associated with a quantity of the tradeable object that has been bought or sold by the user at a price,” and "plurality of values represents a profit or loss if the position is closed at a price level." If a position has already been taken and it is associated with something that has already been bought or sold at a price by the user, it is unclear what the Applicant meant by the position is “closed” at a price level? Appropriate correction is required.

### ***Conclusion***


Any inquiry concerning this communication or earlier communications from the examiner should be directed to CHIA-YI LIU whose telephone number is (571)270-1573. The examiner can normally be reached on Mon-Thur alternating Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, TOM DIXON can be reached on (571) 272-6803. 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.

/THOMAS A DIXON/  
Supervisory Patent Examiner, Art Unit 3696

CHIA-YI LIU  
Examiner  
Art Unit 3696

<b>Index of Claims</b> 	<b>Application/Control No.</b> 10800295	<b>Applicant(s)/Patent Under Reexamination</b> SINGER ET AL.
	<b>Examiner</b> LIU, CHIA-YI	<b>Art Unit</b> 3609

✓	<b>Rejected</b>
=	<b>Allowed</b>


-	<b>Cancelled</b>
÷	<b>Restricted</b>

N	<b>Non-Elected</b>
I	<b>Interference</b>

A	<b>Appeal</b>
O	<b>Objected</b>

Claims renumbered in the same order as presented by applicant
  CPA
  T.D.
  R.1.47

CLAIM		DATE							
Final	Original	08/23/2007	04/25/2008	01/21/2009					
	1	✓	✓	-					
	2	✓	✓	-					
	3	✓	✓	-					
	4	✓	✓	-					
	5	✓	✓	-					
	6	✓	-	-					
	7	✓	✓	-					
	8	✓	✓	-					
	9	✓	✓	-					
	10	✓	✓	-					
	11	✓	✓	-					
	12	✓	✓	-					
	13	✓	✓	-					
	14	✓	✓	-					
	15	✓	✓	-					
	16	✓	✓	-					
	17	✓	✓	-					
	18	✓	✓	-					
	19	✓	✓	-					
	20	✓	✓	-					
	21	✓	✓	-					
	22	✓	✓	-					
	23	✓	✓	-					
	24	✓	✓	-					
	25	✓	✓	-					
	26	✓	✓	-					
	27	✓	✓	-					
	28			✓					
	29			✓					
	30			✓					
	31			✓					
	32			✓					
	33			✓					
	34			✓					
	35			✓					
	36			✓					

<b>Index of Claims</b>  	<b>Application/Control No.</b> 10800295	<b>Applicant(s)/Patent Under Reexamination</b> SINGER ET AL.
	<b>Examiner</b> LIU, CHIA-YI	<b>Art Unit</b> 3609

✓	<b>Rejected</b>
=	<b>Allowed</b>

-	<b>Cancelled</b>
÷	<b>Restricted</b>

N	<b>Non-Elected</b>
I	<b>Interference</b>

A	<b>Appeal</b>
O	<b>Objected</b>

Claims renumbered in the same order as presented by applicant
  CPA
  T.D.
  R.1.47

CLAIM		DATE							
Final	Original	08/23/2007	04/25/2008	01/21/2009					
	37			✓					
	38			✓					
	39			✓					
	40			✓					
	41			✓					
	42			✓					
	43			✓					
	44			✓					
	45			✓					
	46			✓					
	47			✓					
	48			✓					
	49			✓					

<b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b> ( Not for submission under 37 CFR 1.99)	Application Number	10800295
	Filing Date	2004-03-12
	First Named Inventor	Scott F. Singer
	Art Unit	3692
	Examiner Name	Chia-Yi Liu
	Attorney Docket Number	04-225

**U.S. PATENTS**

Examiner Initial*	Cite No	Patent Number	Kind Code <sup>1</sup>	Issue Date	Name of Patentee or Applicant of cited Document	Pages,Columns,Lines where Relevant Passages or Relevant Figures Appear
	1					

If you wish to add additional U.S. Patent citation information please click the Add button.

**U.S. PATENT APPLICATION PUBLICATIONS**

Examiner Initial*	Cite No	Publication Number	Kind Code <sup>1</sup>	Publication Date	Name of Patentee or Applicant of cited Document	Pages,Columns,Lines where Relevant Passages or Relevant Figures Appear
/J.L./	1	20030004853	A1	2003-01-02	Ram et al.	

If you wish to add additional U.S. Published Application citation information please click the Add button.

**FOREIGN PATENT DOCUMENTS**

Examiner Initial*	Cite No	Foreign Document Number <sup>3</sup>	Country Code <sup>2</sup> i	Kind Code <sup>4</sup>	Publication Date	Name of Patentee or Applicant of cited Document	Pages,Columns,Lines where Relevant Passages or Relevant Figures Appear	T <sup>5</sup>
	1							<input type="checkbox"/>

If you wish to add additional Foreign Patent Document citation information please click the Add button.

**NON-PATENT LITERATURE DOCUMENTS**

Examiner Initials*	Cite No	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc), date, pages(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>5</sup>

<b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b> ( Not for submission under 37 CFR 1.99)	Application Number	10800295
	Filing Date	2004-03-12
	First Named Inventor	Scott F. Singer
	Art Unit	3692
	Examiner Name	Chia-Yi Liu
	Attorney Docket Number	04-225

1		<input type="checkbox"/>
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If you wish to add additional non-patent literature document citation information please click the Add button

**EXAMINER SIGNATURE**

Examiner Signature	/Chia-yi Liu/	Date Considered	01/21/2009
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\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through a citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup> See Kind Codes of USPTO Patent Documents at [www.USPTO.GOV](http://www.USPTO.GOV) or MPEP 901.04. <sup>2</sup> Enter office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>3</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>4</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. <sup>5</sup> Applicant is to place a check mark here if English language translation is attached.

**REQUEST FOR CONTINUED EXAMINATION(RCE)TRANSMITTAL  
 (Submitted Only via EFS-Web)**

Application Number	10800295	Filing Date	2004-03-12	Docket Number (if applicable)	04-225	Art Unit	3692
First Named Inventor	Scott F. Singer			Examiner Name	Chia-Yi Liu		

**This is a Request for Continued Examination (RCE) under 37 CFR 1.114 of the above-identified application.**  
 Request for Continued Examination (RCE) practice under 37 CFR 1.114 does not apply to any utility or plant application filed prior to June 8, 1995, or to any design application. The Instruction Sheet for this form is located at WWW.USPTO.GOV

**SUBMISSION REQUIRED UNDER 37 CFR 1.114**

Note: If the RCE is proper, any previously filed unentered amendments and amendments enclosed with the RCE will be entered in the order in which they were filed unless applicant instructs otherwise. If applicant does not wish to have any previously filed unentered amendment(s) entered, applicant must request non-entry of such amendment(s).

- Previously submitted. If a final Office action is outstanding, any amendments filed after the final Office action may be considered as a submission even if this box is not checked.
- Consider the arguments in the Appeal Brief or Reply Brief previously filed on \_\_\_\_\_
- Other \_\_\_\_\_
- Enclosed
- Amendment/Reply
- Information Disclosure Statement (IDS)
- Affidavit(s)/ Declaration(s)
- Other  
 \_\_\_\_\_  
 Petition for Extension of Time

**MISCELLANEOUS**

- Suspension of action on the above-identified application is requested under 37 CFR 1.103(c) for a period of months \_\_\_\_\_  
 (Period of suspension shall not exceed 3 months; Fee under 37 CFR 1.17(i) required)
- Other \_\_\_\_\_

**FEES**

- The RCE fee under 37 CFR 1.17(e) is required by 37 CFR 1.114 when the RCE is filed.**  
 The Director is hereby authorized to charge any underpayment of fees, or credit any overpayments, to  
 Deposit Account No 132490

**SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT REQUIRED**

- Patent Practitioner Signature
- Applicant Signature

Doc code: RCEX

Doc description: Request for Continued Examination (RCE)

PTO/SB/30EFS (08/08)

Approved for use through 09/30/2008. OMB 0651-0031

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Signature of Registered U.S. Patent Practitioner			
Signature	/Thomas J. Loos/	Date (YYYY-MM-DD)	2008-10-29
Name	Thomas J. Loos	Registration Number	60161

This collection of information is required by 37 CFR 1.114. 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 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.

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



## Privacy Act Statement

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.

The information provided by you in this form will be subject to the following routine uses:

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 the Freedom of Information Act requires disclosure of these records.
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 inspections 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.

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**  
(MBHB No. 04-225)

Appl. No.	:	10/800,295	Confirmation No. 8245
Applicant	:	Scott F. Singer	
Filed	:	03/12/2004	
TC/A.U.	:	3692	
Examiner	:	Chia-Yi Liu	

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

**RESPONSE TO THE FINAL OFFICE ACTION**  
**MAILED APRIL 29, 2008**

Dear Examiner,

In response to the Final Office Action of April 29, 2008, Applicant submits the following:

**Amendments to the Claims** begins on page 2; and  
**Remarks** begin on page 7 of this paper.

## AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

### Listing of Claims

1.-27. (Cancelled)

28. (New) A method for displaying market information on a graphical user interface, the method comprising:

receiving a current highest bid price and a current lowest ask price for a tradeable object from an electronic exchange;

identifying a position taken by a user with respect to the tradeable object, wherein the position is associated with a quantity of the tradeable object that has been bought or sold by the user at a price;

computing a plurality of values based on the position, wherein each of the plurality of values represents a profit or loss if the position is closed at a price level among a range of price levels for the tradeable object;

displaying via a computing device the plurality of values along a value axis;

displaying via the computing device a first indicator at a first location corresponding to a first value along the value axis, wherein the first indicator represents a price based on any of the following prices: current best bid, current best ask, and the last traded price, and wherein the first value represents a profit or loss incurred by the user if the position is closed at the price; and

moving the first indicator relative to the value axis to a second location corresponding to a second value along the value axis responsive to receipt of an update to the price, wherein the second value represents a profit or loss incurred by the user if the position is closed at the update to the price.

29. (New) The method of claim 28, further comprising an order entry region in alignment with the value axis, the order entry region comprising a plurality of locations for receiving commands to send orders, each location corresponding to a value along the value axis.

30. (New) The method of claim 29, further comprising:

in response to a selection of a location of the order entry region by a single action of a user input device, setting an order price based on the selected location.

31. (New) The method of claim 28, further comprising displaying the range of price levels along the value axis, wherein each price level of the range of price levels corresponds to a different value along the value axis.

32. (New) The method of claim 28, further comprising graphically indicating on the value axis whether a particular value of the plurality of values represents a profit or a loss.

33. (New) The method of claim 28, wherein each of the plurality of values comprises a number to indicate a profit or loss.

34. (New) The method of claim 28, wherein each of the plurality of values comprises a plus or minus sign to indicate a profit or loss.

35. (New) The method of claim 28, wherein the user represents a single trader.

36. (New) The method of claim 28, further comprising receiving a re-positioning command.

37. (New) The method of claim 28, further comprising:

identifying a new position taken by the user with respect to the tradeable object, wherein the new position is associated with a second quantity of the tradeable object that has been bought or sold by the user at a second price;

computing a second plurality of values based on the new position, wherein each of the second plurality of values represents a profit or loss if the new position is closed at a price level among the range of price levels; and

displaying via a computing device the second plurality of values along a value axis.

38. (New) The method of claim 28, further comprising:

displaying via the computing device a second indicator at a third location corresponding to a third value along the value axis, wherein the second indicator represents a second price based on any of the following prices: current best bid, current best ask, and the last traded price, wherein the third value represents a profit or loss incurred by the user if the position is closed at the second price, and wherein the second price of the second indicator is different than the price of the first indicator; and

moving the second indicator relative to the value axis to a fourth location corresponding to a fourth value along the value axis responsive to receipt of an update to the second price, wherein the fourth value represents a profit or loss incurred by the user if the position is closed at the update to the second price.

39. (New) A computer readable medium having program code recorded thereon for execution on a computer, the program code causing a machine to perform the method comprising:

receiving a current highest bid price and a current lowest ask price for a tradeable object from an electronic exchange;

identifying a position taken by a user with respect to the tradeable object, wherein the position is associated with a quantity of the tradeable object that has been bought or sold by the user at a price;

computing a plurality of values based on the position, wherein each of the plurality of values represents a profit or loss if the position is closed at a price level among a range of price levels for the tradeable object;

displaying via a computing device the plurality of values along a value axis;

displaying via the computing device a first indicator at a first location corresponding to a first value along the value axis, wherein the first indicator represents a price based on any of the following prices: current best bid, current best ask, and the last traded price, and wherein the first value represents a profit or loss incurred by the user if the position is closed at the price; and

moving the first indicator relative to the value axis to a second location corresponding to a second value along the value axis responsive to receipt of an update to the price, wherein the second value represents a profit or loss incurred by the user if the position is closed at the update to the price.

40. (New) The computer readable medium of claim 39, further comprising an order entry region in alignment with the value axis, the order entry region comprising a plurality of locations for receiving commands to send orders, each location corresponding to a value along the value axis.

41. (New) The computer readable medium of claim 40, further comprising: in response to a selection of a location of the order entry region by a single action of a user input device, setting an order price based on the selected location.

42. (New) The computer readable medium of claim 39, further comprising displaying the range of price levels along the value axis, wherein each price level of the range of price levels corresponds to a different value along the value axis.

43. (New) The computer readable medium of claim 39, further comprising graphically indicating on the value axis whether a particular value of the plurality of values represents a profit or a loss.

44. (New) The computer readable medium of claim 39, wherein each of the plurality of values comprises a number to indicate a profit or loss.

45. (New) The computer readable medium of claim 39, wherein each of the plurality of values comprises a plus or minus sign to indicate a profit or loss.

46. (New) The computer readable medium of claim 39, wherein the user represents a single trader.

47. (New) The computer readable medium of claim 39, further comprising receiving a re-positioning command.

48. (New) The computer readable medium of claim 39, further comprising:  
identifying a new position taken by the user with respect to the tradeable object, wherein the new position is associated with a second quantity of the tradeable object that has been bought or sold by the user at a second price;

computing a second plurality of values based on the new position, wherein each of the second plurality of values represents a profit or loss if the new position is closed at a price level among the range of price levels; and

displaying via a computing device the second plurality of values along a value axis.

49. (New) The computer readable medium of claim 39, further comprising:  
displaying via the computing device a second indicator at a third location corresponding to a third value along the value axis, wherein the second indicator represents a second price based on any of the following prices: current best bid, current best ask, and the last traded price, wherein the third value represents a profit or loss incurred by the user if the position is closed at the second price, and wherein the second price of the second indicator is different than the price of the first indicator; and

moving the second indicator relative to the value axis to a fourth location corresponding to a fourth value along the value axis responsive to receipt of an update to the second price, wherein the fourth value represents a profit or loss incurred by the user if the position is closed at the update to the second price.

## REMARKS

Applicant thanks Examiner Chia-Yi Liu for the thorough examination in the Final Office Action mailed on April 29, 2008, which rejected pending claims 1-5 and 7-27. Particularly, claims 1-5, 7-14 and 25 were rejected under 35 U.S.C. 103(a) as being unpatentable over Burns (US 2003/0004852 A1) in view of Kemp, II et al. (US 2002/0099644 A1), and further in view of Official Notice. Claims 15-24 were rejected under 35 U.S.C. 103(a) as being unpatentable over Burns in view of Official Notice.

First, Applicant cancels claims 1-27 without prejudice and submits new claims 28-49. Support for the subject matter of the new claims can be found throughout the specification including page 30. As such, no new matter was added in making this amendment.

None of the art of record discloses or suggests at least the following features of new independent claims 28 and 39 (portions of the claimed features are underlined below for emphasis, but of course, the claim is to be read as a whole):

- identifying a position taken by a user with respect to the tradeable object, wherein the position is associated with a quantity of the tradeable object that has been bought or sold by the user at a price;
- computing a plurality of values based on the position, wherein each of the plurality of values represents a profit or loss if the position is closed at a price level among a range of price levels for the tradeable object;
- displaying via a computing device the plurality of values along a value axis;
- displaying via the computing device a first indicator at a first location corresponding to a first value along the value axis, wherein the first indicator represents a price based on any of the following prices: current best bid, current best ask, and the last traded price, and wherein the first value represents a profit or loss incurred by the user if the position is closed at the price; and
- moving the first indicator relative to the value axis to a second location corresponding to a second value along the value axis responsive to receipt of an update to the price, wherein the second value represents a profit or loss incurred by the user if the position is closed at the update to the price.

Second, the current rejections are moot in view of the present amendment.

Third, in view of the present amendment, Applicant believes that it is not necessary to address the Examiner's various statements and/or rejections made in the Final Office Action at



this time. However, Applicant reserves the right to address any statements and/or rejections made in the Final Office Action, including the Official Notice, or any previous action for that matter in a future correspondence, if the need so arises.

Applicant respectfully submits that the rejections are obviated and that the pending claims are in a condition for allowance. Favorable reconsideration and withdrawal of the rejections are respectfully requested. The Examiner is invited contact Trading Technologies in-house Patent Counsel Mark Triplett at 312-476-1151 if it would expedite prosecution.

Respectfully submitted,

Dated: October 29, 2008

By: /Thomas J. Loos/  
Thomas J. Loos  
Reg. No. 60,161

## Electronic Patent Application Fee Transmittal

<b>Application Number:</b>	10800295			
<b>Filing Date:</b>	12-Mar-2004			
<b>Title of Invention:</b>	System and method for displaying order information in relation to a derivative of price			
<b>First Named Inventor/Applicant Name:</b>	Scott F. Singer			
<b>Filer:</b>	Thomas J. Loos			
<b>Attorney Docket Number:</b>	04-225			
Filed as Large Entity				
<b>Utility under 35 USC 111(a) Filing Fees</b>				
<b>Description</b>	<b>Fee Code</b>	<b>Quantity</b>	<b>Amount</b>	<b>Sub-Total in USD(\$)</b>
<b>Basic Filing:</b>				
<b>Pages:</b>				
<b>Claims:</b>				
<b>Miscellaneous-Filing:</b>				
<b>Petition:</b>				
<b>Patent-Appeals-and-Interference:</b>				
<b>Post-Allowance-and-Post-Issuance:</b>				
<b>Extension-of-Time:</b>				
Extension - 3 months with \$0 paid	1253	1	1110	1110

Description	Fee Code	Quantity	Amount	Sub-Total in USD(\$)
<b>Miscellaneous:</b>				
Request for continued examination	1801	1	810	810
<b>Total in USD (\$)</b>				<b>1920</b>

## Electronic Acknowledgement Receipt

<b>EFS ID:</b>	4195507
<b>Application Number:</b>	10800295
<b>International Application Number:</b>	
<b>Confirmation Number:</b>	8245
<b>Title of Invention:</b>	System and method for displaying order information in relation to a derivative of price
<b>First Named Inventor/Applicant Name:</b>	Scott F. Singer
<b>Customer Number:</b>	39310
<b>Filer:</b>	Thomas J. Loos
<b>Filer Authorized By:</b>	
<b>Attorney Docket Number:</b>	04-225
<b>Receipt Date:</b>	29-OCT-2008
<b>Filing Date:</b>	12-MAR-2004
<b>Time Stamp:</b>	12:40:13
<b>Application Type:</b>	Utility under 35 USC 111(a)

### Payment information:

Submitted with Payment	yes
Payment Type	Deposit Account
Payment was successfully received in RAM	\$1920
RAM confirmation Number	7145
Deposit Account	132490
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)

Charge any Additional Fees required under 37 C.F.R. Section 1.19 (Document supply fees)

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**File Listing:**

Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1	Extension of Time	04-225_EOT_102908.pdf	795937 8b74a5ac9b4d2b2ac51ff8f29056b079372c e8ec	no	2

**Warnings:**

**Information:**

2	Information Disclosure Statement (IDS) Filed (SB/08)	04-225_IDS_102908.pdf	749440 3431b56be285d4a0c071db8089bda499a1 9c4307	no	4
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**Warnings:**

**Information:**

3	Request for Continued Examination (RCE)	04-225_RCE_102908.pdf	769065 41fd45d0eb8f10f6dda86b7a6e0d7db4caf 3de	no	3
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**Warnings:**

**Information:**

4		04-225_response_as_filed_102908.pdf	88651 1281813e9570e8023ebe0070c5cb1a9d800 d2c79	yes	8
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**Multipart Description/PDF files in .zip description**

Document Description	Start	End
Amendment Submitted/Entered with Filing of CPA/RCE	1	1
Claims	2	6
Applicant Arguments/Remarks Made in an Amendment	7	8

**Warnings:**

**Information:**

5	Fee Worksheet (PTO-06)	fee-info.pdf	31554 12d97ad8205d910234321b19d2de37b68b 3391a8	no	2
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**Warnings:**

**Information:**

**Total Files Size (in bytes):** 2434647

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 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.

Under the paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

<b>PETITION FOR EXTENSION OF TIME UNDER 37 CFR 1.136(a)</b> <b>FY 2009</b> <i>(Fees pursuant to the Consolidated Appropriations Act, 2005 (H.R. 4818).)</i>	Docket Number (Optional) 04-225																								
Application Number 10/800,295	Filed March 12, 2004																								
For Scott F. Singer																									
Art Unit 3692	Examiner Chia-Yi Liu																								
This is a request under the provisions of 37 CFR 1.136(a) to extend the period for filing a reply in the above identified application. The requested extension and fee are as follows (check time period desired and enter the appropriate fee below):																									
	<table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 60%;"></th> <th style="width: 15%; text-align: center;"><u>Fee</u></th> <th style="width: 15%; text-align: center;"><u>Small Entity Fee</u></th> <th style="width: 10%;"></th> </tr> </thead> <tbody> <tr> <td><input type="checkbox"/> One month (37 CFR 1.17(a)(1))</td> <td style="text-align: center;">\$130</td> <td style="text-align: center;">\$65</td> <td style="text-align: center;">\$ _____</td> </tr> <tr> <td><input type="checkbox"/> Two months (37 CFR 1.17(a)(2))</td> <td style="text-align: center;">\$490</td> <td style="text-align: center;">\$245</td> <td style="text-align: center;">\$ _____</td> </tr> <tr> <td><input checked="" type="checkbox"/> Three months (37 CFR 1.17(a)(3))</td> <td style="text-align: center;">\$1110</td> <td style="text-align: center;">\$555</td> <td style="text-align: center;">\$ <u>1110</u></td> </tr> <tr> <td><input type="checkbox"/> Four months (37 CFR 1.17(a)(4))</td> <td style="text-align: center;">\$1730</td> <td style="text-align: center;">\$865</td> <td style="text-align: center;">\$ _____</td> </tr> <tr> <td><input type="checkbox"/> Five months (37 CFR 1.17(a)(5))</td> <td style="text-align: center;">\$2350</td> <td style="text-align: center;">\$1175</td> <td style="text-align: center;">\$ _____</td> </tr> </tbody> </table>		<u>Fee</u>	<u>Small Entity Fee</u>		<input type="checkbox"/> One month (37 CFR 1.17(a)(1))	\$130	\$65	\$ _____	<input type="checkbox"/> Two months (37 CFR 1.17(a)(2))	\$490	\$245	\$ _____	<input checked="" type="checkbox"/> Three months (37 CFR 1.17(a)(3))	\$1110	\$555	\$ <u>1110</u>	<input type="checkbox"/> Four months (37 CFR 1.17(a)(4))	\$1730	\$865	\$ _____	<input type="checkbox"/> Five months (37 CFR 1.17(a)(5))	\$2350	\$1175	\$ _____
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<input type="checkbox"/> Five months (37 CFR 1.17(a)(5))	\$2350	\$1175	\$ _____																						
<input type="checkbox"/> Applicant claims small entity status. See 37 CFR 1.27. <input type="checkbox"/> A check in the amount of the fee is enclosed. <input type="checkbox"/> Payment by credit card. Form PTO-2038 is attached. <input type="checkbox"/> The Director has already been authorized to charge fees in this application to a Deposit Account. <input checked="" type="checkbox"/> The Director is hereby authorized to charge any fees which may be required, or credit any overpayment, to Deposit Account Number <u>13-2490</u> . <b>WARNING: Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.</b>																									
I am the <input type="checkbox"/> applicant/inventor. <input type="checkbox"/> assignee of record of the entire interest. See 37 CFR 3.71. Statement under 37 CFR 3.73(b) is enclosed (Form PTO/SB/96). <input checked="" type="checkbox"/> attorney or agent of record. Registration Number <u>60,161</u> <input type="checkbox"/> attorney or agent under 37 CFR 1.34. Registration number if acting under 37 CFR 1.34 _____																									
/Thomas J. Loos/ _____ Signature	October 29, 2008 _____ Date																								
Thomas J. Loos _____ Typed or printed name	312-913-3338 _____ Telephone Number																								
NOTE: Signatures of all the inventors or assignees of record of the entire interest or their representative(s) are required. Submit multiple forms if more than one signature is required, see below. <input type="checkbox"/> Total of _____ forms are submitted.																									

This collection of information is required by 37 CFR 1.136(a). 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 and 1.14. This collection is estimated to take 6 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.*

## Privacy Act Statement

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.

The information provided by you in this form will be subject to the following routine uses:

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.



<b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b> ( Not for submission under 37 CFR 1.99)	Application Number	10800295
	Filing Date	2004-03-12
	First Named Inventor	Scott F. Singer
	Art Unit	3692
	Examiner Name	Chia-Yi Liu
	Attorney Docket Number	04-225

**U.S. PATENTS** Remove

Examiner Initial*	Cite No	Patent Number	Kind Code <sup>1</sup>	Issue Date	Name of Patentee or Applicant of cited Document	Pages, Columns, Lines where Relevant Passages or Relevant Figures Appear
	1					

If you wish to add additional U.S. Patent citation information please click the Add button. Add

**U.S. PATENT APPLICATION PUBLICATIONS** Remove

Examiner Initial*	Cite No	Publication Number	Kind Code <sup>1</sup>	Publication Date	Name of Patentee or Applicant of cited Document	Pages, Columns, Lines where Relevant Passages or Relevant Figures Appear
	1	20030004853	A1	2003-01-02	Ram et al.	

If you wish to add additional U.S. Published Application citation information please click the Add button. Add

**FOREIGN PATENT DOCUMENTS** Remove

Examiner Initial*	Cite No	Foreign Document Number <sup>3</sup>	Country Code <sup>2</sup> j	Kind Code <sup>4</sup>	Publication Date	Name of Patentee or Applicant of cited Document	Pages, Columns, Lines where Relevant Passages or Relevant Figures Appear	T <sup>5</sup>
	1							<input type="checkbox"/>

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**NON-PATENT LITERATURE DOCUMENTS** Remove

Examiner Initials*	Cite No	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc), date, pages(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>5</sup>

**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**  
( Not for submission under 37 CFR 1.99)

Application Number	10800295
Filing Date	2004-03-12
First Named Inventor	Scott F. Singer
Art Unit	3692
Examiner Name	Chia-Yi Liu
Attorney Docket Number	04-225

	1		<input type="checkbox"/>
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If you wish to add additional non-patent literature document citation information please click the Add button

**EXAMINER SIGNATURE**

Examiner Signature		Date Considered	
--------------------	--	-----------------	--

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through a citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup> See Kind Codes of USPTO Patent Documents at [www.USPTO.GOV](http://www.USPTO.GOV) or MPEP 901.04. <sup>2</sup> Enter office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>3</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>4</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. <sup>5</sup> Applicant is to place a check mark here if English language translation is attached.

**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**  
( Not for submission under 37 CFR 1.99)

Application Number	10800295
Filing Date	2004-03-12
First Named Inventor	Scott F. Singer
Art Unit	3692
Examiner Name	Chia-Yi Liu
Attorney Docket Number	04-225

**CERTIFICATION STATEMENT**

Please see 37 CFR 1.97 and 1.98 to make the appropriate selection(s):

That each item of information contained in the information disclosure statement was first cited in any communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of the information disclosure statement. See 37 CFR 1.97(e)(1).

**OR**

That no item of information contained in the information disclosure statement was cited in a communication from a foreign patent office in a counterpart foreign application, and, to the knowledge of the person signing the certification after making reasonable inquiry, no item of information contained in the information disclosure statement was known to any individual designated in 37 CFR 1.56(c) more than three months prior to the filing of the information disclosure statement. See 37 CFR 1.97(e)(2).

- See attached certification statement.
- Fee set forth in 37 CFR 1.17 (p) has been submitted herewith.
- None

**SIGNATURE**

A signature of the applicant or representative is required in accordance with CFR 1.33, 10.18. Please see CFR 1.4(d) for the form of the signature.

Signature	/Thomas J. Loos/	Date (YYYY-MM-DD)	2008-10-29
Name/Print	Thomas J. Loos	Registration Number	60161

This collection of information is required by 37 CFR 1.97 and 1.98. 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 1 hour 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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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).
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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.
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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/800,295	03/12/2004	Scott F. Singer	04-225	8245

39310 7590 04/29/2008  
MBHB/TRADING TECHNOLOGIES  
300 SOUTH WACKER DRIVE  
SUITE 3200  
CHICAGO, IL 60606

EXAMINER

LIU, CHIA-YI

ART UNIT	PAPER NUMBER
3692	

MAIL DATE	DELIVERY MODE
04/29/2008	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.

<b>Office Action Summary</b>	Application No.	Applicant(s)	
	10/800,295	SINGER ET AL.	
	Examiner	Art Unit	
	CHIA-YI LIU	3692	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- 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.
- 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.
- 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).

**Status**

- 1)  Responsive to communication(s) filed on 12 March 2004.
- 2a)  This action is FINAL.                      2b)  This 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) 1-5 and 7-27 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) 1-5 and 7-27 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).
    - 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(s)**

- |  |   |
|--|---|
| <ul style="list-style-type: none"> <li>1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)</li> <li>2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)</li> <li>3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br/>Paper No(s)/Mail Date <u>2/6/2008</u>.</li> </ul> | <ul style="list-style-type: none"> <li>4) <input type="checkbox"/> Interview Summary (PTO-413)<br/>Paper No(s)/Mail Date: _____</li> <li>5) <input type="checkbox"/> Notice of Informal Patent Application</li> <li>6) <input type="checkbox"/> Other: _____</li> </ul> |
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### DETAILED ACTION

1. Claims 1-5 and 7-27 are presented for examination. Applicant filed an amendment on 2/6/2008 canceling claim 6, amending claims 1-3, 5, 7-12, and 15. New grounds of rejection of claims 1-5 and 7-27 necessitated by Applicant's amendment are established in the instant office action as set forth in detail below.

#### ***Claim Rejections - 35 USC § 103***

2. 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 negated by the manner in which the invention was made.

3. Claims 1-14, 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Burns (US 2003/0004852 A1) in view of Kemp, II et al. (US 2002/0099644 A1), and further in view of Official Notice.

As per Claim 1

Burns ('852) discloses,

establishing a static value axis (statically displaying prices, see Abstract of Burns, lines 7-10) that comprises a plurality of net change value levels (column 840, spread price levels) wherein the plurality of net change value levels are based on the net change value (spread price), see paragraph 0087, lines 8-9 and Fig 8.

dynamically displaying a first indicator (marker moves with the best bid price) in one of a plurality of locations in a bid display region, see paragraph 0063, lines 10-14 and Fig 5 (510, 511)

Art Unit: 3692

dynamically displaying a second indicator (marker moves with the best offer price) in one of a plurality of locations in an ask display region, see paragraph 0063, lines 10-14 and Fig 5 (512)

the first indicator (Fig 5 (510, 511)) representing quantity associated with at least one order (100 orders) to buy the tradable object at the highest bid price (9220) currently available in the market, see Fig 5.

the second indicator (Fig 5 (512)) representing quantity associated with at least one order (15 orders) to sell the tradable object at the lowest ask (offer) price (9221) currently available in the market, see Fig 5.

each location in the bid display region (Fig 8 (column 820)) corresponding to a net change value level (spread price) along the static value axis (statically displaying prices, see Abstract of Burns, lines 7-10), see paragraph 0078, lines 1-6 and Fig 8.

each location in the ask display region (Fig 8 (column 830)) corresponding to a net change value level (spread price) along the static value axis (statically displaying prices, see Abstract of Burns, lines 7-10), see paragraph 0078, lines 1-2, 6-8 and Fig 8.

displaying an order entry region comprising a plurality of locations (bids and asks area) for receiving commands to send trade orders (allowing the placement of trade), see paragraph 0009, lines 17-21.

displaying the bid and ask display regions in relation to the plurality of net change value levels (spread) positioned along the static value axis, see Fig 8 and paragraph 0079, lines 1-8, and when the inside market changes, at least one of the first and second indicators moves in the bid or ask display regions relative to the static value axis (the markets track or move with the best bid/offer prices), see paragraph 0063, lines 11-14 and Fig 5 (510, 512).

selecting a particular location of the order entry region by a single action of a user input device and allowing placement of trade order, each location of the order entry region corresponding to a net change value level along the static value axis, see paragraph 0009, lines 17-21. (Display of bids and asks = region corresponding to net change value level, see Fig 8 and paragraph 0078, lines 1-6)

Burns ('852) teaches a net change value (spread price) determined based on the highest bid price (best bid), see paragraph 0086, lines 5-6, and displaying an indicator corresponding with a desired price level, see paragraph 0007, lines 10-



Art Unit: 3692

11, but fails to explicitly disclose the first indicator is displayed in a first location that corresponds to a net change value. Official Notice is taken that placing an indicator at a desired location is old and well known in the art. Therefore, the Examiner asserts that it would have been obvious for one of ordinary skill in the art, at the time the invention was made, to modify Burns' invention to include the first indicator is displayed in a first location that corresponds to a net change value determined based on the highest bid price. One would be motivated to do so, for the benefit of pointing customers to useful information, thereby allowing customers to make decisions quicker.

Burns ('852) teaches a net change value (spread price) determined based on the lowest ask price (best offer), see paragraph 0086, lines 5-6, and displaying an indicator corresponding with a desired price level, see paragraph 0007, lines 10-11, but fails to explicitly disclose the second indicator is displayed in a second location that corresponds to a net change value. Official Notice is taken that placing an indicator at a desired location is old and well known in the art. Therefore, the Examiner asserts that it would have been obvious for one of ordinary skill in the art, at the time the invention was made, to modify Burns' invention to include wherein the second indicator is displayed in a second location that corresponds to a net change value determined based on the lowest ask price. One would be motivated to do so, for the benefit of pointing customers to useful information, thereby allowing customers to make decisions quicker.

Burns ('852) teaches computing a net change value (spread) based on a first value (best offer) and a second value (best bid), wherein the net change value represents a difference between the first and second values (9861-9223), see paragraph 0086, lines 5-6 and Fig 7, but fails to explicitly disclose basing the first value at a first time and basing the second value at a second time. Official Notice is taken that it is old and well known to calculate net change value using values obtained at different time. Also, since best offer and best bid don't always occur at the same time, the Examiner asserts that it would have been obvious for one of ordinary skill in the art, at the time the invention was made, to modify Burns' invention to include disclose basing the first value at a first time and basing the second value at a second time. One would be motivated to do so, for the benefit of not limiting customer to only small range information.

Burns ('852) teaches selecting a particular location of the order entry region by a single action of a user input device and allowing placement of trade order, see paragraph 0009, lines 17-21, but fails to explicitly disclose in response to a selection of a particular location of the order entry region by a single action of a user input device, setting a plurality of parameters for a trade order relating to the tradable object and sending the trade order to the electronic exchange. Kemp ('644) discloses in response to a selection of a particular location of the order entry region by a single action of a user input device, see paragraph 0015, lines

Art Unit: 3692

5-6, 14, setting (preset) a plurality of parameters for a trade order relating to the tradable object (see paragraph 0015, lines 20-23) and sending the trade order to the electronic exchange, see Abstract of Kemp, lines 2-3. Both Burns and Kemp are directed toward electronic trading tool with display of price and bid/ask quantity. Therefore, the Examiner asserts that it would have been obvious for one of ordinary skill in the art, at the time the invention was made, to modify Burns' invention to include in response to a selection of a particular location of the order entry region by a single action of a user input device, setting a plurality of parameters for a trade order relating to the tradable object and sending the trade order to the electronic exchange. One would be motivated to do so for the benefit of allowing customer to set the contents of the trade order according to his/her own need, and providing the customer with improved efficiency and versatility in placing trade orders.

As per Claim 2

Burns ('852) further discloses displaying a numerical, graphical, or numerical and graphical representation of the plurality of net change value levels (spread) along the static value axis, see Fig 8. (Numerical representation = 645, 644, 643 ...etc.)

As per Claim 3

Burns ('852) further discloses each of the plurality of net change value levels is based on a common relationship for a different price, see paragraph 0086, lines 5-6. (Common relationship = best bid—best offer.)

As per Claim 4

Burns ('852) teaches facilitating spread trading using a graphical user interface, see paragraph 0009, lines 1-3, but fails to explicitly disclose input the common relationship through a graphical user interface. Official Notice is taken that it is old and well known in the art to input common relationship through a graphical user interface. For example, input a mathematical equation on a Microsoft spreadsheet. Therefore, the Examiner asserts that it would have been obvious for one of ordinary skill in the art, at the time the invention was made, to modify Burns' invention to include input the common relationship through a graphical user interface. One would be motivated to do so for the benefit of providing trader with improved efficiency in viewing price spread.

As per Claim 5

Art Unit: 3692

Burns ('852) further discloses the common relationship comprises Net change = (Value(s) at Current Point) - (Value(s) at Reference Point), see paragraph 0043, lines 2-4. (Current point = settlement price, reference = theoretical price)

#### Claim 7

Burns ('852) teaches the plurality of net change value levels (price spread) are updated (automatically recalculated), see paragraph 0085, lines 1-4, but fails to explicitly disclose the plurality of net change value levels are updated at predetermined intervals. Official Notice is taken that it is old and well known to update data at predetermined intervals. Therefore, the Examiner asserts that it would have been obvious for one of ordinary skill in the art, at the time the invention was made, to modify Burns' invention to include the plurality of net change value levels are updated at predetermined intervals. One would be motivated to do so for the benefit of allowing the customer to know ahead of time when the change value levels will be updated.

#### As per Claim 8

Burns ('852) teaches the plurality of net change value levels (price spread) are updated (automatically recalculated), see paragraph 0085, lines 1-4, but fails to explicitly disclose displaying a region for receiving a command to update the plurality of net change value levels, wherein the plurality of net change value are updated in response to a selection of the region with a user input device. Official Notice is taken that it is old and well known to update data in response to a selection of region with a user input device. For example, use computer mouse (user input device) to click "Fresh" button (selected location) on Internet Explorer to update a page. Therefore, the Examiner asserts that it would have been obvious for one of ordinary skill in the art, at the time the invention was made, to modify Burns' invention to include displaying a region for receiving a command to update the plurality of net change value levels, wherein the plurality of net change value are updated in response to a selection of the region with a user input device. One would be motivated to do so, for the purpose of allowing the customer update the net change value easily when they want to see new information.

#### As per Claim 9

Burns ('852) further discloses the plurality of net change value levels (spread) are updated in response to detecting a programmed event (detecting a market change), see paragraph 0085, lines 1-4.

#### As per Claim 10

Art Unit: 3692

Burns ('852) teaches displaying a plurality of bid and offer indicators in association with the plurality of net change value levels, wherein each of the bid indicators represents a quantity available to buy the tradable object and each of the offer indicators represents a quantity available to sell the tradable object, see Fig 8 and paragraph 0079, lines 1-8. (Also, see Claim 1 of Burns above regarding the use of indicators is old and well known)

As per Claim 11

Burns ('852) fails to explicitly disclose consolidating the plurality of net change value levels on the static value axis such that groups of two or more values are combined into consolidated value levels and consolidating the display of the plurality of bid and offer indicators into a plurality of consolidated bid and offer indicators so that each consolidated bid and offer indicator represents quantity associated with the two or more values within a consolidated value level. Kemp ('644) discloses consolidating numbers in order to condense the display, see paragraph 0018. Both Burns and Kemp are directed toward electronic trading tool with display of price and bid/ask quantity. Therefore, the Examiner asserts that it would have been obvious for one of ordinary skill in the art, at the time the invention was made, to modify Burns' invention to include consolidating the plurality of net change value levels on the static value axis such that groups of two or more values are combined into consolidated value levels and consolidating the display of the plurality of bid and offer indicators into a plurality of consolidated bid and offer indicators so that each consolidated bid and offer indicator represents quantity associated with the two or more values within a consolidated value level. One would be motivated to do so for the benefit of allowing a customer to view a greater range of data and a greater number of orders in the market at any given time and reducing the risk of a favorable order scrolling from the screen prior to hitting a bid or ask on that order.

As per Claim 12

Burns ('852) further discloses displaying a second set of values (Fig 8 (820)) along the static value axis, wherein each of the second set of values corresponds to each of the plurality of net change value levels (Fig 8 (810)) on the static value axis, see Fig 8 and paragraph 0079, lines 1-6.

As per Claim 13

Burns ('852) fails to explicitly disclose each of the second set of values represents a price. Official Notice is taken that is it old and well known to display related values next to a set of values. In Burns' invention, the prices used to calculate the spread (see Fig 7, FGBL/FGBM prices) would be useful information that the trader might want to know. Therefore, the Examiner asserts that it would

Art Unit: 3692

have been obvious for one of ordinary skill in the art, at the time the invention was made, to modify Burns' invention to include disclose each of the second set of values represents a price. One would be motivated to do so for the benefit of allowing the traders to know how the price spread was calculated before making decisions.

As per Claim 14

Burns ('852) fails to explicitly disclose each of the second set of values represents a different derivative of a price. Official Notice is taken that is it old and well known to display related values next to a set of values. In Burns' invention, the prices used to calculate the spread (see Fig 7, FGBL/FGBM prices) are derivatives of the spread price and would be useful information that the trader might want to know. Therefore, the Examiner asserts that it would have been obvious for one of ordinary skill in the art, at the time the invention was made, to modify Burns' invention to include disclose each of the second set of values represents a price. One would be motivated to do so for the benefit of allowing the traders to know how the price spread was calculated before making decisions.

4. Claims 15-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Burns (US 2003/0004852 A1) in view of Official Notice.

As per Claim 15

Burns ('852) discloses,

dynamically displaying a first indicator (marker moves with the best bid price) in a location in a bid display region, see paragraph 0063, lines 10-14 and Fig 5 (510, 511)

the location in the bid display region corresponding to one of the plurality of price derivative values (price spread), see paragraph 0078, lines 1-6 and Fig 8.

the first indicator (Fig 5 (510, 511)) representing quantity associated with at least one order (100 orders) to buy the tradable object at the highest bid price (9220) currently available in the market, see Fig 5.

the second indicator (Fig 5 (512)) representing quantity associated with at least one order (15 orders) to sell the tradable object at the lowest ask (offer) price (9221) currently available in the market, , see Fig 5.

Art Unit: 3692

the first/second indicators move relative to the plurality of price derivative values (price spread, see Fig 8) when the highest bid price/lowest offer price changes (the markets track or move with the best bid/offer prices), see paragraph 0063, lines 11-14 and Fig 5 (510, 512) and paragraph 0078, lines 1-2, 6-8 and Fig 8

dynamically displaying a second indicator (marker moves with the best offer price) in an ask display region, see paragraph 0063, lines 10-14 and Fig 5 (512)

the location in the ask display region (Fig 8 (column 830)) corresponding to one of the plurality of price derivative values (spread price), see paragraph 0078, lines 1-2, 6-8 and Fig 8.

Burns ('852) teaches calculating a plurality of price derivative values (price spread) wherein each of the plurality of price derivative values represents a change (9861-9223), between a first number (best offer) and at a second number (best bid), see paragraph 0086, lines 5-6 and Fig 7, but fails to explicitly disclose basing the first value at a first point in time and basing the second value at a second point time. Official Notice is taken that it is old and well known to calculate net change value using values obtained at different time. Also, since best offer and best bid don't always occur at the same time, the Examiner asserts that it would have been obvious for one of ordinary skill in the art, at the time the invention was made, to modify Burns' invention to include each of the plurality of price derivative values represents a change between a first number at a first point in time and at a second number at a second point in time. One would be motivated to do so, for the benefit of not limiting customer to only small range information.

Burns ('852) teaches a price derivative value (spread price) determined based on the highest bid price (best bid), see paragraph 0086, lines 5-6, and displaying an indicator corresponding with a desired price level, see paragraph 0007, lines 10-11, but fails to explicitly disclose the first indicator is displayed in a first location that corresponds to a price derivative value. Official Notice is taken that placing an indicator at a desired location is old and well known in the art. Therefore, the Examiner asserts that it would have been obvious for one of ordinary skill in the art, at the time the invention was made, to modify Burns' invention to include the first indicator is displayed in a first location that corresponds to a price derivative value determined based on the highest bid price. One would be motivated to do so, for the benefit of pointing customers to useful information, thereby allowing customers to make decisions quicker.

Burns ('852) teaches a derivative of price (spread price) determined based on the lowest ask price (best offer), see paragraph 0086, lines 5-6, and displaying an indicator corresponding with a desired price level, see paragraph 0007, lines 10-

Art Unit: 3692

11, but fails to explicitly disclose the second indicator is displayed in a second location that corresponds to a derivative of price. Official Notice is taken that placing an indicator at a desired location is old and well known in the art. Therefore, the Examiner asserts that it would have been obvious for one of ordinary skill in the art, at the time the invention was made, to modify Burns' invention to include wherein the second indicator is displayed in a second location that corresponds to a price derivative value determined based on the lowest offer price. One would be motivated to do so, for the benefit of pointing customers to useful information, thereby allowing customers to make decisions quicker.

As per Claim 16

Burns ('852) teaches the first number represents a particular value of interest (best offer), see paragraph 0086, lines 5-6 and Fig 7, but fails to explicitly disclose the first point in time represents a designated time of interest. Official Notice is taken that it is old and well known to obtain values at a designated time of interest. Therefore, the Examiner asserts that it would have been obvious for one of ordinary skill in the art, at the time the invention was made, to modify Burns' invention to include the first point in time represents a designated time of interest. One would be motivated to do so, for the benefit of allowing customers the option to view market information obtained at the time he chooses.

As per Claim 17

Burns ('852) further discloses the first number represents a last traded price, a settlement price, a last bid price, a last ask price, a yield value, or a profit and loss value, see paragraph 0043, lines 2-4. (Settlement price/last traded price)

As per Claim 18

Burns ('852) teaches a user input device, see paragraph 0009, lines 17-21, but fails to explicitly disclose the particular value of interest is input through a graphical user interface. Official Notice is taken that it is old and well known to input value through a graphical user interface. (For example, input numbers through computer). Therefore, the Examiner asserts that it would have been obvious for one of ordinary skill in the art, at the time the invention was made, to modify Burns' invention to include the particular value of interest is input through a graphical user interface. One would be motivated to do so for the benefit of speeding up the trading process by input information through graphical device.

As per Claim 19

Art Unit: 3692

Burns ('852) teaches the second number represents a particular value of interest (best bid), see paragraph 0086, lines 5-6 and Fig 7, but fails to explicitly disclose the first point in time represents a designated time of interest. Official Notice is taken that it is old and well known to obtain values at a designated time of interest. Therefore, the Examiner asserts that it would have been obvious for one of ordinary skill in the art, at the time the invention was made, to modify Burns' invention to include the second number represents a second particular value of interest and the second point in time represents a second designated time of interest. One would be motivated to do so, for the benefit of allowing customers the option to view market information obtained at the time he chooses.

As per Claim 20

Burns ('852) further discloses the second number represents a last traded price, a settlement price, a last bid price, a last ask price, a yield value, or a profit and loss value, see paragraph 0043, lines 2-4. (Settlement price/last traded price)

As per Claim 21

Burns ('852) teaches a user input device, see paragraph 0009, lines 17-21, but fails to explicitly disclose the second value of interest is input through a graphical user interface. Official Notice is taken that it is old and well known to input value through a graphical user interface. (For example, input numbers through computer). Therefore, the Examiner asserts that it would have been obvious for one of ordinary skill in the art, at the time the invention was made, to modify Burns' invention to include the second particular value of interest is input through a graphical user interface. One would be motivated to do so for the benefit of speeding up the trading process by input information through graphical device.

As per Claim 22

Burns ('852) further discloses the plurality of price derivative values (price spread) in the bid and ask (offer) display regions are positioned along a static value axis (statically displaying prices), see Abstract of Burns, lines 7-10, and Fig 8, 9.

As per Claim 23

Burns ('852) further discloses the bid and ask display regions are displayed in relation to fixed derivative of price values (spread) positioned along the static value axis (statically displaying prices), see Abstract of Burns, lines 7-10, and Fig 8, 9, and when the inside market changes, the derivative of price values along the static value axis do not move and at least one of the first and second



indicators moves in the bid or ask display regions relative to the static value axis, see paragraph 0063, lines 10-14.

As per Claim 24

Burns ('852) fails to explicitly disclose receiving a recentering command to approximately center the first and second indicators in the bid and ask display regions. Kemp ('644) discloses receiving a re-center command to re-center the market on the trader's screen. Official Notice was taken that it is old and well known to center indicators in the desired regions. Both Burns and Kemp are directed toward electronic trading tool with display of price and bid/ask quantity. Therefore, the Examiner asserts that it would have been obvious for one of ordinary skill in the art, at the time the invention was made, to modify Burns' invention to include receiving a recentering command to approximately center the first and second indicators in the bid and ask display regions. One would be motivated to do so for the benefit of providing trader with improved efficiency in viewing bid and ask data.

As per 25

Burns ('852) further discloses displaying an order entry region comprising a plurality of locations (bids and asks area) for receiving commands to send trade orders (allowing the placement of trade), see paragraph 0009, lines 17-21, and each location corresponding to a derivative of price value (spread price) along the static value axis (statically displaying prices, see Abstract of Burns, lines 7-10), see paragraph 0078, lines 1-6 and Fig 8.

Burns ('852) teaches selecting a particular location of the order entry region by a single action of a user input device and allowing placement of trade order, see paragraph 0009, lines 17-21, but fails to explicitly disclose in response to a selection of a particular location of the order entry region by a single action of a user input device, setting a plurality of parameters for a trade order relating to the tradable object and sending the trade order to the electronic exchange. Kemp ('644) discloses in response to a selection of a particular location of the order entry region by a single action of a user input device, see paragraph 0015, lines 5-6, 14, setting (preset) a plurality of parameters for a trade order relating to the tradable object (see paragraph 0015, lines 20-23) and sending the trade order to the electronic exchange, see Abstract of Kemp, lines 2-3. Both Burns and Kemp are directed toward electronic trading tool with display of price and bid/ask quantity. Therefore, the Examiner asserts that it would have been obvious for one of ordinary skill in the art, at the time the invention was made, to modify Burns' invention to include in response to a selection of a particular location of the order entry region by a single action of a user input device, setting a plurality of parameters for a trade order relating to the tradable object and sending the

Art Unit: 3692

trade order to the electronic exchange. One would be motivated to do so for the benefit of allowing customer to set the contents of the trade order according to his/her own need, and providing the customer with improved efficiency and versatility in placing trade orders.

As per Claim 26.

Burns ('852) further discloses the plurality of price derivative values (price spread) are represented by numbers, see Fig 8 (810).

As per Claim 27

Burns ('852) further discloses the plurality of price derivative values spread) are represented graphically (graphic user interface), see paragraph 0025, lines 1-3 and Fig 8.

**Conclusion**

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). 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 date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to CHIA-YI LIU whose telephone number is (571)270-1573. The examiner can normally be reached on Mon-Thur alternating Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, KAMBIZ ABDI can be reached on (571) 272-6702. 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.

CHIA-YI LIU  
Examiner  
Art Unit 3692

/Susanna M. Diaz/  
Primary Examiner, Art Unit 3692

<b>Notice of References Cited</b>	Application/Control No. 10/800,295	Applicant(s)/Patent Under Reexamination SINGER ET AL.	
	Examiner CHIA-YI LIU	Art Unit 3692	Page 1 of 1

**U.S. PATENT DOCUMENTS**

*	Document Number Country Code-Number-Kind Code	Date MM-YYYY	Name	Classification
*	A US-2003/0004852 A1	01-2003	Burns, Mike	705/37
*	B US-2002/0099644 A1	07-2002	Kemp et al.	705/37
	C US-			
	D US-			
	E US-			
	F US-			
	G US-			
	H US-			
	I US-			
	J US-			
	K US-			
	L US-			
	M US-			


**FOREIGN PATENT DOCUMENTS**

*	Document Number Country Code-Number-Kind Code	Date MM-YYYY	Country	Name	Classification
	N				
	O				
	P				
	Q				
	R				
	S				
	T				

**NON-PATENT DOCUMENTS**

*	Document Number Country Code-Number-Kind Code	Date MM-YYYY	Country	Name	Classification
	Include as applicable: Author, Title Date, Publisher, Edition or Volume, Pertinent Pages)				
	U				
	V				
	W				
	X				


\*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.

<b>Index of Claims</b> 	<b>Application/Control No.</b> 10800295	<b>Applicant(s)/Patent Under Reexamination</b> SINGER ET AL.
	<b>Examiner</b> LIU, CHIA-YI	<b>Art Unit</b> 3609

✓	<b>Rejected</b>	-	<b>Cancelled</b>	N	<b>Non-Elected</b>	A	<b>Appeal</b>
=	<b>Allowed</b>	÷	<b>Restricted</b>	I	<b>Interference</b>	O	<b>Objected</b>

Claims renumbered in the same order as presented by applicant
  CPA
  T.D.
  R.1.47

CLAIM		DATE							
Final	Original	08/23/2007	04/25/2008						
	1	✓	✓						
	2	✓	✓						
	3	✓	✓						
	4	✓	✓						
	5	✓	✓						
	6	✓	-						
	7	✓	✓						
	8	✓	✓						
	9	✓	✓						
	10	✓	✓						
	11	✓	✓						
	12	✓	✓						
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	22	✓	✓						
	23	✓	✓						
	24	✓	✓						
	25	✓	✓						
	26	✓	✓						
	27	✓	✓						

<b>Search Notes</b>  	<b>Application/Control No.</b>  10800295	<b>Applicant(s)/Patent Under Reexamination</b>  SINGER ET AL.
	<b>Examiner</b>  LIU, CHIA-YI	<b>Art Unit</b>  3609

SEARCHED			
Class	Subclass	Date	Examiner
705		8/23/2007	C.L.
705		4/24/2008	C.L.

SEARCH NOTES			
Search Notes	Date	Examiner	
East Search	8/23/2007	C.L.	
East Search	4/24/2008	C.L.	

INTERFERENCE SEARCH			
Class	Subclass	Date	Examiner



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CONFIRMATION NO. 8245

<b>SERIAL NUMBER</b> 10/800,295	<b>FILING or 371(c) DATE</b> 03/12/2004 <b>RULE</b>	<b>CLASS</b> 705	<b>GROUP ART UNIT</b> 3692	<b>ATTORNEY DOCKET NO.</b> 04-225	
<b>APPLICANTS</b> Scott F. Singer, Lake Bluff, IL; Michael J. Burns, Chicago, IL; Fred Monroe, Silver Springs, MD; <b>** CONTINUING DATA *****</b> <b>** FOREIGN APPLICATIONS *****</b> <b>** IF REQUIRED, FOREIGN FILING LICENSE GRANTED ** ** SMALL ENTITY **</b> 05/28/2004					
Foreign Priority claimed <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No 35 USC 119(a-d) conditions met <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Verified and Acknowledged <u>/CHIA YI LIU/</u> Examiner's Signature	<input type="checkbox"/> Met after Allowance C.L. Initials	<b>STATE OR COUNTRY</b> IL	<b>SHEETS DRAWINGS</b> 10	<b>TOTAL CLAIMS</b> 27	<b>INDEPENDENT CLAIMS</b> 2
<b>ADDRESS</b> MBHB/TRADING TECHNOLOGIES 300 SOUTH WACKER DRIVE SUITE 3200 CHICAGO, IL 60606 UNITED STATES					
<b>TITLE</b> System and method for displaying order information in relation to a derivative of price					
<b>FILING FEE RECEIVED</b> 448	FEES: Authority has been given in Paper No. _____ to charge/credit DEPOSIT ACCOUNT No. _____ for following:	<input type="checkbox"/> All Fees			
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## EAST Search History

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
S1	1432	((net near2 change) or (price near2 change)) with value	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2008/04/23 13:49
S2	1297	bid same ask same price	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2008/04/23 13:55
S3	193	S1 and S2	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2008/04/23 13:55
S4	50	change with ((highest or best) near2 bid near2 price)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2008/04/24 18:25
S5	11613834	"7"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2008/04/24 19:08
S6	3	"7177833"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2008/04/24 19:08
S7	2	("7177833").PN.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2008/04/24 19:09

EAST Search History

S8	2	("7110974").PN.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2008/04/24 19:11
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Substitute for form 1449/PTO  <b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b> <i>(Use as many sheets as necessary)</i>	<b>Complete if Known</b>	
	Application Number	10/800295
	Filing Date	March 12, 2004
	First Named Inventor	Scott F. Singer
	Art Unit	3609
Examiner Name	Chia-Yi Liu	
Attorney Docket Number	04-225	
Sheet <u>1</u>	of <u>2</u>	

U. S. PATENT DOCUMENTS					
Examiner Initials*	Cite No. <sup>1</sup>	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code <sup>2</sup> (if known)			
/J.L./		US- 7,212,999	May 1, 2007	Friesen et al.	
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		Country Code <sup>2</sup> -Number <sup>4</sup> -Kind Code <sup>5</sup> (if known)				

Examiner Signature	/Chia-yi Liu/	Date Considered	04/25/2008
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<b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  (Use as many sheets as necessary)		Application Number	10/800,295
		Filing Date	March 12, 2004
		First Named Inventor	Scott F. Singer
		Art Unit	3609
		Examiner Name	Chia-Yi Liu
		Attorney Docket Number	04-225
Sheet	2	of	2

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/J.L./		Co-Pending U.S. Patent Application Serial No. 11/415,884 filed 5/2/2006	

Examiner Signature	/Chia-yi Liu/	Date Considered	04/25/2008
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**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**  
(Case No. 04-225)

Appl. No.	:	10/800,295	Confirmation No. 8245
Applicant	:	Scott F. Singer	
Filed	:	3/12/2004	
TC/A.U.	:	3609	
Examiner	:	Chia-Yi Liu	

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

**RESPONSE TO THE OFFICE ACTION**  
**MAILED SEPTEMBER 26, 2007**

Dear Examiner,

In response to the Office Action of September 26, 2007, Applicant submits the following:

**Claims** begin on page 2; and

**Remarks** begin on page 9.

## LISTING OF CLAIMS

1. (Currently amended) A method for displaying market information relating to a tradeable object being traded at an electronic exchange having an inside market with a highest bid price and a lowest offer price, the method comprising:

computing a net change value based on a first value at a first time and a second value at a second time, wherein the net change value represents a difference between the first and second values;

establishing a static value axis that comprises a plurality of net change value levels, wherein the plurality of net change value levels are based on the net change value;

dynamically displaying a first indicator in one of a plurality of locations in a bid display region, each location in the bid display region corresponding to a net change value level along the static value axis ~~derivative of price value along a static value axis~~, the first indicator representing quantity associated with at least one order to buy the tradeable object at the highest bid price currently available in the market, wherein the first indicator is displayed in a first location that corresponds to a net change value determined based on the highest bid price;

dynamically displaying a second indicator in one of a plurality of locations in an ask display region, each location in the ask display region corresponding to a net change value level along the static value axis ~~derivative of price value along a static value axis~~, the second indicator representing quantity associated with at least one order to sell the ~~commodity~~ tradeable object at the lowest ask price currently available in the market, wherein the second indicator is displayed in a second location that corresponds to a net change value determined based on the lowest ask price;

displaying the bid and ask display regions in relation to the plurality of net change value levels ~~fixed derivative of price values~~ positioned along the static value axis such

that when the inside market changes, the ~~derivative of price values along the static value axis do not move and~~ then at least one of the first and second indicators moves in the bid or ask display regions relative to the static value axis;

displaying an order entry region comprising a plurality of locations for receiving commands to send trade orders, each location of the order entry region corresponding to a net change value level along the static value axis ~~derivative of price value along a static value axis~~; and

in response to a selection of a particular location of the order entry region by a single action of a user input device, setting a plurality of parameters for a trade order relating to the tradeable object and sending the trade order to the electronic exchange.

2. (Currently amended) The method of claim 1 further comprising displaying a numerical, graphical, or numerical and graphical representation of the plurality of net change value levels along the static value axis ~~derivative of price values along the common value axis~~.

3. (Currently amended) The method of claim 1 wherein each of the plurality of net change value levels is based on a common relationship for a different price ~~derivative of price values are based through a common relationship on a different price~~.

4. (Original) The method of claim 3 wherein the common relationship is input through a graphical user interface.

5. (Currently amended) The method of claim 3 wherein ~~the derivative of price values comprise a net change and~~ the common relationship comprises *Net change = (Value(s) at Current Point) - (Value(s) at Reference Point)*.

6. (Canceled)

7. (Currently amended) The method of claim 1 wherein the plurality of net change value levels ~~derivative of price values~~ are updated at predetermined intervals.

8. (Currently amended) The method of claim 1 further comprising displaying a region for receiving a command to update the plurality of net change value levels ~~derivative of price values~~, wherein the plurality of net change value levels ~~derivative of price values~~ are updated in response to a selection of the region with a user input device.

9. (Currently amended) The method of claim 1 wherein the plurality of net change value levels ~~derivative of price values~~ are updated in response to detecting a programmed event.

10. (Currently amended) The method of claim 1 further comprising displaying a plurality of bid and offer indicators in association with the plurality of net change value levels ~~derivative of price values~~, wherein each of the bid indicators represents a quantity available to buy the tradeable object and each of the offer indicators represents a quantity available to sell the tradeable object.

11. (Currently amended) The method of claim 10 further comprising:  
consolidating the plurality of net change value levels ~~derivative of price values~~ on the static value axis such that groups of two or more values are combined into consolidated value levels; and

consolidating the display of the plurality of bid and offer indicators into a plurality of consolidated bid and offer indicators so that each consolidated bid and offer indicator



represents quantity associated with the two or more values within a consolidated value level.

12. (Currently amended) The method of claim 1 further comprising displaying a second set of values along the static value axis, wherein each of the second set of values corresponds to each of the plurality of net change value levels derivative of price values on the static value axis.

13. (Original) The method of claim 12 wherein each of the second set of values represents a price.

14. (Original) The method of claim 12 wherein each of the second set of values represents a different derivative of a price.

15. (Currently amended) A method for displaying market information relating to a tradeable object being traded at an electronic exchange having an inside market with a highest bid price and a lowest offer price, the method comprising:

calculating a plurality of price derivative values, wherein each of the plurality of price derivative values represents a change between a first number at a first point in time and at a second number at a second point in time;

dynamically displaying a first indicator in a location in a bid display region, the location in the bid display region corresponding to one of the plurality of price derivative values, the first indicator representing quantity associated with at least one order to buy the tradeable object at the highest bid price currently available in the market, wherein the first indicator is displayed in a first location that corresponds to a price derivative value determined based on the highest bid price, and wherein the first indicator moves

relative to the plurality of price derivative values when the highest bid price changes;  
and

dynamically displaying a second indicator in a location in an ask display region, the location in the ask display region corresponding to one of the plurality of price derivative values, the second indicator representing quantity associated with at least one order to sell the tradeable object at the lowest [[ask]] offer price currently available in the market, wherein the second indicator is displayed in a second location that corresponds to a price derivative value determined based on the lowest offer price, and wherein the second indicator moves relative to the plurality of price derivative values when the lowest offer price changes.

16. (Original) The method of claim 15 wherein the first number represents a particular value of interest and the first point in time represents a designated time of interest.

17. (Original) The method of claim 16 wherein the first number represents a last traded price, a settlement price, a last bid price, a last ask price, a yield value, or a profit and loss value.

18. (Original) The method of claim 16 wherein the particular value of interest is input through a graphical user interface.

19. (Original) The method of claim 15 wherein the second number represents a second particular value of interest and the second point in time represents a second designated time of interest.

20. (Original) The method of claim 19 wherein the second number represents a last traded price, a settlement price, a last bid price, a last ask price, a yield value, or a profit and loss value.
21. (Original) The method of claim 19 wherein the second particular value of interest is input through a graphical user interface.
22. (Original) The method of claim 15 wherein the plurality of price derivative values in the bid and ask display regions are positioned along a static value axis.
23. (Original) The method of claim 22 wherein the bid and ask display regions are displayed in relation to fixed derivative of price values positioned along the static value axis such that when the inside market changes, the derivative of price values along the static value axis do not move and at least one of the first and second indicators moves in the bid or ask display regions relative to the static value axis.
24. (Original) The method of claim 22 further comprising receiving a recentering command to approximately center the first and second indicators in the bid and ask display regions.
25. (Original) The method of claim 22 further comprising displaying an order entry region comprising a plurality of locations for receiving commands to send trade orders, each location corresponding to a derivative of price value along the static value axis, and in response to a selection of a particular location of the order entry region by a single action of a user input device, setting a plurality of parameters for a trade order relating to the tradeable object and sending the trade order to the electronic exchange.

26. (Original) The method of claim 15 wherein the plurality of price derivative values are represented by numbers.

27. (Original) The method of claim 15 wherein the plurality of price derivative values are represented graphically.

## REMARKS

### I. Status of the Claims

First, Applicant thanks the Examiner for the thorough examination. Claims 1-5 and 7-27 are currently pending in the application. In the Office Action mailed September 26, 2007, all claims 1-27 were rejected. Claims 1-2, 7, 9-11 are rejected under 35 U.S.C. 102(b) as being anticipated by Kemp (US 2002/0099644). Claims 3-6, 12-15, 22-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kemp in view of Kane (US 6,317,728). Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kemp in view of Barclay (US 6,850,555). Claims 16-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kemp in view of Kane and further in view of Wolfberg (US 4,885,685). While Applicant respectfully traverses these rejections for at least the reasons stated below, Applicant has amended claims 1-3, 5, 7-12, and 15 to focus on a particular embodiment and to expedite the prosecution of this case to an allowance. No new matter was added. Dependent claim 6 is cancelled without prejudice.

### II. Claim Rejections

#### Independent claims 1 and 15

Claim 1 is amended to include establishing "...a static value axis that comprises a plurality of net change value levels, wherein the plurality of net change value levels are based on the net change value...." The "net change value" is computed based on a "...first value at a first time and a second value at a second time...." Then, indicators representing the highest bid price and the lowest ask price currently available in the market are displayed in relation to this "static value axis." A trade order is sent using this particular display.

Before the amendment, the Office contended that Kemp discloses each and every feature of claim 1. However, Applicant will not address this specific contention at this time, and reserves the right to do so in the future, but will rather focus on the amended features of claim 1 that the Office states are missing from Kemp. Particularly, with respect to Applicant's dependent claim 5, which was rejected under 35 U.S.C. 103, the Office stated that Kemp does not disclose the net change features that are now

similarly called for in Applicant's amended claim 1. The Office turned to Kane (US 6,317,728) in making that rejection as disclosing a delta value (see Kane's Fig. 19), and contended that Kemp and Kane together disclose the claimed invention. Applicant respectfully traverses this contention.

The Kane reference, and in particular Kane's Fig. 19, discloses the use of a single delta value for the IBM market. So, for example, according to Kane's Fig. 19, a row is dedicated to displaying things like the best bid price, the best ask price, the high, the low, volume, delta, bid size, and ask size for the IBM market. Kane does not disclose establishing a static value axis that comprises "a plurality of net change value levels" against which current bid and offer indicators are displayed, such as called for in Applicant's claim 1. Additionally, Kemp does not disclose or suggest displaying bid and offer indicators in relation to a static axis comprising the specific net change derivation called for in Applicant's amended claim 1. Particularly, amended claim 1 calls for "computing a net change value" and "establishing a static value axis" that comprises a plurality of net change value levels, which are "based on the net change value." As such, Applicant respectfully submits that not only would the combination not result in Applicant's claimed invention, but it would not be obvious to modify Kemp based on Kane to arrive at Applicant's presently claimed invention.

Amended independent claim 15 does not include a static value axis like Applicant's independent claim 1, but calls for "calculating a plurality of price derivative values, wherein each of the plurality of price derivative values represents a change between a first number at a first point in time and at a second number at a second point in time" and displaying a first and second indicator relative to these "price derivative values." Particularly, claim 15 recites, "...wherein the first indicator moves relative to the plurality of price derivative values when the highest bid price changes...; and ... wherein the second indicator moves relative to the plurality of price derivative values when the lowest ask price changes." As such, claim 15 distinguishes over the cited art for at least the reason that Kemp/Kane does not disclose or teach the computation of a "plurality of price derivative values" like those called for in claim 15, in addition to displaying the first and second indicators in relation to these price derivative values.

#### Dependent claims 2-5, 7-14, and 16-27

Dependent claims 2-5, 7-14, and 16-27 are also rejected. Applicant traverses these rejections too, and reserves the right to address the Office's contentions with respect to these dependent claims in the future, if the need so arises. However, these claims depend from independent claim 1 or independent claim 15 and are patentable for

at least the reasons that claims 1/15 are patentable over the cited art, in addition to their own separate reasons.

III. Conclusion

Applicant respectfully submits that pending claims 1-5 and 7-27 are patentable over the cited art. Accordingly, each of these claims is in condition for allowance. Applicant respectfully requests favorable reconsideration. If Examiner believes that further dialog would expedite consideration of the application, Examiner is invited to contact Trading Technologies Patent Counsel Mark Triplett at 312-476-1151, or the undersigned attorney or agent.

Respectfully submitted,

Date: February 6, 2008

By: /Thomas J. Loos/  
Thomas J. Loos  
Reg. No. 60,161

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		Art Unit	3609
		Examiner Name	Chia-Yi Liu
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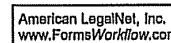
Substitute for form 1449B/PTO  <h2 style="text-align: center;">INFORMATION DISCLOSURE STATEMENT BY APPLICANT</h2> <p style="text-align: center;"><i>(Use as many sheets as necessary)</i></p>				<b>Complete if Known</b>	
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		<b>Examiner Name</b>	Chia-Yi Liu		
<b>Sheet</b>	2	<b>of</b>	2	<b>Attorney Docket Number</b>	04-225

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		Co-Pending U.S. Patent Application Serial No. 11/415,884 filed 5/2/2006	

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\* EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.  
<sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> Applicant is to place a check mark here if English language Translation is attached.  
 This collection of information is required by 37 CFR 1.98. 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 2 hours 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, 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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<b>PETITION FOR EXTENSION OF TIME UNDER 37 CFR 1.136(a) FY 2008</b> <i>(Fees pursuant to the Consolidated Appropriations Act, 2005 (H.R. 4818).)</i>		Docket Number (Optional) 04-225	
Application Number 10/800295		Filed 2004-03-12	
For Scott F. Singer et al.			
Art Unit 3609		Examiner Chia-Yi Liu	
This is a request under the provisions of 37 CFR 1.136(a) to extend the period for filing a reply in the above identified application.			
The requested extension and fee are as follows (check time period desired and enter the appropriate fee below):			
		<u>Fee</u>	<u>Small Entity Fee</u>
<input type="checkbox"/>	One month (37 CFR 1.17(a)(1))	\$120	\$60
<input checked="" type="checkbox"/>	Two months (37 CFR 1.17(a)(2))	\$460	\$230
<input type="checkbox"/>	Three months (37 CFR 1.17(a)(3))	\$1050	\$525
<input type="checkbox"/>	Four months (37 CFR 1.17(a)(4))	\$1640	\$820
<input type="checkbox"/>	Five months (37 CFR 1.17(a)(5))	\$2230	\$1115
<input type="checkbox"/>	Applicant claims small entity status. See 37 CFR 1.27.		
<input type="checkbox"/>	A check in the amount of the fee is enclosed.		
<input type="checkbox"/>	Payment by credit card. Form PTO-2038 is attached.		
<input type="checkbox"/>	The Director has already been authorized to charge fees in this application to a Deposit Account.		
<input checked="" type="checkbox"/>	The Director is hereby authorized to charge any fees which may be required, or credit any overpayment, to Deposit Account Number <u>132490</u> . I have enclosed a duplicate copy of this sheet.		
<b>WARNING: Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.</b>			
I am the	<input type="checkbox"/>	applicant/inventor.	
	<input type="checkbox"/>	assignee of record of the entire interest. See 37 CFR 3.71. Statement under 37 CFR 3.73(b) is enclosed (Form PTO/SB/96).	
	<input checked="" type="checkbox"/>	attorney or agent of record. Registration Number <u>60,161</u>	
	<input type="checkbox"/>	attorney or agent under 37 CFR 1.34. Registration number if acting under 37 CFR 1.34 _____.	
/Thomas J. Loos/		February 6, 2008	
Signature		Date	
Thomas J. Loos		312 913 3338	
Typed or printed name		Telephone Number	
NOTE: Signatures of all the inventors or assignees of record of the entire interest or their representative(s) are required. Submit multiple forms if more than one signature is required, see below.			
<input type="checkbox"/>	Total of _____ forms are submitted.		

This collection of information is required by 37 CFR 1.136(a). 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 and 1.14. This collection is estimated to take 6 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.

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## Electronic Patent Application Fee Transmittal

<b>Application Number:</b>	10800295			
<b>Filing Date:</b>	12-Mar-2004			
<b>Title of Invention:</b>	System and method for displaying order information in relation to a derivative of price			
First Named Inventor/Applicant Name:	Scott F. Singer			
<b>Filer:</b>	Thomas J. Loos			
<b>Attorney Docket Number:</b>	04-225			
Filed as Large Entity				
<b>Utility Filing Fees</b>				
<b>Description</b>	<b>Fee Code</b>	<b>Quantity</b>	<b>Amount</b>	<b>Sub-Total in USD(\$)</b>
<b>Basic Filing:</b>				
<b>Pages:</b>				
<b>Claims:</b>				
<b>Miscellaneous-Filing:</b>				
<b>Petition:</b>				
<b>Patent-Appeals-and-Interference:</b>				
Post-Allowance-and-Post-Issuance:				
<b>Extension-of-Time:</b>				
Extension - 2 months with \$0 paid	1252	1	460	460

Description	Fee Code	Quantity	Amount	Sub-Total in USD(\$)
<b>Miscellaneous:</b>				
Submission- Information Disclosure Stmt	1806	1	180	180
<b>Total in USD (\$)</b>				<b>640</b>

## Electronic Acknowledgement Receipt

<b>EFS ID:</b>	2820781
<b>Application Number:</b>	10800295
<b>International Application Number:</b>	
<b>Confirmation Number:</b>	8245
<b>Title of Invention:</b>	System and method for displaying order information in relation to a derivative of price
<b>First Named Inventor/Applicant Name:</b>	Scott F. Singer
<b>Customer Number:</b>	39310
<b>Filer:</b>	Thomas J. Loos
<b>Filer Authorized By:</b>	
<b>Attorney Docket Number:</b>	04-225
<b>Receipt Date:</b>	06-FEB-2008
<b>Filing Date:</b>	12-MAR-2004
<b>Time Stamp:</b>	12:44:54
<b>Application Type:</b>	Utility under 35 USC 111(a)

### Payment information:

Submitted with Payment	yes
Payment Type	Deposit Account
Payment was successfully received in RAM	\$ 640
RAM confirmation Number	7195
Deposit Account	132490
Authorized User	
<p>The Director of the USPTO is hereby authorized to charge indicated fees and credit any overpayment as follows:</p> <p style="padding-left: 40px;">Charge any Additional Fees required under 37 C.F.R. Section 1.16 (National application filing, search, and examination fees)</p> <p style="padding-left: 40px;">Charge any Additional Fees required under 37 C.F.R. Section 1.17 (Patent application and reexamination processing fees)</p>	

Charge any Additional Fees required under 37 C.F.R. Section 1.19 (Document supply fees)

Charge any Additional Fees required under 37 C.F.R. Section 1.20 (Post Issuance fees)

Charge any Additional Fees required under 37 C.F.R. Section 1.21 (Miscellaneous fees and charges)

**File Listing:**

Document Number	Document Description	File Name	File Size(Bytes) /Message Digest	Multi Part /.zip	Pages (if appl.)
1		Response_to_09_26_07_OA_for_04_225.pdf	90231 <small>39d0932817888ecbf6e14397e353d1cb4d38d41</small>	yes	11
<b>Multipart Description/PDF files in .zip description</b>					
	<b>Document Description</b>		<b>Start</b>		<b>End</b>
	Amendment - After Non-Final Rejection		1		1
	Claims		2		8
	Applicant Arguments/Remarks Made in an Amendment		9		11
<b>Warnings:</b>					
<b>Information:</b>					
2	Information Disclosure Statement (IDS) Filed	IDS_for_04_225.pdf	286772 <small>3a4a4ee35c66a18c55cc82cf90517605851c2b98</small>	no	2
<b>Warnings:</b>					
<b>Information:</b>					
This is not an USPTO supplied IDS fillable form					
3	NPL Documents	11_415884_Specification.pdf	1483848 <small>34c390d6ca6138c7d7c672dbd760c28d0448ad03</small>	no	51
<b>Warnings:</b>					
<b>Information:</b>					
4	Extension of Time	Petition_for_extension_of_time_04_225.pdf	112811 <small>698eb53780a28cb65760486cfc22b69d2006b62c</small>	no	1
<b>Warnings:</b>					
<b>Information:</b>					
5	Fee Worksheet (PTO-06)	fee-info.pdf	8331 <small>e05d1607c4fbedabd284030a0bc8e3bf758132ab</small>	no	2
<b>Warnings:</b>					
<b>Information:</b>					
<b>Total Files Size (in bytes):</b>			1981993		

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 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.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

<b>PATENT APPLICATION FEE DETERMINATION RECORD</b> Substitute for Form PTO-875					Application or Docket Number <b>10/800,295</b>		Filing Date <b>03/12/2004</b>		<input type="checkbox"/> To be Mailed					
<b>APPLICATION AS FILED – PART I</b>														
(Column 1)			(Column 2)			SMALL ENTITY <input checked="" type="checkbox"/>		OR		OTHER THAN SMALL ENTITY				
FOR		NUMBER FILED		NUMBER EXTRA		RATE (\$)	FEE (\$)	OR	RATE (\$)	FEE (\$)				
<input type="checkbox"/> BASIC FEE <small>(37 CFR 1.16(a), (b), or (c))</small>		N/A		N/A		N/A			N/A					
<input type="checkbox"/> SEARCH FEE <small>(37 CFR 1.16(k), (l), or (m))</small>		N/A		N/A		N/A			N/A					
<input type="checkbox"/> EXAMINATION FEE <small>(37 CFR 1.16(o), (p), or (q))</small>		N/A		N/A		N/A			N/A					
TOTAL CLAIMS <small>(37 CFR 1.16(i))</small>		minus 20 =		*		X \$ =			X \$ =					
INDEPENDENT CLAIMS <small>(37 CFR 1.16(h))</small>		minus 3 =		*		X \$ =			X \$ =					
<input type="checkbox"/> APPLICATION SIZE FEE <small>(37 CFR 1.16(s))</small>		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).												
<input type="checkbox"/> MULTIPLE DEPENDENT CLAIM PRESENT <small>(37 CFR 1.16(j))</small>														
						TOTAL		TOTAL						
* If the difference in column 1 is less than zero, enter "0" in column 2.														
<b>APPLICATION AS AMENDED – PART II</b>														
(Column 1)			(Column 2)			(Column 3)			SMALL ENTITY		OR		OTHER THAN SMALL ENTITY	
AMENDMENT	<b>02/06/2008</b>	CLAIMS REMAINING AFTER AMENDMENT		HIGHEST NUMBER PREVIOUSLY PAID FOR	PRESENT EXTRA	RATE (\$)	ADDITIONAL FEE (\$)	OR	RATE (\$)	ADDITIONAL FEE (\$)				
	Total <small>(37 CFR 1.16(i))</small>	* 26	Minus	** 27	= 0	X \$25 =	0		X \$ =					
	Independent <small>(37 CFR 1.16(h))</small>	* 2	Minus	***3	= 0	X \$105 =	0		X \$ =					
	<input type="checkbox"/> Application Size Fee <small>(37 CFR 1.16(s))</small>													
	<input type="checkbox"/> FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM <small>(37 CFR 1.16(j))</small>													
						TOTAL ADD'L FEE		TOTAL ADD'L FEE						
(Column 1)			(Column 2)			(Column 3)			SMALL ENTITY		OR		OTHER THAN SMALL ENTITY	
AMENDMENT		CLAIMS REMAINING AFTER AMENDMENT		HIGHEST NUMBER PREVIOUSLY PAID FOR	PRESENT EXTRA	RATE (\$)	ADDITIONAL FEE (\$)	OR	RATE (\$)	ADDITIONAL FEE (\$)				
	Total <small>(37 CFR 1.16(i))</small>	*	Minus	**	=	X \$ =			X \$ =					
	Independent <small>(37 CFR 1.16(h))</small>	*	Minus	***	=	X \$ =			X \$ =					
	<input type="checkbox"/> Application Size Fee <small>(37 CFR 1.16(s))</small>													
	<input type="checkbox"/> FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM <small>(37 CFR 1.16(j))</small>													
						TOTAL ADD'L FEE		TOTAL ADD'L FEE						
* If the entry in column 1 is less than the entry in column 2, write "0" in column 3.														
** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 20, enter "20".														
*** 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.														
Legal Instrument Examiner: /phyllis canty/														

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.

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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/800,295	03/12/2004	Scott F. Singer	04-225	8245

39310 7590 09/26/2007  
MBHB/TRADING TECHNOLOGIES  
300 SOUTH WACKER DRIVE  
SUITE 3200  
CHICAGO, IL 60606

EXAMINER

LIU, CHIA-YI

ART UNIT	PAPER NUMBER
3609	

MAIL DATE	DELIVERY MODE
09/26/2007	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.

<b>Office Action Summary</b>	<b>Application No.</b> 10/800,295	<b>Applicant(s)</b> SINGER ET AL.	
	<b>Examiner</b> CHIA-YI LIU	<b>Art Unit</b> 3609	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- 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.
- 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.
- 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).

**Status**

- 1)  Responsive to communication(s) filed on 12 March 2004.
- 2a)  This action is **FINAL**.                      2b)  This 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) 1-27 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) 1-27 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).  
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(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

**DETAILED ACTION**

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-2, 7, 9-11 are rejected under 35 U.S.C. 102(b) as being anticipated by Kemp, II et al. (US 2002/0099644)

As per Claim 1

Kemp ('644) discloses,

dynamically displaying a first indicator in one of a plurality of locations in a bid display region, each location in the bid display region corresponding to a derivative of price value (round-up price) along a static value axis, the first indicator representing quantity (BidQ) associated with at least one order to buy the tradable object at the highest bid price currently available in the market, see Fig 7B. (Round up price = anything that has dependence on or relationship to price = derivative of price)

dynamically displaying a second indicator in one of a plurality of locations in an ask display region, each location in the ask display region corresponding to a derivative of price value (round-up price) along the static value axis, the second indicator representing quantity (AskQ) associated with at least one order to sell the commodity at the lowest ask price currently available in the market, see Fig 7B.

displaying the bid and ask display regions in relation to fixed derivative of price values positioned along the static value axis such that when the inside market changes, the derivative of price values along the static value axis do not move, see paragraph 0047, lines 1-3.

displaying an order entry region comprising a plurality of locations (trading cells) for receiving commands to send trade orders, each location corresponding to a derivative of price value along the static value axis, see paragraph 0085, lines 8-9, Fig 7B and column 0047, line 1.

at least one of the first and second indicators moves in the bid or ask display regions relative to the static value axis, see paragraph 0047, lines 3-6.

in response to a selection of a particular location of the order entry region by a single action of a user input device, see paragraph 0015, lines 5-6,14.

setting a plurality of parameters for a trade order relating to the tradable object and sending the trade order to the electronic exchange, see Abstract of Kemp, lines 2-3.

As per Claim 2

Kemp ('644) further discloses, displaying a numerical, graphical, or numerical and graphical representation of the derivative of price values along the common value axis, see Fig 7B.

As per Claim 7

Kemp ('644) further discloses the derivative of price values are updated at predetermined intervals, see paragraph 0039, lines 16-19.

As per Claim 9

Kemp ('644) further discloses the derivative of price values are updated in response to detecting a programmed event, paragraph 0039, lines 16-19.

As per Claim 10

Kemp ('644) further discloses displaying a plurality of bid and offer indicators in association with the derivative of price values, wherein each of the bid indicators represents a quantity (BidQ) available to buy the tradable object and each of the offer indicators represents a quantity (AskQ) available to sell the tradable object, see Fig. 7B.

As per Claim 11

Kemp ('644) further discloses consolidating the derivative of price values on the static value axis such that groups of two or more values are combined into consolidated value levels, see paragraph 0018, lines 2-3.

consolidating the display of the plurality of bid and offer indicators into a plurality of consolidated bid and offer indicators so that each consolidated bid and offer indicator represents quantity associated with a the two or more values within a consolidated value level, see Claim 1 of Kemp, lines 4-13.

***Claim Rejections - 35 USC § 103***

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:

Art Unit: 3609

(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 negated by the manner in which the invention was made.

Claims 3-6, 12-15, 22-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kemp, II et al. (US 2002/0099644) in view of Kane (US 6,317,728)

As per Claim 3

Kemp ('644) does not specifically disclose each of the derivatives of price values are based through a common relationship on a different price.

Kane ('728) teaches each of the derivative of price (Delta) values are based through a common relationship on a different price, see Fig 19. (Delta = change in price. Each delta value is based on a different price through common relationship)

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Kemp's invention to include a common relationship based on different price.

One of ordinary skill in the art would be motivated to do so for the benefit of comparing pieces of price information.

As per Claim 4

Kemp ('644) further discloses the common relationship is input through a graphical user interface, see paragraph 0014, lines 1-3 and Fig 7B.

As per Claim 5

Kemp ('644) does not specifically disclose the derivative of price values comprises a net change and that the common relationship comprises  $\text{Net change} = (\text{Value(s) at Current Point}) - (\text{Value(s) at Reference Point})$ .

Kane ('728) teaches the derivative of price values comprise a net change (Delta). The common relationship comprises  $\text{Net change} = (\text{Value(s) at Current Point}) - (\text{Value(s) at Reference Point})$ , see Fig 19. (Delta = price change between two points of time = current value – previous value)

(According to applicant's Specification, "Net change" = difference in value between two points in time, which includes the net change of price or a change in any other measurement and that Reference point = one or more values at an earlier point of time)

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Kemp's invention to include a net change.

One of ordinary skill in the art would be motivated to do so for the benefit of presenting one more market information for comparison.

#### As per Claim 6

Kemp ('644) does not specifically disclose the derivative of price values comprise yield, profit and loss, volatility, or momentum indicators.

Kane ('728) teaches volatility, see Fig 19 (High/Low/Delta = volatility) and Fig 20.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Kemp's invention to include volatility.

One of ordinary skill in the art would be motivated to do so for the benefit of presenting one more market information for comparison.

As per Claim 12

Kemp ('644) does not specifically disclose displaying a second set of values along the static value axis, wherein each of the second set of values corresponds to each of the derivative of price values on the value axis.

Kane ('728) teaches displaying a second set of values (Delta) along the static value axis, wherein each of the second set of values corresponds to each of the derivative of price values (High/Low) on the value axis, see Fig 19.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Kemp's invention to include a second set of values correspond to each of derivative of price values.

One of ordinary skill in the art would be motivated to do so for the benefit of grouping and comparing sets of values.

As per Claim 13

Kemp ('644) does not specifically disclose each of the second set of values represents a price.

Kane ('728) teaches each of the second set of values (Delta) represents a price, see Fig 19.



Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Kemp's invention to include each of the second set of values represent a price.

One of ordinary skill in the art would be motivated to do so for the benefit of presenting another price information for comparison.

As per Claim 14

Kemp ('644) does not specifically disclose each of the second set of values represents a different derivative of a price.

Kane ('728) teaches each of the second set of values (Delta) represents a different derivative of a price, see Fig 19. (Derivative of price = anything that has dependence on or relationship to price. Delta = change in price)

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Kemp's invention to include each of the second set of values represent a different derivative of price.

One of ordinary skill in the art would be motivated to do so for the benefit of presenting another price information for comparison.

As per Claim 15

Kemp ('644) discloses,

dynamically displaying a first indicator (BidQ) in a location in a bid display region, the location in the bid display region corresponding to one of the plurality of price

derivative (Round-up-price) values, see Fig 7B. (Round-up-price has dependence on or relationship to price = derivative of price)

the first indicator representing quantity (BidQ) associated with at least one order to buy the tradable object at the highest bid price currently available in the market, see Fig 7B. (Quantity at highest bid price= 108)

dynamically displaying a second indicator (AskQ) in a location in an ask display region, the location in the ask display region corresponding to one of the plurality of price derivative values, see Fig 7B.

the second indicator representing quantity (AskQ) associated with at least one order to sell the tradable object at the lowest ask price currently available in the market, see Fig 7B. (Quantity at lowest ask price= 206)

Kemp ('644) does not specifically disclose calculating a plurality of price derivative values, wherein each of the plurality of price derivative values represents a change between a first number at a first point in time and at a second number at a second point in time.

Kane ('728) teaches calculating a plurality of price derivative values, wherein each represents a change between a first number at a first point in time and at a second number at a second point in time, see Fig 19. (Both Trend and Delta are about price change between two points of time)

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Kemp's invention to include calculating a plurality of price-derivative values, each represent a change between a first number at a first point in time and a second number at a second point in time.

One of ordinary skill in the art would be motivated to do so for the benefit of comparing price spread.

As per Claim 22

Kemp ('644) further discloses the plurality of price derivative values in the bid and ask display regions are positioned along a static value axis, see Fig 7B.

As per Claim 23

Kemp ('644) further discloses the bid and ask display regions are displayed in relation to fixed derivative of price values positioned along the static value axis such that when the inside market changes, the derivative of price values along the static value axis do not move and at least one of the first and second indicators moves in the bid or ask display regions relative to the static value axis, column 0047, lines 1-6 and Fig 7B.

As per Claim 24

Kemp ('644) further discloses receiving a recentering command to approximately center the first and second indicators in the bid and ask display regions, see paragraph 0050, lines 6-9.

As per Claim 25

Kemp ('644) further discloses derivative of price values are along the static value axis, see Fig 7B and column 0047, line 1.

displaying an order entry region comprising a plurality of locations (trading cells) for receiving commands to send trade orders (enter an order), each location corresponding to a derivative of price, see paragraph 0085, lines 8-11 and Fig 5.

in response to a selection of a particular location of the order entry region by a single action of a user input device, setting a plurality of parameters (restrictions/elements) for a trade order relating to the tradable object and sending the trade order to the electronic exchange, see paragraph 0007, lines 1-3, 8-10 and paragraph 0015, lines 5-6 and 13-16.

As per Claim 26

Kemp ('644) does not specifically disclose the plurality of price derivative values are represented by numbers.

Kane ('728) teaches the plurality of price derivative values are represented by numbers, see Fig 19 (Delta).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Kemp's invention to include the plurality of price derivative values are represented by numbers.

One of ordinary skill in the art would be motivated to do so for the benefit of comparing data.

As per Claim 27

Kemp ('644) does not specifically disclose the plurality of price derivative values are represented graphically.

Kane ('728) teaches the plurality of price derivative (Trend) values are represented graphically, see Fig 19.

(Graphical form = shapes, colors, or any other graphic to represent price derivatives. Generated value do not need to be displaced so long as market info is displayed in relation to derivative of price value) ("UP" and "DOWN" could easily be represented with arrows = graphic form)

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Kemp's invention to include the plurality of price derivative values are represented graphically.

One of ordinary skill in the art would be motivated to do so for the benefit of creating alternative way of presenting and comparing data.

Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kemp, II et al. (US 2002/0099644) in view of Barclay (US 6,850,555)

As per Claim 8

Kemp ('644) does not specifically disclose displaying a region for receiving a command to update the derivative of price values, wherein the derivative of price values are updated in response to a selection of the region with a user input device.

Barclay ('555) teaches price updated in response to user input, see Claim 31, lines 53-57.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Kemp's invention to include price updated in response to user input.

One of ordinary skill in the art would be motivated to do so for the benefit of changing price manually.

Claims 16-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kemp, II et al. (US 2002/0099644) in view of Kane (US 6,317,728) and further in view of Wolfberg et al. (4,885,685)

As per Claim 16

Kemp ('644) does not specifically disclose the first number represents a particular value of interest and the first point in time represents a designated time of interest.

Wolfberg ('685) teaches the first number (current amount) represents a particular value of interest and the first point in time represents a designated time (current) of interest, see column 22, lines 26-28.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Kemp's invention to include the first number represents a particular value of interest and the first point in time represents a designated time of interest.

One of ordinary skill in the art would be motivated to do so for the benefit of comparing price spread.

As per Claim 19

Kemp ('644) does not specifically disclose the second number represents a second particular value of interest and the second point in time represents a second designated time of interest.

Wolfberg ('685) teaches the second number (previous months amount) represents a second particular value of interest and the second point in time represents a second designated time (previous month) of interest, see column 22, lines 26-28.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Kemp's invention to include the first number represents a particular value of interest and the first point in time represents a designated time of interest.

One of ordinary skill in the art would be motivated to do so for the benefit of comparing price spread.

As per Claim 17

the first number represents a last traded price, a settlement price, a last bid price, a last ask price, a yield value, or a profit and loss value, see Table 1 (Last Price)

As per Claim 18

Kemp ('644) further discloses the particular value of interest is input through a graphical user interface, see paragraph 0014, lines 1-3 and Fig 7B.

As per Claim 20

the second number represents a last traded price, a settlement price, a last bid price, a last ask price, a yield value, or a profit and loss value, see Table 1 (Bid Price)

As per Claim 21

Kemp ('644) further discloses the second particular value of interest is input through a graphical user interface, see paragraph 0014, lines 1-3 and Fig 7B.

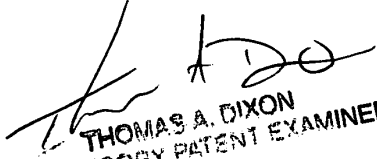
**Conclusion**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to CHIA-YI LIU whose telephone number is (571) 270-1573. The examiner can normally be reached on Mon-Thur alternating Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, TOM DIXON can be reached on (571) 272-6803. 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.

CHIA-YI LIU  
Examiner  
Art Unit 3609

  
THOMAS A. DIXON  
SUPERVISORY PATENT EXAMINER



<b>Notice of References Cited</b>	Application/Control No. 10/800,295	Applicant(s)/Patent Under Reexamination SINGER ET AL.	
	Examiner CHIA-YI LIU	Art Unit 3609	Page 1 of 1

**U.S. PATENT DOCUMENTS**

*	Document Number Country Code-Number-Kind Code	Date MM-YYYY	Name	Classification
*	A US-2002/0099644	07-2002	Kemp et al.	705/37
*	B US-6,317,728	11-2001	Kane, Richard L.	705/36R
*	C US-4,885,685	12-1989	Wolfberg et al.	705/14
*	D US-6,850,555	02-2005	Barclay, Michael John	375/141
	E US-			
	F US-			
	G US-			
	H US-			
	I US-			
	J US-			
	K US-			
	L US-			
	M US-			

**FOREIGN PATENT DOCUMENTS**

*	Document Number Country Code-Number-Kind Code	Date MM-YYYY	Country	Name	Classification
	N				
	O				
	P				
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	R				
	S				
	T				

**NON-PATENT DOCUMENTS**

*	Include as applicable: Author, Title Date, Publisher, Edition or Volume, Pertinent Pages)
U	
V	
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X	

\*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.



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Bib Data Sheet

CONFIRMATION NO. 8245

<b>SERIAL NUMBER</b> 10/800,295	<b>FILING OR 371(c) DATE</b> 03/12/2004 <b>RULE</b>	<b>CLASS</b> 705	<b>GROUP ART UNIT</b> 3609	<b>ATTORNEY DOCKET NO.</b> 04-225
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**APPLICANTS**  
 Scott F. Singer, Lake Bluff, IL;  
 Michael J. Burns, Chicago, IL;  
 Fred Monroe, Silver Springs, MD;

**\*\* CONTINUING DATA \*\*\*\*\***

**\*\* FOREIGN APPLICATIONS \*\*\*\*\***


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**\*\* 05/28/2004**

Foreign Priority claimed <input type="checkbox"/> yes <input checked="" type="checkbox"/> no	<b>STATE OR COUNTRY</b> IL	<b>SHEETS DRAWING</b> 10	<b>TOTAL CLAIMS</b> 27	<b>INDEPENDENT CLAIMS</b> 2
35 USC 119 (a-d) conditions met <input type="checkbox"/> yes <input checked="" type="checkbox"/> no <input type="checkbox"/> Met after Allowance				
Verified and Acknowledged <i>[Signature]</i> Examiner's Signature Initials				

**ADDRESS**  
39310

**TITLE**  
System and method for displaying order information in relation to a derivative of price


<b>FILING FEE RECEIVED</b> 448	FEES: Authority has been given in Paper No. _____ to charge/credit DEPOSIT ACCOUNT No. _____ for following:	<input type="checkbox"/> All Fees <input type="checkbox"/> 1.16 Fees ( Filing ) <input type="checkbox"/> 1.17 Fees ( Processing Ext. of time ) <input type="checkbox"/> 1.18 Fees ( Issue ) <input type="checkbox"/> Other _____ <input type="checkbox"/> Credit
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<b>Index of Claims</b> 	<b>Application/Control No.</b> 10800295	<b>Applicant(s)/Patent Under Reexamination</b> SINGER ET AL.
	<b>Examiner</b> LIU, CHIA-YI	<b>Art Unit</b> 3609

✓	<b>Rejected</b>	-	<b>Cancelled</b>	N	<b>Non-Elected</b>	A	<b>Appeal</b>
=	<b>Allowed</b>	÷	<b>Restricted</b>	I	<b>Interference</b>	O	<b>Objected</b>

Claims renumbered in the same order as presented by applicant
  CPA
  T.D.
  R.1.47

CLAIM		DATE									
Final	Original	08/23/2007									
	1	✓									
	2	✓									
	3	✓									
	4	✓									
	5	✓									
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	26	✓									
	27	✓									

<b>Search Notes</b> 	<b>Application/Control No.</b> 10800295	<b>Applicant(s)/Patent Under Reexamination</b> SINGER ET AL.
	<b>Examiner</b> LIU, CHIA-YI	<b>Art Unit</b> 3609

<b>SEARCHED</b>			
<b>Class</b>	<b>Subclass</b>	<b>Date</b>	<b>Examiner</b>
705		8/23/2007	C.L.

<b>SEARCH NOTES</b>			
<b>Search Notes</b>		<b>Date</b>	<b>Examiner</b>
East Search		8/23/2007	C.L.

<b>INTERFERENCE SEARCH</b>			
<b>Class</b>	<b>Subclass</b>	<b>Date</b>	<b>Examiner</b>

## EAST Search History

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L1	299	update with price same input	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/09/11 11:01
L2	606	updat\$3 with price same input	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/09/11 11:01
L3	53531	("705").CLAS.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2007/09/11 11:01
L4	316	L2 and L3	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/09/11 15:11
L5	252946	user near3 input	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/09/11 15:11
L6	147	L4 and L5	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/09/11 15:12
L7	14303	updat\$3 same (input near3 user)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/09/11 15:13

## EAST Search History

L8	1591	L3 and L7	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/09/11 15:13
L9	63	(updat\$3 near3 price) same (input near3 user)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/09/11 15:13
L10	39	L3 and L9	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/09/11 15:13
S1	2	("7043449").PN.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2007/09/10 11:15
S2	0	("9589751").PN.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2007/08/23 09:39
S3	15	"09589751"	US-PGPUB; USPAT; USOCR	OR	ON	2007/08/23 09:40
S4	15	"09589751"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/08/23 09:41

## EAST Search History

S5	25	"09590692"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/08/23 16:13
S6	410	derivative near3 price	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/08/23 16:14
S7	50965	("705").CLAS.	US-PGPUB; USPAT; USOCR	OR	OFF	2007/08/23 16:14
S8	273	S6 and S7	US-PGPUB; USPAT; USOCR	OR	ON	2007/08/23 16:44
S9	153	bid same quantity same price same (yield or profit or loss or volatility)	US-PGPUB; USPAT; USOCR	OR	ON	2007/08/23 16:46
S10	155	bid same quantity same price same (yield or profit or loss or volatility)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/08/23 16:47
S11	152	S7 and S10	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/08/23 16:47
S12	10436	price with (beta or yield or profit or loss or volatility)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/08/29 10:24
S13	248976	order and trad\$3	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/08/29 10:26

## EAST Search History

S14	2820	S12 and S13	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/08/29 10:26
S15	53175	("705").CLAS.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2007/08/29 10:27
S16	2087	S14 and S15	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/08/29 10:28
S17	6469887	(net near3 change) or reference	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/08/29 10:29
S18	1921	S16 and S17	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/08/29 10:29
S19	533444	updat\$3	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/08/29 10:30
S20	1367	S18 and S19	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/08/29 10:30



## EAST Search History

S21	8761	bid and (offer or ask)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/08/29 10:30
S22	841	S20 and S21	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/08/29 10:32
S23	469	bid same (offer or ask) same (yield or profit or loss or vilatility or beta)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/08/29 10:33
S24	223	S22 and S23	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/08/29 10:33
S25	4	"2002009644"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/08/30 09:55
S26	1	("2002/0059129").URPN.	USPAT	OR	ON	2007/08/30 11:33
S27	2	"1067471"	USPAT	OR	ON	2007/08/30 11:33
S28	10	"1067471"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/08/30 11:40
S29	20540	price same (yield or profit or loss or volatitily)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/08/30 11:41

### EAST Search History

S30	0	price same yield same profit same volatility	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/08/30 11:41
S31	53330	("705").CLAS.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2007/08/30 11:42
S32	0	("L21andL23andtrad\$andorder").PN.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2007/08/30 11:42
S33	3289	S29 and S31 and trad\$ and order	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/08/30 11:42
S34	1773	S29 and S31 and trad\$ and order and update	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/08/30 11:42
S35	2285	S29 and S31 and trad\$ and order and updat\$	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/08/30 11:43
S36	1179	S29 and S31 and trad\$ and order and updat\$ and bid	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/08/30 11:43

## EAST Search History

S37	746	S29 and S31 and trad\$ and order and updat\$ and bid and quantity and interface	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/08/30 11:45
S38	724	S29 and S31 and trad\$ and order and updat\$ and bid and quantity and interface and market	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/08/30 11:47
S39	1	("2002/0059129").URPN.	USPAT	OR	ON	2007/08/30 11:46
S40	9	("6938011").URPN.	USPAT	OR	ON	2007/08/30 11:46
S41	288	S29 and S31 and trad\$ and order and updat\$ and bid and quantity and interface and market and (P&L or (profit with loss) or volati\$3)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/08/30 15:59
S42	0	"last ask price" and yield and (last near2 price)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/08/30 16:01
S43	4	"last ask price"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/08/30 16:01
S44	61	yield and (last near2 price) and (profit with loss)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/08/30 16:01
S45	1579059	(yield or (profit with loss) or volatility)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/09/10 11:15

### EAST Search History

S46	9761	(yield or (profit with loss) or volatility) same price	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/09/10 11:16
S47	10176	net near3 change	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/09/10 11:16
S48	158	S46 and S47	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/09/10 16:00
S49	17755	delta with change	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/09/10 16:01
S50	53498	("705").CLAS.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2007/09/10 16:01
S51	326	S49 and S50	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/09/10 16:01
S52	1	("2002/0059129").URPN.	USPAT	OR	ON	2007/09/10 16:21
S53	5580	delta with ("traded price" or "bid price" or "ask price" or yield or profit)	USPAT	OR	ON	2007/09/10 16:22
S54	19	S50 and S53	USPAT	OR	ON	2007/09/10 16:22

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<p><b>ADDRESS TO:</b></p> <p><b>Mail Stop Patent Application Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450</b></p>	<p>Attorney Docket No.    04-225</p> <p>First Named Inventor    Singer</p> <p>Express Mail No.        EV334694993US</p>
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APPLICATION ELEMENTS	ACCOMPANYING APPLICATION PARTS
<p>1. <input checked="" type="checkbox"/> Transmittal Form with Fee</p> <p>2. <input checked="" type="checkbox"/> Specification (including claims and abstract) [Total Pages 41]</p> <p>3. <input checked="" type="checkbox"/> Drawings [Total Sheets 10]</p> <p>4. <input checked="" type="checkbox"/> Oath or Declaration [Total Pages 2]</p> <p style="margin-left: 20px;">a. <input checked="" type="checkbox"/> Newly executed</p> <p style="margin-left: 20px;">b. <input type="checkbox"/> Copy from prior application</p> <p style="margin-left: 40px;"><b>[Note Boxes 5 and 18 below]</b></p> <p style="margin-left: 40px;">i. <input type="checkbox"/> Deletion of Inventor(s) Signed statement attached deleting inventor(s) named in the prior application</p> <p>5. <input type="checkbox"/> Incorporation by Reference: The entire disclosure of the prior application, from which a copy of the oath or declaration is supplied under Box 4b, is considered as being part of the disclosure of the accompanying application and is hereby incorporated by reference therein.</p> <p>6. <input type="checkbox"/> Application Data Sheet (See 37 CFR 1.76)</p> <p>7. <input type="checkbox"/> Computer Code Listing (See 1.96)</p> <p style="margin-left: 20px;">a. <input type="checkbox"/> Microfiche Appendix</p> <p style="margin-left: 20px;">b. <input type="checkbox"/> CD-Rom (in duplicate, with separate transmittal)</p> <p>8. <input type="checkbox"/> Nucleotide and/or Amino Acid Sequence Submission</p> <p style="margin-left: 20px;">a. <input type="checkbox"/> Computer Readable Copy</p> <p style="margin-left: 20px;">b. <input type="checkbox"/> Paper Copy</p> <p style="margin-left: 20px;">c. <input type="checkbox"/> Statement verifying above copies</p> <p>9. <input checked="" type="checkbox"/> Small Entity Status</p> <p style="margin-left: 20px;"><input checked="" type="checkbox"/> is claimed</p> <p style="margin-left: 20px;"><input type="checkbox"/> Statement filed in prior application; status still proper and desired</p> <p style="margin-left: 20px;"><input type="checkbox"/> is no longer claimed.</p>	<p>10. <input checked="" type="checkbox"/> Assignment Papers</p> <p>11. <input checked="" type="checkbox"/> Power of Attorney</p> <p>12. <input type="checkbox"/> English Translation Document (if applicable)</p> <p>13. <input type="checkbox"/> Information Disclosure Statement (IDS)</p> <p style="margin-left: 20px;"><input type="checkbox"/> PTO-1449 Form</p> <p style="margin-left: 20px;"><input type="checkbox"/> Copies of IDS Citations</p> <p>14. <input type="checkbox"/> Preliminary Amendment</p> <p>15. <input checked="" type="checkbox"/> Return Receipt Postcard (Should be specifically itemized)</p> <p>16. <input type="checkbox"/> Certified Copy of Priority Document(s)</p> <p>17. <input checked="" type="checkbox"/> A Request for non-publication pursuant to 35 U.S.C. § 122(b)(2)(B)(i)</p> <p>18. <input checked="" type="checkbox"/> Other: Application Data Sheet</p>

19.  This is a CONTINUING APPLICATION. Please note the following:

a.  This is a  Continuation  Divisional  Continuation-in-part of prior U.S. Patent Application Serial No..

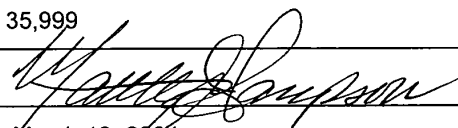
b.  Cancel in this application original claims of the prior application before calculating the filing fee. (At least one claim must remain.)

c.  Amend the specification by inserting before the first line the sentence:  
This is a  continuation  divisional  continuation-in-part of application Serial No.

d.  The prior application is assigned of record to

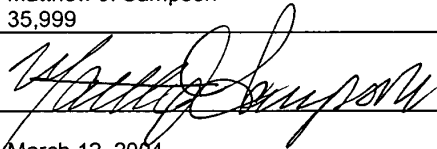
UTILITY PATENT APPLICATION TRANSMITTAL

Attorney Docket No. 04-225

APPLICATION FEES				
BASIC FEE				\$ 770.00
CLAIMS	NUMBER FILED	NUMBER EXTRA	RATE	
Total Claims	27 -20 =	7	x \$18.00	\$ 126.00
Independent Claims	3 - 3 =		x \$86.00	\$
<input type="checkbox"/> Multiple Dependent Claims(s) if applicable			+\$290.00	\$
Total of above calculations =				\$ 896.00
Reduction by 50% for filing by small entity =				\$(448.00)
<input checked="" type="checkbox"/> Assignment fee if applicable			+\$40.00	\$ 40.00
TOTAL =				\$ 488.00
20. <input type="checkbox"/> Please charge my Deposit Account No. 13-2490 in the amount of \$				
21. <input checked="" type="checkbox"/> A check in the amount of \$488.00 is enclosed.				
22. The Commissioner is hereby authorized to credit overpayments or charge any additional fees of the following types to Deposit Account No. 13-2490:				
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b. <input checked="" type="checkbox"/> Fees required under 37 CFR 1.17.				
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23. The Commissioner is hereby generally authorized under 37 CFR 1.136(a)(3) to treat any future reply in this or any related application filed pursuant to 37 CFR 1.53 requiring an extension of time as incorporating a request therefor, and the Commissioner is hereby specifically authorized to charge Deposit Account No. 13-2490 for any fee that may be due in connection with such a request for an extension of time.				
24. CERTIFICATE OF MAILING				
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25. USPTO CUSTOMER NUMBER				
39310				
Trading Technologies International, Inc.				
26. SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT REQUIRED				
Name	Matthew J. Sampson			
Reg. No.	35,999			
Signature				
Date	March 12, 2004			

UTIL (Rev. 11/21/00)

<b>REQUEST AND CERTIFICATION UNDER 35 U.S.C. 122(b)(2)(B)(i)</b>	Attorney Docket No. 04-225 First Named Inventor Scott F. Singer Express Mail Label No. EV334694993US
<p>I hereby certify that the invention disclosed in the attached application <b>has not and will not be</b> 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).</p>	

Name	McDonnell Boehnen Hulbert & Berghoff
Address	32 <sup>nd</sup> Floor, 300 South Wacker Drive
City, State, Zip	Chicago, Illinois 60606
SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT REQUIRED	
Name/Reg. No.	Matthew J. Sampson 35,999
Signature	
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18351 U.S. PTO  
031204

22386 U.S. PTO  
10/800295  
031204

## UTILITY PATENT APPLICATION TRANSMITTAL

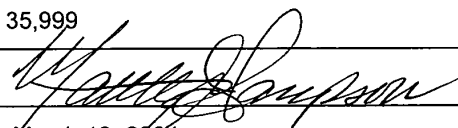
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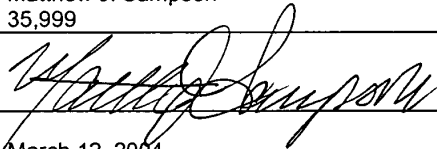
UTILITY PATENT APPLICATION TRANSMITTAL

Attorney Docket No. 04-225

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City, State, Zip	Chicago, Illinois 60606
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Name/Reg. No.	Matthew J. Sampson 35,999
Signature	
Date	March 12, 2004

**APPLICATION FOR A UNITED STATES PATENT  
UNITED STATES PATENT AND TRADEMARK OFFICE**

**TITLE: A System and Method for Displaying Order  
Information in Relation to a Derivative of Price**

**INVENTORS: Scott F. Singer  
Michael J. Burns  
Fred Monroe**

# A SYSTEM AND METHOD FOR DISPLAYING ORDER INFORMATION IN RELATION TO A DERIVATIVE OF PRICE

## 5 FIELD OF INVENTION

The present invention relates to electronic trading. More specifically, the present invention relates to displaying market information on a screen.

## BACKGROUND

An electronic exchange provides an automatic matching process between buyers  
10 and sellers, also referred to herein as traders. In particular, traders connect to an  
electronic exchange over a communication link. If necessary, a gateway is sometimes  
used to connect the trader with the electronic exchange. Once a trader is connected, the  
electronic exchange can broadcast its data feed to the traders over the communication  
link. Subsequently, the traders receive the data feed, in one form or another, and their  
15 computers process the information. Traders may respond by sending orders to buy or sell  
the tradeable object. When the electronic exchange receives an order, it may check the  
limits of the order, for example price and quantity, and prioritize the order. When buy  
and sell orders match, a trade occurs and information relating to the trade is relayed back  
to the traders' computers.

20 The kinds of information that are present in an electronic exchange's data feed are  
relatively dependent on the exchange itself. However, most electronic exchanges provide  
the same key pieces of information. For instance, they typically provide the best prices.  
This might include the best bid price, which represents the highest price that someone is  
willing to pay for the tradeable object, and the best offer price, which represents the

lowest price that someone is willing to sell the tradeable object. A data feed might also include one or more levels of the next best prices such as the next highest bid price(s) or the next lowest ask price(s). Along with price information, an electronic exchange will likely provide the bid and offer quantities available at those prices. More advanced  
5 electronic exchanges may even provide things like the last traded price (“LTP”), the last traded quantity (“LTQ”), the previous day’s settlement price, the open price, the close price and other information.

The data feed’s content can be displayed to a trader using a variety of different formats, any of which would be known to one of ordinary skill in the art. To provide the  
10 reader with a general background, two examples are provided directly below, with the understanding that many different formats and variations of the example screens shown in FIG. 1 and FIG. 2 exist and could also be used.

In one example, FIG. 1 illustrates a typical display 100 used in electronic trading. A trading screen similar to that shown in FIG. 1 is commercially available, as the Market  
15 window in the X\_Trader® product offered by Trading Technologies International, Inc. of Chicago, Illinois. In general, display 100 has an order entry section 102 and a market grid section 104. The order entry section 102 may have pre-set fields, properties, and buttons that can help someone trade quickly and efficiently. The market grid section 104 displays tradeable object information such as the tradeable objects name 106, number of  
20 working buy orders 108, bid quantities 110, bid prices 112, sell prices 114, sell quantities 116 and working sell orders 110. For instance, “object 1” is a tradeable object that has an inside market with a best bid price of “230” and a best offer price of “232.” The quantity

available at the inside market is “15” at “230” and “10” at “232.” In another instance, “object 2” is another tradeable object that has an inside market with a best bid price of “190” and a best offer price of “192.” The quantity available at the inside market is “45” at “190” and “90” at “192.”

5           In another example, FIG. 2 illustrates an evolved and more intuitive trading screen 200. A trading screen similar to that shown in FIG. 2 is also commercially available, as MD Trader™, from Trading Technologies International, Inc. of Chicago, Illinois. Trading screen 200 displays the same type of information as trading screen 100 in FIG. 1, except that it displays, among other things, bids 202 and offers 204 in  
10   association with price values along axis 206. Thus, a trader may view the market as it moves relative to price values on axis 206. Moreover, traders may enter orders quickly through trading screen 200 by simply clicking, with a mouse or some other input device, on specific areas on the screen associated with the price values.

          In addition to viewing traditional-style trading screens, traders are often interested  
15   in analyzing other pieces of highly relevant information that are not normally provided in an electronic exchange’s data feed nor displayed by a trading screen. For instance, they might make quick mental calculations, use charting software, or look to other sources to provide additional insight beyond what is normally provided by an exchange or a typical trading screen. Some even trade directly off this information. Regardless of what source  
20   or sources a trader might use, it may be too difficult for the trader to quickly assimilate this highly relevant information from diverse and often unrelated sources or even effectively process all of the information to make informed trades. In doing so, the trader

must attempt to determine various trends in the buying or selling of the tradeable object to favorably characterize the market.

In the following detailed description, a system and method for displaying, on a trading screen, order information in relation to a derivative of price, and in particular, for displaying the derivative of price along an axis, are described. These tools provide advantages, as described below, to a trader in an electronic trading environment.

## BRIEF DESCRIPTION OF THE DRAWINGS

Many aspects of the preferred embodiments may be better understood with reference to the following drawings. The components in the drawings are not necessarily to scale, emphasis instead being placed upon illustrating example embodiments.

5           FIG. 1 illustrates one example format used to convey market information received from an electronic exchange to a trader;

          FIG. 2 illustrates a second example format used to convey market information received from an electronic exchange to a trader along an axis;

          FIG. 3 illustrates an overview of an example system configuration, in accordance  
10 with the preferred embodiments, used to relay market information to a variety of trading terminals;

          FIG. 4 illustrates a flow diagram of an example process for generating a derivative of price axis and displaying order information in association with derivative of price values on the axis;

15           FIG. 5 illustrates an example graphical user interface that can be used to select price derivative types for use in generating price derivative values;

          FIGS. 6-9 illustrate an example screen in accordance with an aspect of the preferred embodiments; and



FIG. 10 illustrates an example screen in accordance with another aspect of the preferred embodiments.

## DETAILED DESCRIPTION

### I. Overview

The system and method of the present invention are appropriate for use in any electronic trading screen, and work particularly well with a trading screen similar to that shown in FIG. 2, which displays market data in association with a price scale or axis. A trading screen like that shown in FIG. 2 is described in U.S. Patent Application No. 09/590,692, filed on June 9, 2000, and entitled, "Click Based Trading With Intuitive Grid Display of Market Depth," the contents of which are incorporated herein by reference. The system and method may also work with a trading screen like that shown in FIG. 1, which is described in U.S. Patent Application No. 09/589,751, filed on June 9, 2000, and entitled, "Click Based Trading with Market Depth Display," the contents of which are incorporated herein by reference.

In the description that follows, in the interest of clarity, aspects of the preferred embodiments will focus primarily on generating values that are derivatives of price and then displaying these values along an axis on a screen. Thereon, market information is displayed in relation to the value axis. Though, it is understood that the system and method of the present invention may be applied to any trading screen and are not limited to those with use of an axis. It is further understood that the generated values do not actually need to be displayed to a trader so long as market information is displayed in relation to the derivative of price values on the value axis.

As used herein, a derivative of price is anything that has some dependence on or relationship to price. For instance, a derivative of price (or “price derivative”) might result from a formula or other logical relation. There are many different possible price derivatives and they are readily apparent to one of ordinary skill in the art. Accordingly, 5 an example embodiment using net change as the derivative of price is primarily described with the understanding that there are numerous other price derivative types. For further illustration, however, some additional examples are also included.

Other systems, methods, features, and advantages of the present invention will be or become apparent to one with skill in the art upon examination of the following 10 drawings and description. It is intended that all such additional systems, methods, features, and advantages be within the scope of the present invention, and be protected by the accompanying claims.

## **II. Example Trading System**

The system and method of the preferred embodiments are appropriate for use in 15 any electronic trading environment. The example electronic trading system, comprising various elements, is described with the understanding that there are numerous equivalent elements and systems, all of which will be apparent to one of ordinary skill in the art.

FIG. 3 is a block diagram that illustrates an example electronic trading system 20 300. The electronic trading system 300 includes one or more electronic exchanges generally indicated as 302, 304, 306 and one or more client devices generally indicated as 308, 310, 312. Intermediate devices such as gateways 314, 316, 318, routers (not

shown), and other such types of network devices may be used to connect network 320 to networks 322, 324, 326 so that client devices 308, 310, 312 and exchanges 302, 304, 306 can communicate.

As indicated above, the preferred embodiments are not limited to any particular trading system configuration. For instance, networks 322, 324, 326 could represent the same network, network 320 could represent the same network as networks 322, 324, 326, or client devices 308, 310, 312 could connect directly to gateways 314, 316, 318. In addition, it is understood that the preferred embodiments may be implemented with systems that have only one electronic exchange (e.g., any of electronic exchanges 302, 304, 306) that lists one or more tradeable objects.

#### **A. Electronic Exchange**

In one embodiment, electronic exchanges 302, 304, 306 represent electronic trading platforms that preferably support electronic transactions of various kinds of tradeable objects. Examples of more sophisticated electronic trading platforms include the London International Financial Futures and Options Exchange (LIFFE), the Chicago Board of Trade (CBOT), the Chicago Mercantile Exchange (CME), the Exchange Electronic Trading (“Xetra,” a German stock exchange), and the European Exchange (“Eurex”).

In another embodiment, electronic exchanges 302, 304, 306 might refer to other facilities, which include more basic systems that automatically match incoming orders. According to this embodiment, for instance, an electronic exchange 302, 304, 306 might

simply refer to an online trading place where sports fans go to buy or sell seats for an event.

Each of the electronic exchanges 302, 304, 306 may host one or more computer-based electronic markets. Traders may connect to the one or more electronic markets to trade tradeable objects. As used herein, the term “tradeable objects,” refers simply to anything that can be traded with a quantity and/or price. It includes, but is not limited to, all types of tradeable objects such events, goods and financial products, which can include, for example, stocks, options, bonds, futures, currency, and warrants, as well as funds, derivatives and collections of the foregoing, and all types of commodities, such as grains, energy, and metals. The tradeable object may be “real,” such as products that are listed by an exchange for trading, or “synthetic,” such as a combination of real products that is created by the user. A tradeable object could actually be a combination of other tradeable object, such as a class of tradeable objects.

An electronic market can implement any of the numerous types of order execution algorithms; sometimes the type of algorithm depends on the tradeable object being traded. By way of illustration only, some example order execution algorithms include price/time priority (also referred to as first-in-first-out or “FIFO”) and pro rata-style algorithms. The FIFO algorithm, for instance, attempts to give priority to the first person to place an order. The pro rata algorithm, for instance, splits all (or most) orders for the same price at a particular point in time. The system and method of the present invention are not limited to any particular type of order execution algorithm.

It is further understood that an electronic market might include other software and/or hardware components to perform other tasks beyond matching orders or part of orders. These software and/or hardware components may be local or remote to the physical location of an electronic exchange. In other words, the components can be operated at the electronic exchange or at locations outside of the electronic exchange such as points of access. Points of access may include gateways or other fast computing devices that are nearby the electronic exchange and have access to other points of access near other electronic exchanges.

## **B. Gateway**

In one embodiment, gateways 314, 316, 318 function as portals to a particular electronic exchange. Gateways 314, 316, 318 may include any computing device such as a mainframe, super minicomputer, minicomputer, workstation, or personal computer that connect network 320 to networks 322, 324, 326 so that market information may be successfully passed between client devices 308, 310, 312 and exchanges 302, 304, 306.

According to one aspect, gateways 314, 316, 318 preferably receive market data from exchanges 302, 304, 306 and convert it to a form compatible with the protocols used by client devices 308, 310, 312 using conversion techniques known in the art. Also, as known by those skilled in the art, gateways 314, 316, 318 may have one or more servers to support the data feeds, such as a price server for processing price information, an order server for processing order information, and a fill server for processing fill information. A trader at one of client devices 308, 310, 312 can preferably subscribe to price information, order information, and fill information for a particular electronic

market hosted at exchanges 302, 304, 306. According to another aspect, gateways 314, 316, 318 preferably receive transaction information, such as orders, order changes, queries, etc. from client devices 308, 310, 312 and forward that information to corresponding exchanges 302, 304, 306.

5           In another embodiment, client devices 308, 310, 312 might connect to electronic exchanges 302, 304, 306 without the need for protocol translation. For instance, a client device might have computer software that recognizes a particular exchange's protocol, and therefore, may have a direct connection to the electronic exchange.

10           It is further understood that gateways or similar types of computer-based devices may be used as points of access. Accordingly, client devices 308, 310, 312 may access an electronic exchange through a gateway, especially if the gateway(s) is used as a point of access in a network and/or at an electronic exchange.

### **C.     Client Device**

15           In one embodiment, client devices 308, 310, 312 function as an interface to trade at one or more electronic exchanges 302, 304, 306. Examples of client devices include a personal computer, laptop computer, hand-held computer, and so forth. Client devices 308, 310, 312, according to one aspect of the preferred embodiments, include at least a display, processor and memory. The processor and memory, which are both well-known computer components, are not shown in the Figure for sake of clarity.

20           It is understood that a display includes any visual output device of a client device. For sake of illustration to the reader only, examples include a CRT-based display, LCD-

based display, a gas plasma-based display, or any other type of display device. For instance, the display device might be physically set on a desk top for a user to view, projected on a wall by a projector, or head mounted in special goggles.

It is further understood that a processor includes any device that, among other things, interprets and executes instructions. In other words, the processor functions as the “brains” of the computer device. Processor may also encompass any components that make up the computers main console to perform the functions described herein.

It is further understood that memory includes a device where information can be stored (temporarily or otherwise) on any computer readable medium and retrieved. The term computer readable medium, as used herein, refers to any medium that participates in providing instructions to processor for execution. Such a medium may take many forms, including but not limited to, non-volatile media, volatile media, and transmission media. Non-volatile media includes, for example, optical or magnetic disks, such as storage device. Volatile media includes dynamic memory, such as main memory or RAM (sometimes referred to as “random access memory”). Common forms of computer-readable media include, for example, a floppy disk, a flexible disk, hard disk, magnetic tape, or any other magnetic medium, a CD-ROM, any other optical medium, punch cards, paper tape, any other physical medium with patterns of holes, a RAM, a PROM, and EPROM, a FLASH-EPROM, and any other memory chip or cartridge, or any other medium from which a computer can read.

In one embodiment, depending on what tradeable objects are being traded, each of client devices 308, 310, 312 receive market information from one or more electronic



markets hosted at any of electronic exchanges 302, 304, 306. Accordingly, market information is displayed to the trader(s) in a trading screen, in accordance with the preferred embodiments, on a visual output device or display device. A trader may also receive news to aid him in analyzing information received from the exchange.

5           Upon viewing the market information or a portion thereof, a trader may wish to send orders to an exchange, cancel orders in a market, change orders in a market, query an exchange, and so on. To do so, the trader may input various commands or signals into the client device 304, for example, by using one or more conventional means for inputting information such as typing into a keyboard, inputting commands through a  
10 mouse, or inputting commands or signals through some other input device.

          Upon receiving one or more commands or signals, client devices 308, 310, 312 preferably generate transaction information. In addition to or in place of manual entry, a trader might use automated trading software that automatically or semi-automatically generates transaction information. Of course, there are many different types of messages  
15 and/or order types that can be submitted to an electronic exchange, all of which may be considered various types of transaction information. Once generated, for instance, transaction information is sent from client device 308 to exchange 302 over network(s) 320 and 322.

### **III. System Function and Operation**

20           As will be appreciated by one of ordinary skill in the art, various aspects of the preferred embodiments may be operated in an entirely software embodiment, in an

entirely hardware embodiment, or in a combination thereof. In the interest of clarity, the preferred embodiments are described in a software embodiment based on a C or C++ language, or any other suitable programming language, which is executed on a computer device. As such, the preferred embodiments take the form of a computer program  
5 product that is stored on a computer readable medium and is executed by a suitable instruction execution system or processor in the computer device. Examples of computer readable medium were provided above.

It is understood that the description contained herein is considered as illustrative only of the various aspects of the preferred embodiments. Further, since numerous  
10 modifications and changes will readily occur to those skilled in the art, it is not desired to limit the present invention to the construction and operation shown and described, and accordingly, all suitable modifications and equivalents may be resorted to.

In one embodiment, the system and method of the preferred embodiments may be operated at a client device. For instance, referring to FIG. 3, one of, some of, or all of  
15 client devices 308, 310, 312 may run program software to implement the various functions described herein. As shown in FIG. 3, each client device 308, 310, 312 is electronically linked to each of electronic exchanges 302, 304, 306 through gateways 314, 316, 318 to receive a data feed. Preferably, each client device 308, 310, 312 may receive data feeds from multiple electronic exchanges. A client device may use the data  
20 feed to generate derivative of price values.

In another embodiment, the system and method of the preferred embodiments may be operated at other computing devices besides client devices 308, 310, 312. For

instance, referring again to FIG. 3, any of gateways 314, 316, 318 may run program software to implement the functions described herein. Each gateway 314, 316, 318 is electronically linked to electronic exchanges 302, 304, 306 to receive one or more data feeds. A gateway may generate derivative of price values for display and disseminate the values across one or more networks to client devices 308, 310, 312. In addition, gateways (not shown in FIG. 3) might be used to electronically interconnect communication between exchanges 302, 304, 306. Other types of computer devices like gateways may be used to run the program software to implement aspects of the preferred embodiments.

10 In yet another embodiment, the system and method of the preferred embodiments may be operated by other computing devices at an electronic exchange. According to this embodiment, an electronic exchange could provide one or more various data feeds that include market information corresponding to a price derivative. For instance, referring again to FIG. 3, any of electronic exchanges 302, 304, 306 may run program software to implement the functions described herein. One or more data feeds with derivative of price values may be disseminated from an electronic exchange to gateways 314, 316, 318 and/or client devices 308, 310, 312.

FIG. 4 shows a flow diagram for illustrating an example method of operation, and more specifically shows the functionality and operation of a possible implementation of the preferred embodiments. In this regard, each block may represent a module, segment, or portion of code, which includes one or more executable instructions for implementing specific logical functions or steps in the process. Alternate implementations are included

within the scope of the preferred embodiment of the present invention in which functions may be executed out of order from that shown or discussed, including substantially concurrently or in reverse order, depending on the functionality involved, as would be understood by those reasonable skilled in the art of the present invention.

5           In the interest of clarity, net change will be used to describe the flow diagram of FIG. 4, with the understanding that there are numerous other price derivatives. As used herein, net change represents a difference in value(s) between two points in time. Examples of other price derivatives include yield, profit/loss (P&L), volatility and momentum, just to name a few, and are described later in the application. It is  
10 understood that net change may also include the net change of price, yield, P&L, volatility, momentum, or a change in any other measurement.

Turning to FIG. 4, various signals may be input into value axis generator 402. The various signals may depend on the actual price derivative. With respect to net change, reference point 404 represents one or more values at an earlier point in time.  
15 Current point 406 represents one or more values at the current time (or some other designated time that occurs after reference point 404). Value axis generator 402 receives the inputs at each point in time and computes the price derivative values based on some predefined relationship or formula, which in this instance, is the change in values at reference point 404 and current point 406. Then, value axis generator 402 generates an  
20 axis of values, which may be subsequently used and updated in graphical display window 408. The axis may also be displayed. An example relationship for net change is provided to the reader in the examples section of this application.

It is understood that if the price derivative is displayed, the price derivative values may be represented in numerical form and/or graphical form. If they are represented in graphical form, then shapes, colors, or any other graphic may be used in addition to the number values or in place of the number values to represent the various price derivative values. For instance, if profit and loss (P&L) was the price derivative, then the color green might be used to represent a positive P&L whereas the color red might be used to represent a negative P&L.

In one aspect, a data feed is received from an electronic exchange as described above. Information pertaining to the value type is parsed out of the data feed by value axis generator 402 and held. The information might be held in buffer storage or on some other computer readable medium. The length of time that the information is held most likely depends on the time difference between reference point 404 and current point 406. For instance, if the time difference is one-hour, then the relevant information is preferably held for approximately one-hour.

In another aspect, a data feed is received from another software application. According to this aspect, information from another software application such as a computer-based spreadsheet or an automated trading tool, for instance, may generate values based on various pieces of market information received from an exchange and some user defined algorithm. Accordingly, the information received from the software application pertaining to the value type may be parsed and held, similarly to the way information is received from an electronic exchange.

In one embodiment, the trader can set parameters that are used in determining the price derivative through a graphical user interface. FIG. 5 shows an example embodiment of a graphical user interface. Graphical user interface 500 (“GUI”) is a visual environment that preferably represents options with graphical images, such as icons, menus, and dialog boxes on a screen. The user may select and activate these options by pointing and clicking with a mouse, selecting them with a keyboard, or by setting them with some other input device. It is also possible to set such parameters through something other than a graphical user interface, such as through command-line entry, which is not shown in FIG. 5.

As shown in FIG. 5, GUI 500 allows a user to select the price derivative of choice. In addition to, or in place of, displaying price, which is a more conventional display option shown in FIGS. 1 and 2, the preferred embodiments allow the user to select price derivatives including, but not limited to, net change, yield, profit/loss (P/L), volatility, and momentum. Preferably, the price derivative can be based on any user-defined formula. For instance, GUI 500 might enable a user to define a particular formula (e.g., shown in FIG. 5 at “Formula Entry” by providing a user with an area for entering an equation and/or linking an equation from a third party software program), or GUI 500 might allow a user to search through a selection of one or more formulas (e.g., shown in FIG. 5 at “Browse Formulas” by browsing for predefined equations).

According to one aspect, if a user selects net change (shown as a mark “X” in a check box next to the net change option in FIG. 5), then GUI 500 allows a user to enter more detail related to net change. For instance, GUI 500 allows for input of a reference

point 404 such as the previous settlement price, or a time differential starting at a particular day, hour, minute, and second. For instance, as shown in FIG. 5, “10” days was chosen as the reference point 404, which means that the system will preferably calculate the net change between the current time (or some other designated time, if  
5 allowed to do so) and “10” days previous to the current time.

According to another aspect, an option in the form of an icon or button may be provided on the trading screen that allows a trader to simply select it thereby setting the reference point 404 to the time of selection. In other words, a trader may preferably set the reference point 404 right on the trading screen, and on the fly if so desired, instead of  
10 or in addition to, setting it through GUI 500. Then, the price derivative values may change on the fly according to the time of selection. For instance, while a trader is trading a particular tradeable object, he or she may select, preferably at any time, an icon or button that causes value axis generator 402 to immediately recalculate the net change values starting from the time of selection to the present time. This feature may also apply  
15 to any other price derivative. Notice that an icon/button labeled “Update” is shown in FIGS. 6-10 to implement this feature. In other words, the “Update” icon can be selected through a single action of a user input device to recalculate the price derivative values at that time. Of course, the icon or button may be placed anywhere on the screen.

According to yet another aspect, a programmed event may cause value axis  
20 generator 402 to recalculate the price derivative values. For now, let us assume that net change is the price derivative and this feature is programmed to recalculate when a user’s own order is filled. According to this example assumption, if the trader’s order fills,

value axis generator 402 would calculate net change values from the time the order filled to the current time. Of course, any event may be preferably programmed so that when the event occurs, value axis generator 402 responds by generating or updating values on the value axis. This feature may also apply to any other price derivative.

5            In the preferred embodiments, once a price derivative is chosen, the price derivative value or values, which are generated by value axis generator 402, may be used and/or displayed in any trading screen regardless of whether the trading screen utilizes an axis. In particular, the price derivatives may be used in place of and/or displayed where prices have normally been used and/or displayed in conventional systems. Thus, one of  
10 ordinary skill in the art will recognize that the preferred embodiments may be beneficially utilized by any particular trading screen.

#### **IV. Net Change Examples**

##### **A. Generating and Displaying Data in Relation to a Price Derivative**

According to one example, assume that net change has been selected as the price  
15 derivative and the reference point was yesterday's settlement price in units of ticks at "125," where a tick is the minimum change in a price value that is set by the exchange for each tradeable object. The last traded price ("LTP") is currently at a price of "230," shown in FIG. 6 by the "5" placed in the last traded quantity indicator column 602. Using the following relationship directly below, value axis generator 402 computes a net  
20 change of  $+105 = 230 - 125$ .

$$\text{Net change} = (\text{Value(s) at Current Point}) - (\text{Value(s) at Reference Point})$$



By way of illustration, FIG. 6 shows an example screen that displays the computed net change value of “+105.” Preferably, the net change value is placed approximately in the center of the display so that market data, such as bid and offer quantities, may be mapped and properly viewed by the trader. It is understood that FIGS. 5 6, 7, and 8 show various steps for describing one example process of generating the value axis to the reader of this application. As a commercially viable product, value axis generator 402 preferably generates the axis and maps the market data in a simultaneous, or near simultaneous, manner so that the market data can be conveyed to the trader in real-time, without disruption.

10 Now, value axis generator 402 can compute other net change values that correspond to price levels above and below the current last traded price. By doing this, the current bid and ask quantities may be displayed approximately near the center of the display. We end up with a value axis that includes values ranging from “+97” to “+114,” shown in FIG. 7. These values may be generated in any particular way. One example 15 method includes moving up/down to various price levels in one-price tick-increments and calculating the net change value based on that particular price level and doing this for as many price levels as necessary. Another example method includes determining the minimum net change, which most likely corresponds directly to the minimum price tick size, and adding/subtracting the minimum net change to various levels of net change on 20 the value axis (e.g., FIG. 7 shows a minimum net change of “1,” therefore according to this example, a value of “1” can be added/subtracted from “+105” to calculate the net change values one level above/below “+105,” which can be repeated for as many levels as needed).

FIG. 8 shows an example screen that displays the generated value axis in addition to market data. As shown, market data, such as the bid and offer quantities, are mapped to the price derivative values. Currently, the last traded price is “+105” ticks above yesterday’s settlement price. This can now be seen by referring to the net change box 5 806, which displays the current net change value, or by viewing the last traded quantity in direct relation to the net change at 808 along the value axis. In addition, one can view the current best bid price is “+105” ticks above yesterday’s settlement price, the current best offer price is “+107” ticks above yesterday’s settlement price, and so on. As such, a trader can quickly and effectively determine the net change between the current state of 10 the market and the state of the market as it was yesterday at closing, or at whatever reference point chosen. As new market data is received, value axis generator 402 preferably updates the screen to reflect the new information.

There are alternative ways to generate the value axis. In the above example, the current last traded price (“LTP”) was used to begin the generation process. Then, the 15 remaining part of the viewable axis was completed so that market data could be mapped and easily seen by a trader on the screen. However, other items may be used instead of LTP. As such, the value axis generator 402 could be programmed to start at the best bid price, the best offer price, or some other item of interest. For instance, if the best offer price is used, then value axis generator 402 computes a net change of  $+107 = 232 - 125$ . 20 Then, value axis generator 402 can compute other net change values that correspond to price levels above and below the current best offer price.

It is understood that a trader can scroll along the value axis (e.g., by pressing the up or down arrows 810, as shown in FIG. 8) to view other net change values and/or other pieces of market information, such as working orders, relative to the value axis. When this happens, value axis generator 402 preferably completes the visible portion of the axis using the already generated values as a starting point. For instance, referring to FIG. 8, if the trader scrolls up and beyond the net change of "+114," then value axis generator 402 can start at "+114" and graphically fill in the visible locations (e.g., "+115," "+116,"...), which are not shown in the figure.

It is further understood that a trader can consolidate net change values, or any other price derivative, in a similar manner to how price levels are consolidated. Price consolidation is described in U.S. Application No. 09/971,087, filed on October 5, 2001, and entitled, "Click Based Trading with Intuitive Grid Display of Market Depth and Price Consolidation," the contents of which are incorporated herein by reference. When the interface is configured to display market information in relation to a consolidated price scale, the same interface may be configured to display market information in relation to a consolidated price derivative scale. As such, market information like bid and offer quantities may be consolidated and displayed in association with a consolidated price derivative row. Consolidation of the price derivative axis may be activated through a graphical user interface, such as the trading screen itself or through some menu driven interface, for instance.

FIG. 9 shows a screen with a value axis according to another embodiment. In this example, the net change is displayed along the value axis without displaying prices as in

FIGS. 6, 7, and 8. Again, the net change is “+105” ticks because the last trade of “5” occurred at “230.” Accordingly, value axis generator 402 has generated a value axis to display market information in association with net change. As shown, the value axis shows net change values from “+97” to “+114.”

5           A feature of the present invention is its flexibility. For instance, as indicated earlier, net change represents a difference in value between two points in time. The example described with respect to FIGS. 6, 7, 8, and 9 used the previous settlement price. However, other changes could have been tracked just as easily by value axis generator 402. For instance, the change in the best bid price or the change in the best offer price  
10 over a certain time period could have been displayed. Accordingly, any change, of any item of interest, may be tracked and displayed on the screen.

As indicated earlier, other types of screens may benefit from the preferred embodiments, besides the trading screens that utilize an axis. FIG. 10 illustrates a screen without an axis. However, as shown, it too can display price derivatives that are  
15 generated by value axis generator 402. For ease of illustration, some of the data shown in the screen in FIG. 10 is equivalent to that data shown in FIGS. 8 and 9. In other words, “object 1,” which represents an example tradeable object, has a current bid quantity of “15” available at the net change value of “+105,” and has a current offer quantity of “10” available at the net change value of “107.”

20           In addition, multiple scales may be used along an axis such that each scale represents a different value type. For instance, one scale might represent price and a second scale might represent a derivative of price such as shown in FIGS. 6, 7, and 8. In

another instance, one scale might represent one type of derivative of price and a second scale might represent another type of derivative of price. Of course, one of ordinary skill in the art will appreciate that any number of scales and/or axes may be used in conveying information to the trader.

5           B.     Order Entry

In one embodiment, a trading screen may be programmed to accept signals indicating a desire to send buy or sell orders to the exchange. For instance, a trader may be able to send orders by simply clicking in designated regions, such as in buy and/or sell order entry regions, of the display. Likewise, orders could be easily cancelled with the  
10 click of a mouse. As such, the preferred embodiments build on the order entry and order cancellation concepts described in the incorporated U.S. Patent Application No. 09/590,692, entitled, "Click Based Trading With Intuitive Grid Display of Market Depth."

According to one aspect of the preferred embodiments, to enable a trader to  
15 quickly send an order to electronic exchange, one or more parameters of an order are preferably based on at least one preset parameter and the location of a cursor on the display. According to one preferred embodiment, an order's quantity is based on a preset quantity while the order's price is based on the location of the cursor on the display, regardless of whether price is actually being displayed with the price derivative. Of  
20 course, the preset parameter can be based on something other than quantity such as last traded quantity ("LTQ"), a theoretical value, price, or some other item of interest.

Additionally, the preset parameter may be linked to and/or based on a dynamic value or an equation.

According to one aspect of the preferred embodiments, the display has one or more regions. Then, the regions can be set up so that one region is an order entry region for buy orders and another region is an order entry region for sell orders. A buy order entry region can be an area dedicated for order entry, or alternatively, the buy order entry region can overlap other regions such as the bid quantity display region. The same may be true for a sell order entry region. Then, when an input device used to control the cursor is positioned over one of the order entry regions, and a button is “pressed” an order to buy (if the cursor is positioned over the buy order entry region) or an order to sell (if the cursor is positioned over the sell order entry region) would be sent to the electronic exchange. It should also be understood that the preferred embodiments may have multiple buy regions and/or multiple sell regions. Then, for example, each of the multiple buy regions and each of the multiple sell regions could represent a different order type. Example order types known to one skilled in the art of trading include basket, iceberg, block orders limit, limit-on-close, limit-on-open, market, market-on-close, market-on-open, odd lot, one-cancels-all, relative stop, stop limit, sweep-to-fill, and volume weighted average price.

According to one aspect of the preferred embodiments, orders can be sent to an electronic exchange by simply clicking in buy and/or sell order entry regions of the display. In other words, orders may be sent by a single-action of a user input device. As used herein, a single-action preferably refers to a single click of a mouse as a means for

user input and interaction with the terminal display. While this describes a preferred mode of interaction, the scope of the present invention is not limited to the use of a mouse as the input device or to the click of a mouse button as the user's single-action. Rather, any action by a user within a short period of time, whether comprising one or  
5 more clicks of a mouse button or other input device, is considered a single-action of the user for the purposes of the present invention.

For example, referring to FIG. 8, a buy order entry region might include cells 802 on the bid side and a sell order entry region might include cells 804 on the ask side. In particular, with a preset quantity already set, if one clicks on a cell in the buy order entry  
10 region, then an order would be sent to the exchange to buy a quantity of the tradeable object equal to the preset quantity. If one clicks on a cell in the sell order entry region, then an order would be sent to the exchange to sell a quantity of the tradeable object equal to the preset quantity.

In another aspect of the preferred embodiments, buttons on an input device are  
15 programmed so that when a particular button is pressed it sends a buy order to the matching engine and that when another button when pressed it sends a sell order to the matching engine. For instance, with a present quantity already set, if one clicks on a cell associated with a price with the right mouse button, then an order would be sent to the exchange to sell a quantity of the tradeable object equal to the preset quantity. If one  
20 clicks on a cell associated with a price with the left mouse button, then an order would be sent to the exchange to buy a quantity of the tradeable object equal to the preset quantity.

#### IV. Other Price Derivative Examples

As indicated previously, any price derivative can be used so long as there is some relationship between a price and the price derivative, such as a formula. Examples include yield, P/L, volatility, and momentum. If the price derivative values are actually displayed on the screen, they may be displayed to the trader in any form including a numerical format and/or a graphical format. It is understood that the following examples are considered as illustrative only, and that one skilled in the art can apply the principles described in this application to any values on an axis.

In one embodiment, yield is a derivative of price. There are many types of yield, though a commonly referred to yield is the yield to maturity (YTM), which is the interest rate by which the present values of all the future cash flows are equal to the bond's price. The YTM for U.S. Treasury bonds and notes can be determined by solving the following equation:

$$\text{Price} = \frac{C \left[ 1 - \left[ \frac{1}{(1 + y_{TM})^T} \right] \right]}{y_{TM}} + \frac{P}{(1 + y_{TM})^T}$$

Where:

Price = Price value

C = the rate of interest to be paid

P = Principal, which is the amount to be borrowed (e.g., face value or par)

T = Term

$Y_{TM}$  = YTM



Using the yield equation, for instance, value axis generator can generate yield values on a value axis for which market information is appropriately mapped. To do so, various inputs into value axis generator might include the variables (fixed variables or non-fixed variables) shown in the equation above. Then, value axis generator can solve or back solve for the unknown variable, such as YTM in this instance. Accordingly, the trading display having market data mapped to yield gives traders an opportunity to trade based on yield.

In another embodiment, profit & loss or P&L is a derivative of price. There are many ways to measure P&L, all of which may be mapped to an axis. For instance, the break-even point may be used. So, if a trader has bought one lot of a particular tradeable object at “230,” then referring to FIG. 8, the value axis might include a “0” associated with the price of “230,” and then “+1” associated with “231,” “+2” associated with “232,” and so on, and “-1” associated with “229,” “-2” associated with “228,” and so on. In this instance, these P&L values represent the gross profit acquired if one lot of the particular tradeable object was sold at the associated price. Of course, there are numerous ways to calculate P&L and one of ordinary skill in the art would recognize the many different possibilities. In addition, it will be appreciated by one of skill in the art that graphics may be used to display P&L (or any other price derivative indicator, for that matter) along the value axis instead of or in addition to using numerical values. For instance, if the trader’s P&L is positive, a color such as green might be displayed at such positive value locations whereas if the trader’s P&L is negative, a color such as red might be displayed at negative value locations.

In yet another embodiment, volatility, and in particular, implied volatility is a derivative of price. In one embodiment, implied volatility is a theoretical value (or values) designed to represent the volatility of the tradeable object underlying an option as determined by the price of the option. There are many ways to measure volatility, all of which may be mapped to an axis. A common formula used in measuring volatility is the Black-Scholes option pricing model, a version of which is shown below:

$$C = SN(d_1) - Ke^{(-rt)}N(d_2)$$

Where:

C = Theoretical call premium

10 S = Current stock price

t = Time until option expiration

K = Option striking price

r = risk free interest rate

N = Cumulative standard normal distribution

15 e = exponential term (2.7183)

$$d_1 = \frac{\ln(S/K) + (r + s^2/2)t}{s\sqrt{t}}$$

$$d_2 = d_1 - s\sqrt{t}$$

s = standard deviation of stock returns

ln = natural logarithm

20 Using the Black-Scholes equation, for instance, value axis generator can generate volatility values on a value axis for which market information is appropriately mapped. Then, the trading display gives traders an opportunity to trade based on volatility. Of course, many different equations can be used to generate volatility values.

Momentum is a type of trading strategy used by some traders. In momentum trading, traders may focus on a tradeable objects movement over the course of a defined time period. In other words, momentum is the perceived strength behind a price movement. As such, momentum indicators may be displayed along an axis. Such indicators attempt to predict future market trends based on recent price and volume data. For instance, an indicator might compare the current price of a tradeable object to the price a selected number of periods ago. The resulting number represents the rate of change of the security's price over that given time period. According to this embodiment, values on the axis might change in magnitude to correspond to changes in momentum at a particular price level.

## V. Conclusion

The foregoing is considered as illustrative only of the principles of the invention. Further, since numerous modifications and changes will readily occur to those skilled in the art, it is not desired to limit the invention to the exact construction and operation shown and described, and accordingly, all suitable modifications and equivalents may be resorted to, falling within the scope of the invention.

It is further understood that the programs, processes, methods and apparatus described herein are not related or limited to any particular type of computer or network apparatus (hardware or software), unless indicated otherwise. Various types of general purpose or specialized computer apparatus or computing device may be used with or perform operations in accordance with the teachings described herein.

It is further understood that a hardware embodiment might take a variety of different forms. A hardware embodiment may be implemented as an integrated circuit with custom gate arrays or an application specific integrated circuit (“ASIC”). A hardware embodiment may also be implemented with discrete hardware components and  
5 circuitry. In particular, it is understood that the logic structures and method steps described in the flow diagrams may be implemented in dedicated hardware such as an ASIC, or as program instructions carried out by a microprocessor or other computing device.

The claims should not be read as limited to the described order of elements unless  
10 stated to that effect. In addition, use of the term “means” in any claim is intended to invoke 35 U.S.C. §112, paragraph 6, and any claim without the word “means” is not so intended. Therefore, all embodiments that come within the scope and spirit of the following claims and equivalents thereto are claimed as the invention.

## CLAIMS

What is claimed is:

1. A method for displaying market information relating to a tradeable object being traded at an electronic exchange having an inside market with a highest bid price and a lowest offer price, the method comprising:
  - 5 dynamically displaying a first indicator in one of a plurality of locations in a bid display region, each location in the bid display region corresponding to a derivative of price value along a static value axis, the first indicator representing quantity associated with at least one order to buy the tradeable object at the highest bid price currently available in the market;
  - 10 dynamically displaying a second indicator in one of a plurality of locations in an ask display region, each location in the ask display region corresponding to a derivative of price value along the static value axis, the second indicator representing quantity associated with at least one order to sell the commodity at the lowest ask price currently available in the market;
  - 15 displaying the bid and ask display regions in relation to fixed derivative of price values positioned along the static value axis such that when the inside market changes, the derivative of price values along the static value axis do not move and at least one of the first and second indicators moves in the bid or ask display regions relative to the static value axis;
  - 20

displaying an order entry region comprising a plurality of locations for receiving commands to send trade orders, each location corresponding to a derivative of price value along the static value axis; and

in response to a selection of a particular location of the order entry region by a single action of a user input device, setting a plurality of parameters for a trade order relating to the tradeable object and sending the trade order to the electronic exchange.

2. The method of claim 1 further comprising displaying a numerical, graphical, or numerical and graphical representation of the derivative of price values along the common value axis.

3. The method of claim 1 wherein each of the derivative of price values are based through a common relationship on a different price.

4. The method of claim 3 wherein the common relationship is input through a graphical user interface.

5. The method of claim 3 wherein the derivative of price values comprise a net change and the common relationship comprises  $Net\ change = (Value(s)\ at\ Current\ Point) - (Value(s)\ at\ Reference\ Point)$ .

6. The method of claim 1 wherein the derivative of price values comprise yield, profit and loss, volatility, or momentum indicators.

7. The method of claim 1 wherein the derivative of price values are updated at predetermined intervals.
- 5 8. The method of claim 1 further comprising displaying a region for receiving a command to update the derivative of price values, wherein the derivative of price values are updated in response to a selection of the region with a user input device.
9. The method of claim 1 wherein the derivative of price values are updated in response to detecting a programmed event.
- 10 10. The method of claim 1 further comprising displaying a plurality of bid and offer indicators in association with the derivative of price values, wherein each of the bid indicators represents a quantity available to buy the tradeable object and each of the offer indicators represents a quantity available to sell the tradeable object.
- 15 11. The method of claim 10 further comprising:  
consolidating the derivative of price values on the static value axis such that groups of two or more values are combined into consolidated value levels; and  
20 consolidating the display of the plurality of bid and offer indicators into a plurality of consolidated bid and offer indicators so that each consolidated bid and offer indicator represents quantity associated with a the two or more values within a consolidated value level.

12. The method of claim 1 further comprising displaying a second set of values along the static value axis, wherein each of the second set of values corresponds to each of the derivative of price values on the value axis.

5

13. The method of claim 12 wherein each of the second set of values represents a price.

14. The method of claim 12 wherein each of the second set of values represents a  
10 different derivative of a price.

15. A method for displaying market information relating to a tradeable object being traded at an electronic exchange having an inside market with a highest bid price and a lowest offer price, the method comprising:

15 calculating a plurality of price derivative values, wherein each of the plurality of price derivative values represents a change between a first number at a first point in time and at a second number at a second point in time;

dynamically displaying a first indicator in a location in a bid display region, the location in the bid display region corresponding to one of the plurality of price derivative  
20 values, the first indicator representing quantity associated with at least one order to buy the tradeable object at the highest bid price currently available in the market; and

dynamically displaying a second indicator in a location in an ask display region, the location in the ask display region corresponding to one of the plurality of price



derivative values, the second indicator representing quantity associated with at least one order to sell the tradeable object at the lowest ask price currently available in the market.

16. The method of claim 15 wherein the first number represents a particular value of interest and the first point in time represents a designated time of interest.

17. The method of claim 16 wherein the first number represents a last traded price, a settlement price, a last bid price, a last ask price, a yield value, or a profit and loss value.

18. The method of claim 16 wherein the particular value of interest is input through a graphical user interface.

19. The method of claim 15 wherein the second number represents a second particular value of interest and the second point in time represents a second designated time of interest.

20. The method of claim 19 wherein the second number represents a last traded price, a settlement price, a last bid price, a last ask price, a yield value, or a profit and loss value.

21. The method of claim 19 wherein the second particular value of interest is input through a graphical user interface.

22. The method of claim 15 wherein the plurality of price derivative values in the bid and ask display regions are positioned along a static value axis.
23. The method of claim 22 wherein the bid and ask display regions are displayed in relation to fixed derivative of price values positioned along the static value axis such that  
5 when the inside market changes, the derivative of price values along the static value axis do not move and at least one of the first and second indicators moves in the bid or ask display regions relative to the static value axis.
24. The method of claim 22 further comprising receiving a recentering command to  
10 approximately center the first and second indicators in the bid and ask display regions.
25. The method of claim 22 further comprising displaying an order entry region comprising a plurality of locations for receiving commands to send trade orders, each location corresponding to a derivative of price value along the static value axis, and in  
15 response to a selection of a particular location of the order entry region by a single action of a user input device, setting a plurality of parameters for a trade order relating to the tradeable object and sending the trade order to the electronic exchange.
26. The method of claim 15 wherein the plurality of price derivative values are  
20 represented by numbers.
27. The method of claim 15 wherein the plurality of price derivative values are represented graphically.

## ABSTRACT

Market data, such as order information, is displayed in relation to a derivative of price. A derivative of price refers to anything that bears some relationship to price, examples of which, include net change, yield, profit and loss, volatility, momentum indicators, and more. According to various aspects of the preferred embodiments, market data is received from one or more electronic exchanges and a value axis is generated based on a user's preferences. Then, market data can be displayed in relation to the value axis to provide a user interface that allows a trader to view the market from a more desirable perspective.

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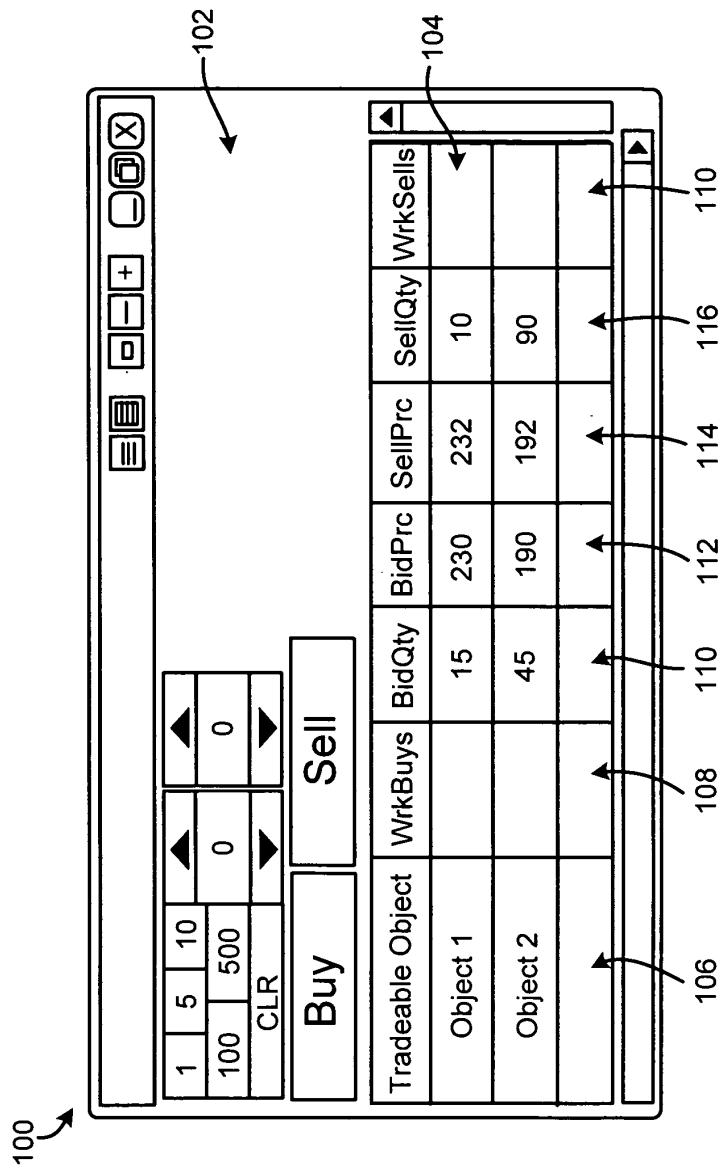
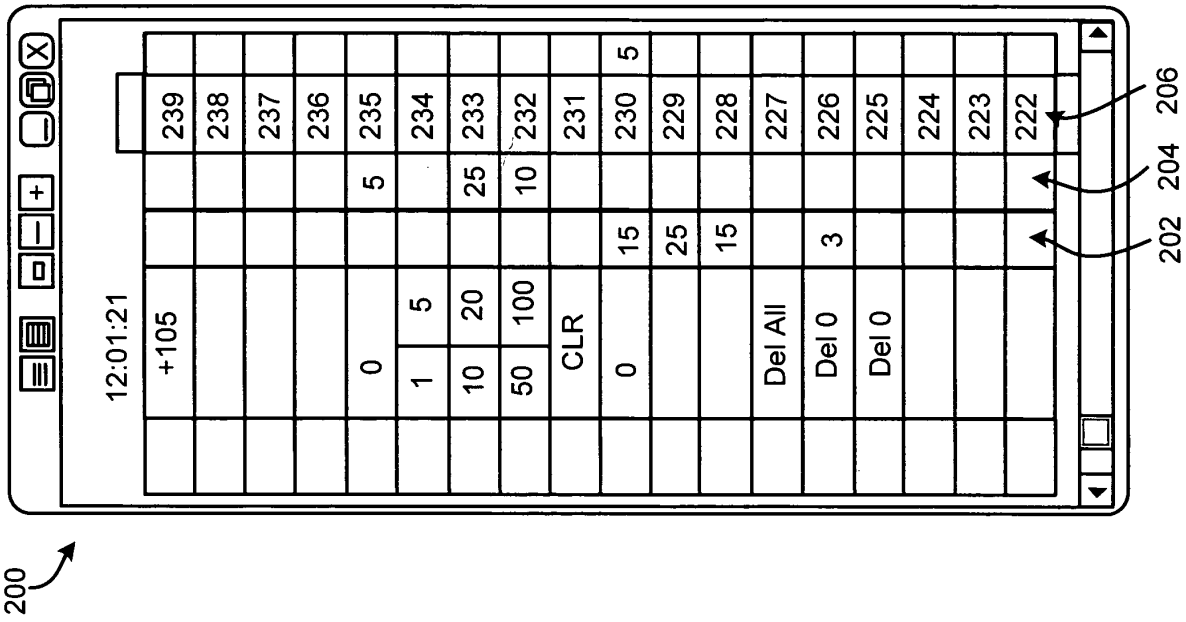


FIG. 1  
Prior Art

FIG. 2  
Prior Art



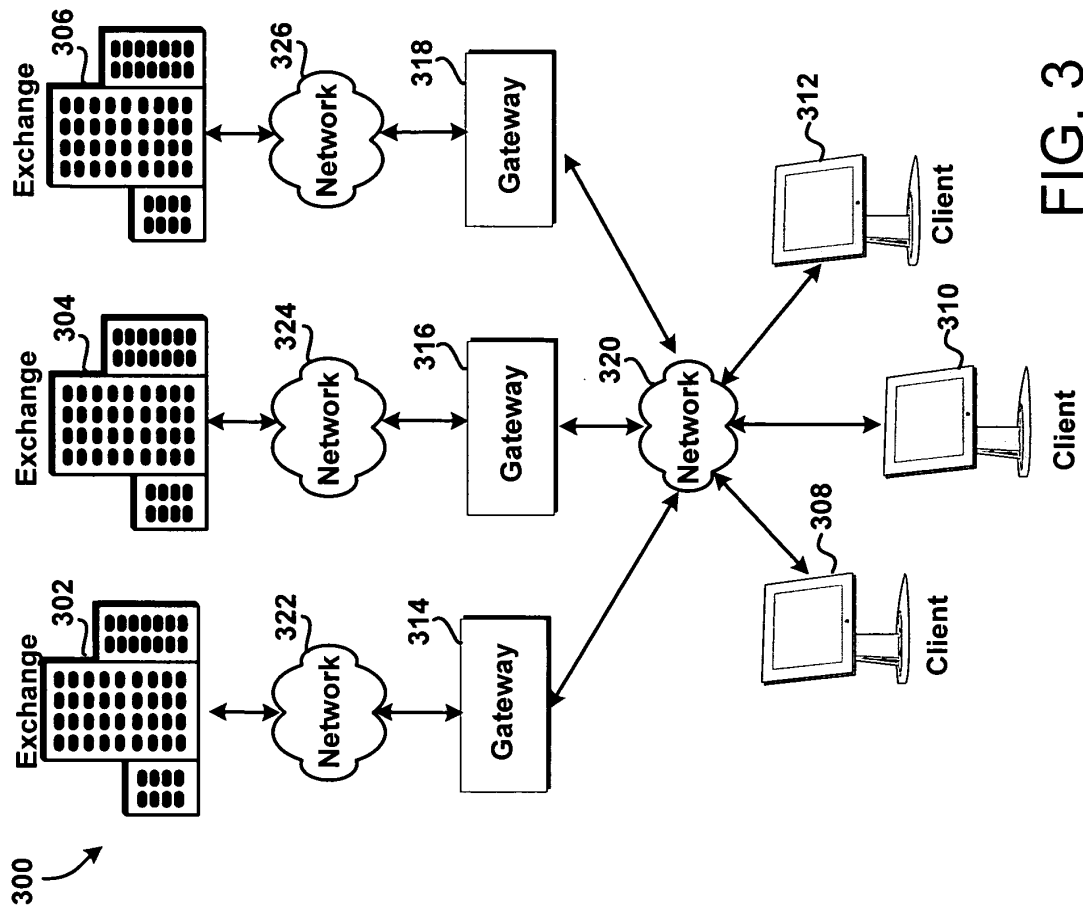


FIG. 3

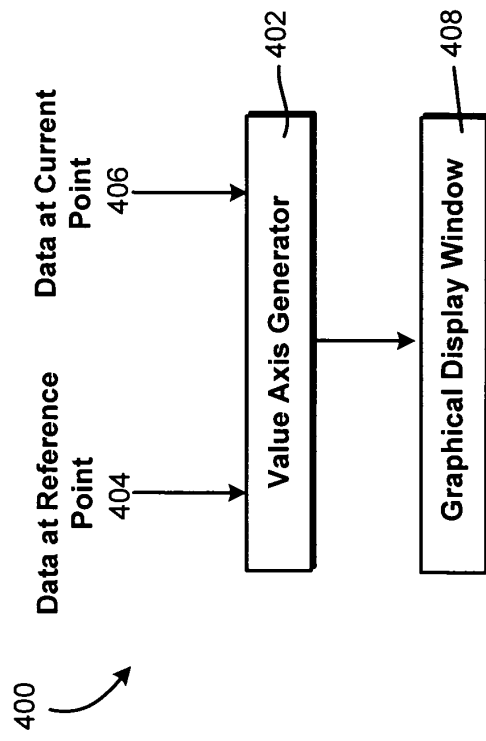


FIG. 4

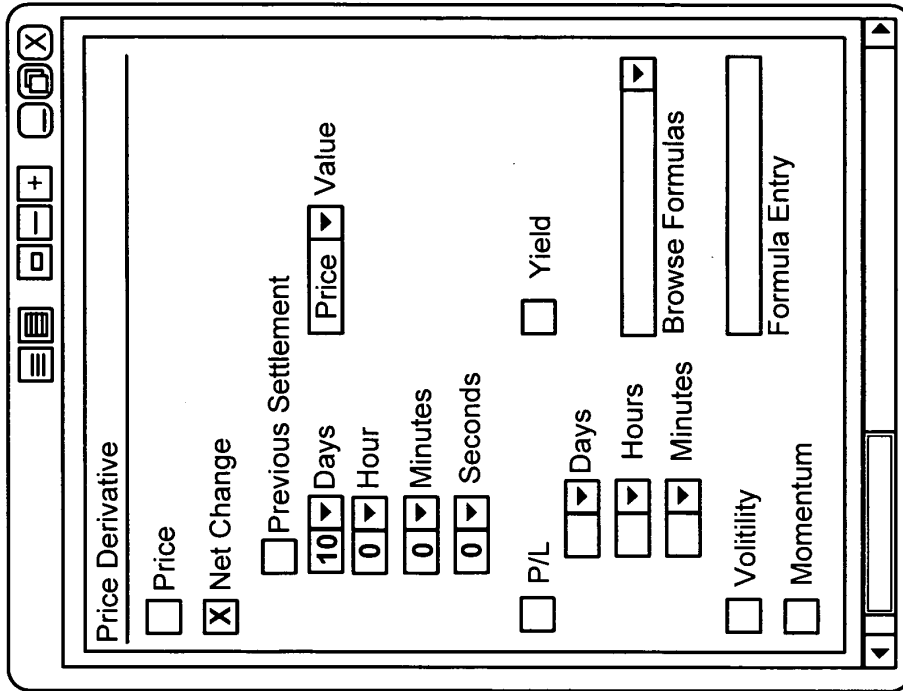


FIG. 5



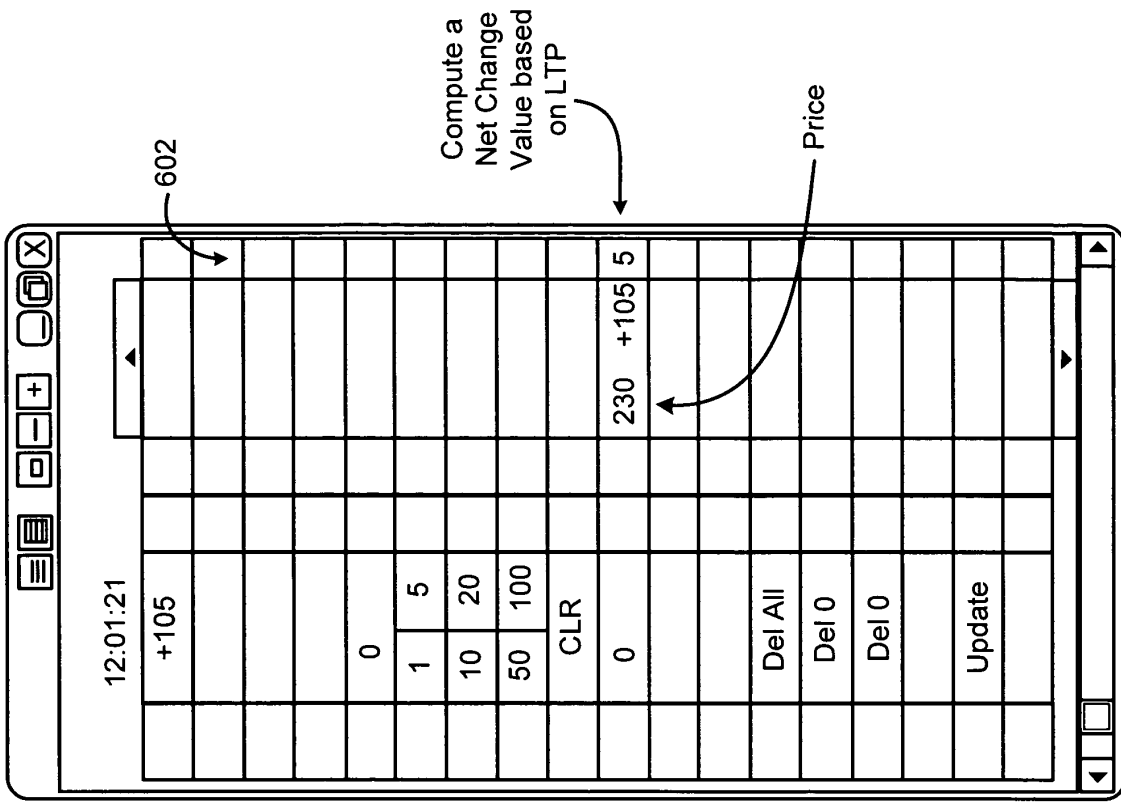
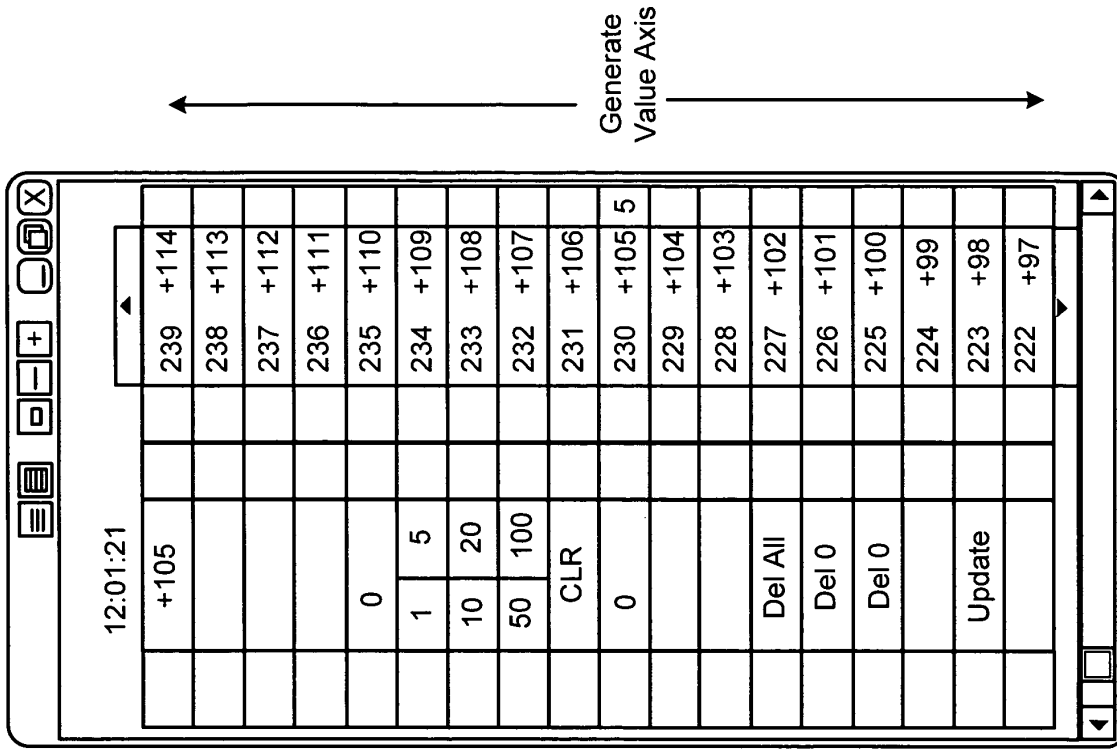


FIG. 6

FIG. 7



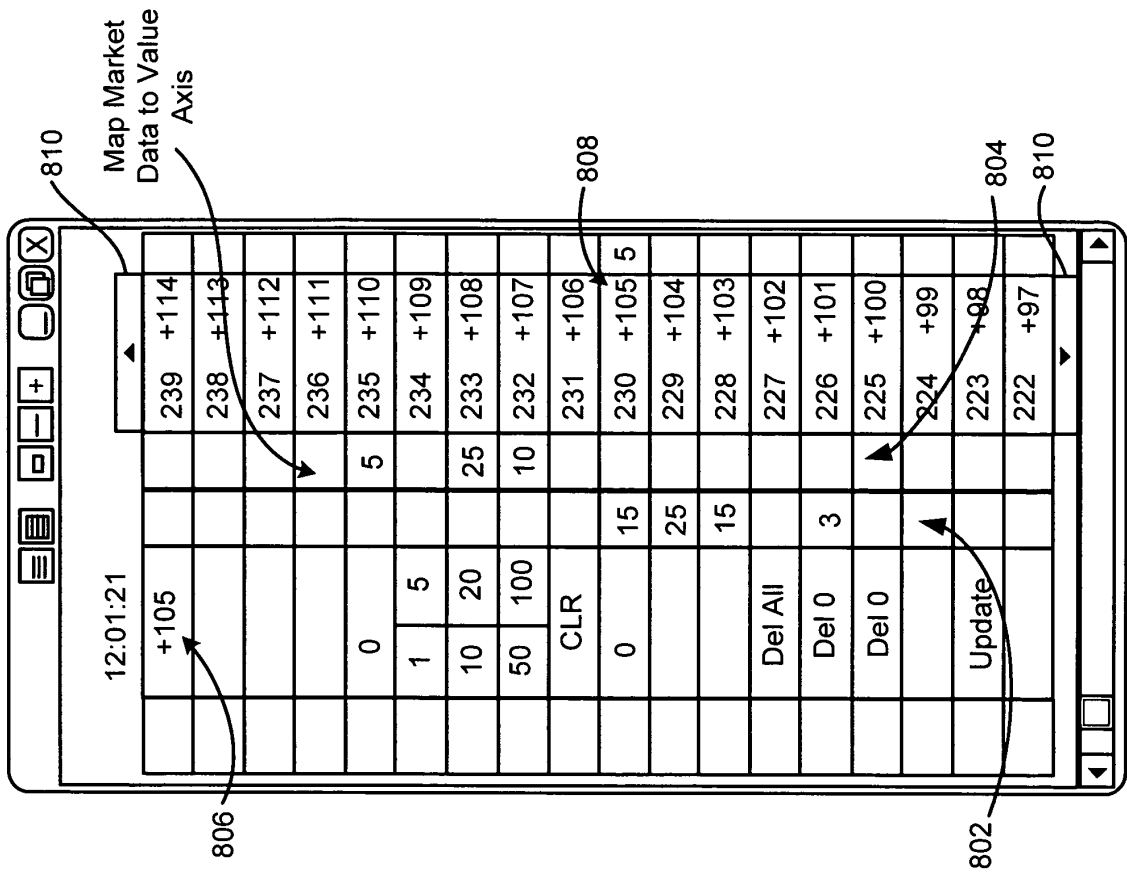


FIG. 8

12:01:21

+105			+114
			+113
			+112
			+111
0		5	+110
1	5		+109
10	20	25	+108
50	100	10	+107
CLR			+106
0		15	+105
		25	+104
		15	+103
Del All			+102
Del 0	3		+101
Del 0			+100
			+99
Update			+98
			+97

FIG. 9

1		5	10	◀	▶	
100		500	0	◀	▶	
CLR						
Buy			Sell			
Update						
Tradeable Object	WrkBuys	BidQty	BidPrc	SellPrc	SellQty	WrkSells
Object 1		15	+105	+107	10	

FIG. 10

**DECLARATION AND POWER OF ATTORNEY  
FOR PATENT APPLICATION**

As a below named inventor, I hereby declare that:

My residence, post office address and citizenship are as stated below next to my name.

I believe I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if plural names are listed below) of the subject matter which is claimed and for which a patent is sought on the invention entitled:

**A SYSTEM AND METHOD FOR DISPLAYING  
ORDER INFORMATION IN RELATION TO A DERIVATIVE OF PRICE**

the specification of which is attached hereto unless the following space is checked:

was filed on \_\_\_\_\_ as United States Application Serial Number \_\_\_\_\_.

I hereby state that I have reviewed and understand the contents of the above-identified specification, including the claims, as amended by any amendment referred to above.

I acknowledge the duty to disclose information which is material to patentability as defined in 37 CFR § 1.56.

I hereby claim the benefit under 35 U.S.C. § 120 of any United States application(s), or § 365(c) of any PCT international application designating the United States, listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States or PCT international application in the manner provided by the first paragraph of 35 U.S.C. § 112, I acknowledge the duty to disclose information which is material to patentability as defined in 37 C.F.R. § 1.56, which became available before the filing date of the prior application and the national or PCT international filing date of this application.

Application Number                      Filing Date                      Status: patented, pending, abandoned

I hereby claim the benefit under 35 U.S.C. § 119(e) of any United States provisional application(s) listed below:

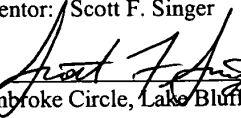
Application Number                      Filing Date

I hereby appoint the practitioners associated with the Customer Number provided below to prosecute this application and to transact all business in the Patent and Trademark Office connected therewith, and I direct that all correspondence be addressed to that Customer Number.

Customer Number: **039310**  
Principal attorney or agent: Matthew J. Sampson  
Telephone number: 312-913-0001

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 issued thereon.

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Inventor's signature: 

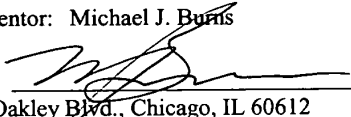
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Date: 3/10/2004

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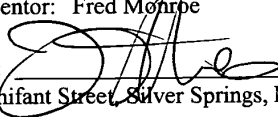
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Date: 3/10/2004

## Application Data Sheet

### Application Information

Application Type::	Regular
Subject Matter::	Utility
Suggested Classification::	
Suggested Group Art Unit::	
CD-Rom or CD-R?	No
Title::	A System and Method for Displaying Order Information in Relation to a Derivative of Price
Attorney Docket Number::	04-225
Request for Early Publication?::	No
Request for Non-Publication?::	Yes
Suggested Drawing Figure::	
Total Drawing Sheets::	10
Small Entity::	Yes
Petition Included?::	No
Secrecy Order in Parent Appl.?::	

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**Representative Information**

Representative Customer Number::	039310
----------------------------------	--------

**Domestic Priority Information**

Application::	Continuity Type::	Parent Application::	Parent Filing Date::

**Foreign Priority Information**

Country::	Application Number::	Filing Date::	Priority Claimed::

**Assignee Information**

Assignee Name:: Trading Technologies International, Inc.

PATENT APPLICATION SERIAL NO. \_\_\_\_\_

U.S. DEPARTMENT OF COMMERCE  
PATENT AND TRADEMARK OFFICE  
FEE RECORD SHEET

03/17/2004 HLE333 00000031 10800295

01 FC:2001	385.00 OP
02 FC:2202	63.00 OP

PTO-1556  
(5/87)

U.S. Government Printing Office: 2001 — 481-697/59173

**PATENT APPLICATION FEE DETERMINATION RECORD**  
Effective October 1, 2003

Application or Docket Number

60800295

**CLAIMS AS FILED - PART I**

	(Column 1)	(Column 2)
TOTAL CLAIMS	27	
FOR	NUMBER FILED	NUMBER EXTRA
TOTAL CHARGEABLE CLAIMS	27 minus 20 =	* 7
INDEPENDENT CLAIMS	2 minus 3 =	* 0
MULTIPLE DEPENDENT CLAIM PRESENT <input type="checkbox"/>		

\* If the difference in column 1 is less than zero, enter "0" in column 2

**SMALL ENTITY TYPE**  OR

**OTHER THAN SMALL ENTITY**

RATE	FEE	OR	RATE	FEE
BASIC FEE	385.00	OR	BASIC FEE	770.00
X\$ 9=	63	OR	X\$18=	
X43=		OR	X86=	
+145=		OR	+290=	
TOTAL	448	OR	TOTAL	

**CLAIMS AS AMENDED - PART II**

	(Column 1)	(Column 2)	(Column 3)
AMENDMENT A	CLAIMS REMAINING AFTER AMENDMENT	HIGHEST NUMBER PREVIOUSLY PAID FOR	PRESENT EXTRA
	Total *	Minus **	=
	Independent *	Minus ***	=
FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM <input type="checkbox"/>			

**SMALL ENTITY** OR

**OTHER THAN SMALL ENTITY**

RATE	ADDITIONAL FEE	OR	RATE	ADDITIONAL FEE
X\$ 9=		OR	X\$18=	
X43=		OR	X86=	
+145=		OR	+290=	
TOTAL ADDIT. FEE		OR	TOTAL ADDIT. FEE	

	(Column 1)	(Column 2)	(Column 3)
AMENDMENT B	CLAIMS REMAINING AFTER AMENDMENT	HIGHEST NUMBER PREVIOUSLY PAID FOR	PRESENT EXTRA
	Total *	Minus **	=
	Independent *	Minus ***	=
FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM <input type="checkbox"/>			

RATE	ADDITIONAL FEE	OR	RATE	ADDITIONAL FEE
X\$ 9=		OR	X\$18=	
X43=		OR	X86=	
+145=		OR	+290=	
TOTAL ADDIT. FEE		OR	TOTAL ADDIT. FEE	

	(Column 1)	(Column 2)	(Column 3)
AMENDMENT C	CLAIMS REMAINING AFTER AMENDMENT	HIGHEST NUMBER PREVIOUSLY PAID FOR	PRESENT EXTRA
	Total *	Minus **	=
	Independent *	Minus ***	=
FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM <input type="checkbox"/>			

RATE	ADDITIONAL FEE	OR	RATE	ADDITIONAL FEE
X\$ 9=		OR	X\$18=	
X43=		OR	X86=	
+145=		OR	+290=	
TOTAL ADDIT. FEE		OR	TOTAL ADDIT. FEE	

\* If the entry in column 1 is less than the entry in column 2, write "0" in column 3.

\*\* If the "Highest Number Previously Paid For" IN THIS SPACE is less than 20, enter "20."

\*\*\* 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.