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06/27/01

ISSUE CLASSIFICATION	
Class	Subclass
705	37

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U.S. UTILITY Patent Application

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APPLICATION NO.	CONT/PRIOR	CLASS	SUBCLASS	ART UNIT	EXAMINER
09/894637	D	705		2164	

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TITLE
Click based trading with intuitive grid display of market depth

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ISSUING CLASSIFICATION

ORIGINAL		CROSS REFERENCE(S)							
CLASS	SUBCLASS	CLASS	SUBCLASS (ONE SUBCLASS PER BLOCK)						
705	37	705	36	35					
INTERNATIONAL CLASSIFICATION									
G	06	F	17/60						

☐ Continued on Issue Slip Inside File Jacket

☐ TERMINAL DISCLAIMER	DRAWINGS			CLAIMS ALLOWED	
	Sheets Drwg.	Figs. Drwg.	Print Fig.	Total Claims	Print Claim for O.G.
	6	6	3	40	1

☐ The term of this patent subsequent to _____ (date) has been disclaimed.	_____ (Assistant Examiner) _____ (Date)	NOTICE OF ALLOWANCE MAILED: 2-10-04
☐ The term of this patent shall not extend beyond the expiration date of U.S Patent. No. _____	Nick Weisberger RICHARD WEISBERGER PRIMARY EXAMINER A.U. 3624 _____ (Primary Examiner) 5/4 (Date)	ISSUE FEE: Amount Due #1330 / Date Paid
☐ The terminal ____months of this patent have been disclaimed.	_____ (Legal Instruments Examiner) _____ (Date)	ISSUE BATCH NUMBER

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TDA 1022
CBM of U.S. Patent No. 6,766,304

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PATENT APPLICATION SERIAL NO. 09894637

U.S. DEPARTMENT OF COMMERCE
PATENT AND TRADEMARK OFFICE
FEE RECORD SHEET

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UNITED STATES PATENT AND TRADEMARK OFFICE

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WASHINGTON, D.C. 20231
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Bib Data Sheet

CONFIRMATION NO. 1527

SERIAL NUMBER	FILING DATE	CLASS	GROUP ART UNIT	ATTORNEY DOCKET NO.
09/894,637	06/27/2001 RULE	705	2164	024051-0155

APPLICANTS

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Harris Brumfield, Chicago, IL;

**** CONTINUING DATA ***************************

THIS APPLICATION IS A DIV OF 09/590,692 06/09/2000
WHICH CLAIMS BENEFIT OF 60/186,322 03/02/2000

**** FOREIGN APPLICATIONS ********************

IF REQUIRED, FOREIGN FILING LICENSE GRANTED ** SMALL ENTITY **
** 07/25/2001

		STATE OR COUNTRY	SHEETS DRAWING	TOTAL CLAIMS	INDEPENDENT CLAIMS
Foreign Priority claimed	☐ yes ☐ no				
35 USC 119 (a-d) conditions met	☐ yes ☒ no ☐ Met after Allowance	IL	6	21	3
Verified and Acknowledged	Examiner's Signature Initials				

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TITLE

Click based trading with intuitive grid display of market depth

FILING FEE RECEIVED		
364	FEES: Authority has been given in Paper No. _____ to charge/credit DEPOSIT ACCOUNT No. _____ for following:	☐ All Fees ☐ 1.16 Fees (Filing) ☐ 1.17 Fees (Processing Ext. of time) ☐ 1.18 Fees (Issue) ☐ Other _____ ☐ Credit

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PTO/SB/05 (11-00)
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UTILITY PATENT APPLICATION TRANSMITTAL

(Only for new nonprovisional applications under 37 C.F.R. 1.53(b))

Attorney Docket No.	120046-00003
First Inventor	Gary Allan Kemp II, et al
Title	CLICK BASED TRADING WITH INTUITIVE GRID DISPLAY OF MARKET DEPTH
Express Mail Label No.	EL 840961286US

APPLICATION ELEMENTS

See MPEP chapter 600 concerning utility patent application contents.

1. ☒ Fee Transmittal Form (e.g., PTO/SB/17) *(Submit an original and a duplicate for fee processing)*
2. ☒ Applicant claims small entity status. See 37 CFR 1.27.
3. ☒ Specification [*Total Pages* 32] *(preferred arrangement set forth below)*
   - Descriptive title of the Invention
   - Cross References to Related Applications
   - Statement Regarding Fed sponsored R & D
   - Reference to sequence listing, a table, or a computer program listing appendix
   - Background of the Invention
   - Brief Summary of the Invention
   - Brief Description of the Drawings *(if filed)*
   - Detailed Description
   - Claim(s)
   - Abstract of the Disclosure
4. ☒ Drawing(s) (*35 U.S.C.113*) [*Total Sheets* 6]
5. Oath or Declaration [*Total Pages*]
   a. ☐ Newly executed (original or copy)
   b. ☒ Copy from a prior application (37 CFR 1.63 (d)) *(for a continuation/divisional with Box 18 completed)*
      i. ☐ DELETION OF INVENTOR(S) Signed statement attached deleting inventor(s) named in the prior application, see 37 CFR 1.63(d)(2) and 1.33(b).
6. ☐ Application Data Sheet. See 37 CFR 1.76

ADDRESS TO: Assistant Commissioner for Patents, Box Patent Application, Washington, DC 20231

7. ☐ CD-ROM or CD-R in duplicate, large table or Computer Program *(Appendix)*
8. Nucleotide and/or Amino Acid Sequence Submission *(if applicable, all necessary)*
   a. ☐ Computer Readable Form (CRF)
   b. Specification Sequence Listing on:
      i. ☐ CD-ROM or CD-R (2 copies); or
      ii. ☐ paper
   c. ☐ Statements verifying identity of above copies

ACCOMPANYING APPLICATIONS PARTS

9. ☐ Assignment Papers (cover sheet & document(s))
10. ☐ 37 C.F.R.§3.73(b) Statement *(when there is an assignee)* ☐ Power of Attorney
11. ☐ English Translation Document *(if applicable)*
12. ☐ Information Disclosure Statement (IDS)/PTO-1449 ☐ Copies of IDS Citations
13. ☒ Preliminary Amendment
14. ☐ Return Receipt Postcard (MPEP 503) *(Should be specifically itemized)*
15. ☐ Certified Copy of Priority Document(s) *(if foreign priority is claimed)*
16. ☐ Request and Certification under 35 U.S.C. 122 (b)(2)(B)(i). Applicant must attach form PTO/SB/35 or its equivalent.
17. ☐ Other:

18. If a CONTINUING APPLICATION, *check appropriate box, and supply the requisite information below and in a preliminary amendment, or in an Application Data Sheet under 37 CFR 1.76:*

☐ Continuation ☒ Divisional ☐ Continuation-in-part (CIP) of prior application No: 09 / 590,692

Prior application information: *Examiner* Rich Weisberger *Group / Art Unit:* 2164

For CONTINUATION or DIVISIONAL APPS only: The entire disclosure of the prior application, from which an oath or declaration is supplied under Box 5b, is considered a part of the disclosure of the accompanying or divisional application and is hereby incorporated by reference. The incorporation can only be relied upon when a portion has been inadvertently omitted from the submitted application parts.

17. CORRESPONDENCE ADDRESS

☒ *Customer Number or Bar Code Label* 25555 *(Insert Customer No. or Attach bar code label here)* *or* ☐ *Correspondence address below*

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Address					
City		*State*		*Zip Code*	
Country		*Telephone*		*Fax*	

Name (Print/Type)	Robert C. Klinger	*Registration No. (Attorney/Agent)*	34,365
Signature		*Date*	June 27, 2001

Burden Hour Statement: This form is estimated to take 0.2 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Box Patent Application, Washington, DC 20231.

JWDOCS 2678917v1

NON-PROVISIONAL APPLICATION FOR U. S. PATENT UNDER 37 CFR 1.53(b)
TRANSMITTAL FORM

Attorney Docket No. 120046-00003

Assistant Commissioner for Patents
Washington, D. C. 20231

Sir:

Transmitted herewith for filing is the patent application of:

Inventor(s): Gary Allan Kemp II, et al

"EXPRESS MAILING" Mailing Label No. **EL840961286US.** Date of Deposit: June 27, 2001. I hereby certify that this paper is being deposited with the U.S. Postal Service Express Mail Post Office to Addressee Service under 37 CFR 1.10 on the date shown above and is addressed to the Assistant Commissioner for Patents, Washington, D.C. 20231.

Trish Paramore

For: **CLICK BASED TRADING WITH INTUITIVE GRID DISPLAY OF MARKET DEPTH**

Enclosed are:

__6__ sheets of informal drawings and 32 pages of Specification (including Abstract)
_____ A Declaration/Power of Attorney
__X__ Small Entity Status claimed under 37 CFR 1.27

This application is a Divisional of Serial No. 09/590,692 entitled **CLICK BASED TRADING WITH INTUITIVE GRID DISPLAY OF MARKET DEPTH**, filed June 09, 2000.

FEE CALCULATION					**FEE**
	NUMBER		**NUMBER EXTRA**	**RATE**	**BASIC FEE $ 355.00**
Total Claims	21	20 =	1	X $9 =	$ 9.00
Independent Claims	3	- 3 =		X $40 =	
				Total Filing Fee	$364.00

A check in the amount of $ 364.00 is enclosed.

All correspondence related to this application may be addressed to the undersigned at Jackson Walker LLP, 2435 North Central Expressway, Suite 600, Richardson, Texas 75080.

June 27, 2001
Date

Robert C. Klinger
Registration No. 34,365

CLICK BASED TRADING WITH INTUITIVE GRID DISPLAY OF MARKET DEPTH

Priority

The present application claims priority to a U.S. Provisional Patent Application entitled "Market Depth Display Click Based Trading and Mercury Display" filed March 2, 2000, the contents of which are incorporated herein by reference.

Field of Invention

The present invention is directed to the electronic trading of commodities. Specifically, the invention provides a trader with a versatile and efficient tool for executing trades. It facilitates the display of and the rapid placement of trade orders within the market trading depth of a commodity, where a commodity includes anything that can be traded with quantities and/or prices.

Background Of The Invention

At least 60 exchanges throughout the world utilize electronic trading in varying degrees to trade stocks, bonds, futures, options and other products. These electronic exchanges are based on three components: mainframe computers (host), communications servers, and the exchange participants' computers (client). The host forms the electronic heart of the fully computerized electronic trading system. The system's operations cover order-matching, maintaining order books and positions, price information, and managing and updating the database for the online trading day as well as nightly batch runs. The host is also equipped with external interfaces that maintain uninterrupted online contact to quote vendors and other price information systems.

Traders can link to the host through three types of structures: high speed data lines, high speed communications servers and the Internet. High speed data lines establish direct connections between the client and the host. Another connection can be established by configuring high speed networks or communications servers at strategic access points worldwide in locations where traders physically are located. Data is transmitted in both directions between traders and exchanges via dedicated high speed communication lines. Most exchange participants install two lines between the exchange and the client site or between the communication server and the client site as a safety measure against potential failures. An exchange's internal computer system is Also often installed with backups as a redundant measure to secure system availability. The third connection utilizes the Internet. Here, the exchange and the traders communicate back and forth through high speed data lines, which are connected to the Internet. This allows traders to be located anywhere they can establish a connection to the Internet.

Irrespective of the way in which a connection is established, the exchange participants' computers allow traders to participate in the market. They use software that creates specialized interactive trading screens on the traders' desktops. The trading screens enable traders to enter and execute orders, obtain market quotes, and monitor positions. The range and quality of features available to traders on their screens varies according to the specific software application being run. The installation of open interfaces in the development of an exchange's electronic strategy means users can choose, depending on their trading style and internal requirements, the means by which they will access the exchange.

The world's stock, bond, futures and options exchanges have volatile products with prices that move rapidly. To profit in these markets, traders must be able to react quickly. A skilled trader with the quickest software, the fastest communications, and the most sophisticated analytics can significantly improve his own or his firm's bottom line. The slightest speed advantage can generate significant returns in a fast moving market. In today's securities markets, a trader lacking a technologically advanced interface is at 4 severe competitive disadvantage.

Irrespective of what interface a trader uses to enter orders in the market, each market supplies and requires the same information to and from every trader. The bids and asks in the market make up the market data and everyone logged on to trade can receive this information if the exchange provides it. Similarly, every exchange requires that certain information be included in each order. For example, traders must supply information like the name of the commodity, quantity, restrictions, price and multiple other variables. Without all of this information, the market will not accept the order. This input and output of information the same for every trader.

With these variables being constant, a competitive speed advantage must come from other aspects of the trading cycle. When analyzing the time it takes to place a trade order for a given commodity, various steps contribute in different amounts to the total time required. Approximately 8% of the total time it takes to enter an order elapses between the moment the host generates the price for the commodity and the moment the client receives the price. The time it takes for the client application to display the price to the trader amounts to approximately 4%. The time it takes for a trade order to be transmitted to the host amounts to approximately 8%. The remainder of the total time it takes to place an order, approximately 80%, is attributable to the time required for the trader to read the prices displayed and to enter a trade order. The present invention provides a significant advantage during the slowest portion of the trading

cycle -- while the trader manually enters his order. Traders recognize that the value of time savings in this portion may amount to millions of dollars annually.

In existing systems, multiple elements of an order must be entered prior to an order being sent to market, which is time consuming for the trader. Such elements include the commodity symbol, the desired price, the quantity and whether a buy or a sell order is desired. The more time a trader takes entering an order, the more likely the price on which he wanted to bid or offer will change or not be available in the market. The market is fluid as many traders are sending orders to the market simultaneously. It fact, successful markets strive to have such a high volume of trading that any trader who wishes to enter an order will find a match and have the order filled quickly, if not immediately. In such liquid markets, the prices of the commodities fluctuate rapidly. On a trading screen, this results in rapid changes in the price and quantity fields within the market grid. If a trader intends to enter an order at a particular price, but misses the price because the market prices moved before he could enter the order, he may lose hundreds, thousands, even millions of dollars. The faster a trader can trade, the less likely it will be that he will miss his price and the more likely he will make money.

Summary Of The Invention

The inventors have developed the present invention which overcomes the drawbacks of the existing trading systems and dramatically reduces the time it takes for a trader to place a trade when electronically trading on an exchange. This, in turn, increases the likelihood that the trader will have orders filled at desirable prices and quantities.

The "Mercury" display and trading method of the present invention ensure fast and accurate execution of trades by displaying market depth on a vertical or horizontal

plane, which fluctuates logically up or down, left or right across the plane as the market prices fluctuates. This allows the trader to trade quickly and efficiently.

Specifically, the present invention is directed to a graphical user interface for displaying the market depth of a commodity traded in a market, including a dynamic display for a plurality of bids and for a plurality of asks in the market for the commodity and a static display of prices corresponding to the plurality of bids and asks. In this embodiment the pluralities of bids and asks are dynamically displayed in alignment with the prices corresponding thereto. Also described herein is a method and system for placing trade orders using such displays.

These embodiments, and others described in greater detail herein, provide the trader with improved efficiency and versatility in placing, and thus executing, trade orders for commodities in an electronic exchange. Other features and advantages of the present invention will become apparent to those skilled in the art from the following detailed description. It should be understood, however, that the detailed description and specific examples, while indicating preferred embodiments of the present invention, are given by way of illustration and not limitation. Many changes and modifications within the scope of the present invention may be made without departing from the spirit thereof, and the invention includes all such modifications.

Brief Description Of The Drawings

Figure 1 illustrates the network connections between multiple exchanges and client sites;

Figure 2 illustrates screen display showing the inside market and the market depth of a given commodity being traded;

Figure 3 illustrates the Mercury display of the present invention;

Figure 4 illustrates the Mercury display at a later time showing the movement of values when compared to Figure 3;

Figure 5 illustrates a Mercury display with parameters set in order to exemplify the Mercury trading method; and

Figure 6 is a flowchart illustrating the process for Mercury display and trading.

Detailed Description Of The Preferred Embodiments

As described with reference to the accompanying figures, the present invention provides a display and trading method to ensure fast and accurate execution of trades by displaying market depth on a vertical or horizontal plane, which fluctuates logically up or down, left or right across the plane as the market prices fluctuates. This allows the trader to place trade orders quickly and efficiently. A commodity's market depth is the current bid and ask prices and quantities in the market. The display and trading method of the invention increase the likelihood that the trader will be able to execute orders at desirable prices and quantities.

In the preferred embodiment, the present invention is implemented on a computer or electronic terminal. The computer is able to communicate either directly or indirectly (using intermediate devices) with the exchange to receive and transmit market, commodity, and trading order information. It is able to interact with the trader and to generate contents and characteristics of a trade order to be sent to the exchange. It is envisioned that the system of the present invention can be implemented on any existing or future terminal or device with the processing capability to perform the functions described herein. The scope of the present invention is not limited by the type of terminal or device used. Further, the specification refers to a single click of a mouse as a means for user input and interaction with the terminal display as an example of a single action of the user. 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 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.

The system can be configured to allow for trading in a single or in multiple exchanges simultaneously. Connection of the system of the present invention with multiple exchanges is illustrated in Figure 1. This figure shows multiple host exchanges 101-103 connected through routers 104-106 to gateways 107-109. Multiple client terminals 110-116 for use as trading stations can then trade in the multiple exchanges through their connection to the gateways 107-109. When the system is configured to receive data from multiple exchanges, then the preferred implementation is to translate the data from various exchanges into a simple format. This. "translation" function is described below with reference to Figure 1. An applications program interface ("TT API" as depicted in the figure) translates the incoming data formats from the different exchanges to a simple preferred data format. This translation function may be disposed anywhere in the network, for example, at the gateway server, at the individual workstations or at both. In addition, the storage at gateway servers and at the client workstations, and/or other external storage cache historical data such as order books which list the client's active orders in the market; that is, those orders that have neither been filled nor cancelled. Information from different exchanges can be displayed at one or in multiple windows at the client workstation. Accordingly, 'while reference is made through the remainder of the specification to a single exchange to which a trading terminal is connected, the scope of the invention includes the ability to trade, in accordance with the trading methods described herein, in multiple exchanges using a single trading terminal.

The preferred embodiments of the present invention include the display of "Market Depth" and allow trader to view the market depth of a commodity and to execute trades within the market depth with a single click of a computer mouse button. Market Depth represents the order book with the current bid and ask prices and quantities in the market. In other words, Market Depth is each bid and ask that was entered into the market, subject to the limits noted below, in addition to the inside market. For a commodity being traded, the "inside market" is the highest bid price and the lowest ask price.

The exchange sends the price, order and fill information to each trader on the exchange. The present invention processes this information and maps it through simple algorithms and mapping tables to positions in a theoretical grid program or any other comparable mapping technique for mapping data to a screen. The physical mapping of such information to a screen grid can be done by any technique known to those skilled in the art. The present invention is not limited by the method used to map the data to the screen display.

How far into the market depth the present invention can display depends on how much of the market depth the exchange provides. Some exchanges supply an infinite market depth, while others provide no market depth or only a few orders away from the inside market. The user of the present invention can also chose how far into the market depth to display on his screen.

Figure 2 illustrates a screen display of an invention described in a commonly owned co-pending application entitled "Click Based Trading with Market Depth Display" serial no. ____, filed on _____ the contents of which are incorporated herein by reference. This display shows the inside market and the market depth of a given commodity being traded. Row 1 represents the "inside market" for the commodity being

traded which is the best (highest) bid price and quantity and the best (lowest) ask price and quantity. Rows 2-5 represent the "market depth" for the commodity being traded. In the preferred embodiment of the present invention, the display of market depth (rows 2-5) lists the available next-best bids, in column 203, and asks, in column 204. The working bid and ask quantity for each price level is also displayed in columns 202 and 205 respectively (inside market - row 1). Prices and quantities for the inside market and market depth update dynamically on a real time basis as such information is relayed ~~from the market.~~

In the screen display shown in Figure 2, the commodity (contract) being traded is represented in row 1 by the character string "CDHO". The Depth column 208 will inform the trader of a status by displaying different colors. Yellow indicates that the program application is waiting for data. Red indicates that the Market Depth has failed to receive the data from the server and has "timed out." Green indicates that the data has just been updated. The other column headings in this and all of the other figures, are defined as follows. BidQty (Bid Quantity): the quantity for each working bid, BidPrc (Bid Price): the price for each working bid, AskPrc (Ask Price): the price for each working ask, AskQty (Ask Quantity): the quantity for each working ask, LastPrc (Last Price): the price for the last bid and ask that were matched in the market and LastQty (Last Quantity): the quantity added at the last price. Total represents the total quantity traded of the given commodity.

The configuration of the screen display itself informs the user in a more convenient and efficient manner than existing systems. Traders gain a significant advantage by seeing the market depth because they can see trends in the orders in the market. The market depth display shows the trader the interest the market has in a given commodity at different price levels. If a large amount

of bids or asks are in the market near the trader's position, he may feel he should sell or buy before the inside market reaches the morass of orders. A lack of orders above or below the inside market might prompt a trader to enter orders near the inside market. Without seeing the market depth, no such strategies could be utilized. Having the dynamic market depth, including the bid and ask quantities and prices of a traded commodity aligned with and displayed below the current inside market of the commodity conveys the information to the user in a more intuitive and easily understandable manner. Trends in the trading of, the commodity and other relevant characteristics are more easily identifiable by the user through the use of the present invention.

Various abbreviations are used in the screen displays, and specifically, in the column headings of the screen displays reproduced herein. Some abbreviations have been discussed above. A list of common abbreviations and their meanings is provided in Table 1.

Table I - Abbreviations.

COLUMN	DESCRIPTION	COLUMN	DESCRIPTION
Month	Expiration Month/Year	TheoBid	Theoretical Bid Price
Bid Mbr(1)	Bid Member ID	TheoAsk	Theoretical Ask Price
WrkBuys(2)	Working Buys for entire Group ID	Qact	Quote Action (Sends individual quotes)
BidQty	Bid Quantity	BQQ	Test Bid Quote Quantity
ThrshBid(6)	Threshold Bid Price	BQP	Test Bid Quote Price
BidPrc	Bid Price	Mkt BQQ	Market Bid Quote Quantity
Bid Qty Accurn	Accumulated Bid Quantity	Mkt BQP	Market Bid Quote Price
BidPrc Avg	Bid Price Average	Quote	Checkbox activates / deactivates contract for quoting
AskPrc Avg	Ask Price Average	Mkt AQQ	Market Ask Quote Quantity
AskQty Accurn	Accumulated Ask Quantity	Mkt AQP	Market Ask Quote Price
AskPrc	Ask Price	AQP	Ask Quote Price
ThrshAsk(6)	Threshold Ask Price	AQQ	Ask Quote Quantity
AskQty	Ask Quantity	Imp BidQty(5)	Implied Bid Quantity
WrkSells(2)	Working Sells for entire Group ID	Imp BidPrc(5)	Implied Bid Price
Ask Mbr(1)	Ask Member ID	Imp AskQty(5)	Implied Ask Quantity
NetPos	Net Position	Imp AskPrc(5)	Implied Ask Price
FFNetPos	Fast Fill Net Position	Gamma(3)	Change in Delta given 1 pt change in underlying
LastPrc	Last Price	Delta (3)	Change in price given 1 pt change in underlying
LastQty	Last Quantity	Vola (3)	Percent volatility
Total	Total Traded Quantity	Vega (3)	Price change given I% change in Vola
High	High Price	Rhop (3)	Price change given I% change in interest rate
Low	Low Price	Theta(3)	Price change for every day that elapses
Open	Opening Price	Click Trd	Activate / deactivate click trading by contract
Close	Closing Price	S (Status)	Auction, Closed, FastMkt, Not Tradable, Pre-trading, Tradable, S = post-trading
Chng	Last Price-Last Close	Expiry	Expiration Month/Year
TheoPrc	Theoretical Price		

As described herein, the display and trading method of the present invention provide the user with certain advantages over systems in which a display of market depth, as shown in Figure 2, is used. The Mercury display and trading method of the present invention ensure fast and accurate execution of trades by displaying market depth on a vertical or horizontal plane, which fluctuates logically up or down, left or right across the plane as the market prices fluctuates. This allows the trader to trade quickly and efficiently. An example of such a Mercury display is illustrated in the screen display of Figure 3.

The display of market depth and the manner in which traders trade within the market depth can be effected in different manners, which many traders will find materially better, faster and more accurate. In addition, some traders may find the display of market depth to be difficult to follow. In the display shown in Figure 2, the market depth is displayed vertically so that both Bid and Ask prices descend the grid. The Bid prices descend the market grid as the prices decrease. Ask prices also descend the market grid as these prices actually increase. This combination may be considered counterintuitive and difficult to follow by some traders.

The Mercury display overcomes this problem in an innovative and logical manner. Mercury also provides an order entry system, market grid, fill window and summary of market orders in one simple window. Such a condensed display materially simplifies the trading system by entering and tracking trades in an extremely efficient manner. Mercury displays market depth in a logical, vertical fashion or horizontally or at some other convenient angle or configuration. A vertical field is shown in the figures and described for convenience, but the field could be horizontal or at an angle. In turn, Mercury further increases the speed of trading and the likelihood of entering orders at desired prices with desired quantities. In the preferred embodiment of the invention, the Mercury display is a static vertical column of prices with the bid and ask quantities

displayed in vertical columns to the side of the price column and aligned with the corresponding bid and ask prices. An example of this display is shown in Figure 3.

Bid quantities are in the column 1003 labeled BidQ and ask quantities are in column 1004 labeled AskQ. The representative ticks from prices for the given commodity are shown in column 1005. The column, does not list the whole prices (e.g. 95.89), but rather, just the last two digits (e.g. 89). In the example shown, the inside market, cells 1020, is 18 (best bid quantity) at 89 (best bid price) and 20 (best ask quantity) at 90 (best ask price). In the preferred embodiment of the invention, these three columns are shown in different colors so that the trader can quickly distinguish between them.

The values in the price column are static; that is, they do not normally change positions unless a re-centering command is received (discussed in detail later). The values in the Bid and Ask columns however, are dynamic; that is, they move up and down (in the vertical example) to reflect the market depth for the given commodity. The LTQ column 1006 shows the last traded quantity of the commodity. The relative position of the quantity value with respect to the Price values reflects the price at which that quantity was traded. Column 1001 labeled El W (entered/working) displays the current status of the trader's orders. The status of each order is displayed in the price row where it was entered. For example, in cells 1007, the number next to S indicates the number of the trader's ordered lots that have been sold at the price in the specific row. The number next to W indicates the number of the trader's ordered lots that are in the market, but have not been filled-i.e. the system is working on filling the order. Blanks in this column indicate that orders are entered or working at that price. In cells 1008, the number next to B indicates the number of the trader's

ordered lots that have been bought a~ the price in the specific row. The number next to W indicates the number of the trader's ordered lots that are in the market, but have not ~~been filled - i.e. the system is working on filling the order.~~

Various parameters are set and information is provided in column 1002. For example, "10:48:44" in cell 1009 shows the actual time of day. The L and R fields in cell 1010 indicate a quantity value, which may be added to the order quantity entered. This process is explained below with respect to trading under Mercury. Below the L and R fields, in cell 1011, a number appears which represents the current market volume. This is the number of lots that have been traded for the chosen contract. Cell 1012, "X 10", displays the Net Quantity, the current position of the trader on the chosen contract. The number "10" represents the trader's buys minus sells. Cell 1013 is the "Current Quantity"; this field represents the quantity for the next order that the trader will send to market. This can be adjusted with right and left clicks (up and down) or by clicking the buttons which appear below the Current Quantity in cells 1014. These buttons increase the current quantity by the indicated amount; for example, "10" will increase it by 10; "1H" will increase it by 100; "1K" will increase it by 1000. Cell 1015 is the Clear button; clicking this button will clear the Current Quantity field. Cell 1016 is the Quantity Description; this is a pull down menu allowing the trader to chose from three Quantity Descriptions. The pull down menu is displayed when the arrow button in the window is clicked. The window includes NetPos, Offset and a field allowing the trader to enter numbers.. Placing a number in this field will set a default buy or sell quantity. Choosing "Offset" in this field will enable the L/R buttons of cell 1010. Choosing "NetPos" in this field will set the current Net Quantity (trader's net position) as the trader's quantity for his next trade. Cell 1017 are +/- buttons; these buttons will alter the size of the screen-either larger (+) or smaller (-). Cell 1018 is used to invoke Net 0; clicking this button will reset the Net Quantity (cell 1011) to zero. Cell 1019 is used to invoke Net Real; clicking this button will reset the Net Quantity (cell 10 11) to its actual position.

The inside market and market depth ascend and descend as prices in the market increase and decrease. For example, Figure 4 shows a screen displaying the same market as that of Figure 3 but at a later interval where the inside market, cells 1101, has risen three ticks. Here, the inside market for the commodity is 43 (best bid quantity) at 92 (best bid price) and 63 (best ask quantity) at 93 (best ask price). In comparing Figures 3 and 4, it can be seen that the price column remained static, but the corresponding bids and asks rose up the price column. Market Depth similarly ascends, and descends the price column, leaving a vertical history of the market.

As the market ascends or descends the price column, the inside market, might go above or below the price column displayed on a trader's screen. Usually a trader will want to be able to see the inside market to assess future trades. The system of the present invention addresses this problem with a one click centering feature. With a single click at any point within the gray area, 1021, below the "Net Real" button, the system will re-center the inside market on the trader's screen. Also, when using a three-button mouse, a click of the middle mouse button, irrespective of the location of the mouse pointer, will re-center the inside market on the trader's screen.

The same information and features can be displayed and enabled in a horizontal fashion. Just as -the market ascends and descends the vertical Mercury display shown in Figures 3 and 4, the market will move left and right in the horizontal Mercury display. The same data and the same information gleaned from the dynamical display of the data is provided. It is envisioned that other orientations can be used to dynamically display the data and such orientations are intended to come within the scope of the present invention.

Next, trading commodities, and specifically, the placement of trade orders using the Mercury display is described. Using the Mercury display and trading method, a trader would first designate the desired commodity and, if applicable, the default quantities. Then he can trade with single clicks of the right or left mouse button. The following equations are used by the system to generate trade orders and to determine the quantity and price to be associated with the trade order. The following abbreviations are used in these formulas: P = Price value of row clicked, R = Value in R field, L = Value in L field, Q = Current Quantity, Q_a = Total of all quantities in AskQ column at an equal or better price than P, Q_b = Total of all quantities in BidQ column at an equal or better price than P, N = Current Net Position, Bo = Buy order sent to market and So = Sell order -sent to market.

Apy order entered using right mouse button

Bo = $(Q_a + R)P$ (Eq. 1) If BidQ field clicked.

So = $(Q_b + R)P$ (Eq. 2) If AskQ field clicked.

Orders entered using the left mouse button

If "Offset" mode chosen in Quantity Description field then:

Bo = $(Q_a + L)P$ (Eq. 3) If BidQ field clicked.

SO = $(Q_b + L)P$ (Eq. 4) If AskQ field clicked.

If "number" mode chosen in Quantity Description field then:

Bo = QP (Eq. 5)

So = QP (Eq. 6)

If "NetPos" mode chosen in Quantity Description field then:

Bo = NP (Eq. 7)

So = NP (Eq. 8)

Orders can also be sent to market for quantities that vary according to the quantities available in the market; quantities preset by the trader; and which mouse button the trader clicks. Using this feature, a trader can buy or sell all of the bids or asks in the market at or better than a chosen price with one click. The trader could also add or subtract a preset quantity from the quantities outstanding in the market. If the trader clicks in a trading cell - i.e. in the BidQ or AskQ column, he will enter an order in the market. The parameters of the order depend on which mouse button he clicks and what preset values he set.

Using the screen display and values from Figure 5, the placement of trade orders using the Mercury display and trading method is now described using examples. A left click on the 18 in the BidQ column 1201 will send an order to market to sell 17 lots (quantity # chosen on the Quantity Description pull down menu cell 1204) of the commodity at a price of 89 (the corresponding price in the Prc column 1203). Similarly, a left click on the 20 in the AskQ column 1202 will send an order to market to buy 17 lots at a price of 90.

Using the right mouse button, an order would be sent to market at the price that corresponds to the row clicked for the total quantity of orders in the market that equal or better the price in that row plus the quantity in the R field 1205. Thus, a right click in the AskQ column 1202 in the 87 price row will send a sell order to market at a price of 87 and a quantity of 150. 150 is the sum of all the quantities 30, 97, 18 and 5. 30, 97 and 18 are all of the quantities in the market that would meet or better the trader's sell order price of 87. These quantities are displayed in the BidQ column 1201 because this column represents the orders outstanding in the market to purchase the commodity at each corresponding price. The quantity 5 is the quantity pre-set in the R field 1205.

Similarly, a right click in the BidQ column 1201 at the same price level of 87 would send a buy limit order to market for a quantity of 5 at a price of 87. The quantity is determined in the game manner as above. In this example, though, there are no orders in the market that equal or better the chosen price - there are no quantities in the AskQ column 1202 that equal or better this price. Therefore, the sum of the equal or better quantities is zero ("0"). The total order entered by the trader will be the value in the R field, which is 5.

An order entered with the left mouse button and the "Offset" option chosen in the quantity description field 1204 will be calculated in the same way as above, but the quantity in the L field 1206 will be added instead of the quantity in the R field 1205. Thus, a left click in the BidQ column 1201 in the 92 price row will send a buy order to market at a price of 92 and a quantity of 96. 96 is the sum of all the quantities 45, 28, 20 and 3. 45, 28 and 20 are all quantities in the market that would meet or better the trader's buy order price of 92. These quantities are displayed in the AskQ column 1202 because this column represents the orders outstanding in the market to sell the commodity at each corresponding price. The quantity 3 is the quantity pre-set in the L field 1206.

The values in the L or R fields may be negative numbers. This would effectively decrease the total quantity sent to market. In other words, in the example of a right click in the AskQ column 1202 in the 87 price row, if the R field was -5, the total quantity sent to market would be 140 (30 + 97 + 18 + (-5)).

If a trader chose the "NetPos" option in the quantity description field 1204, a right click would still work as explained above. A left click would enter an order with a price corresponding to the price row clicked and a quantity equal to the current Net position of the trader. The Net position of the trader is the trader's current position on the

chosen contract. In other words, if the trader has bought 10 more contracts than he has sold, this value would be 10. NetPos would not affect the quantity of an order sent with a right click.

If the trader chose a number value in the quantity description, a left click would send an order to market for the current quantity chosen by the trader. The default value of the current quantity will be the number entered in the quantity description field, but it could be changed by adjusting the figure in the current quantity field 1204.

This embodiment of the invention also allows a trader to delete all of his working trades with a single click of either the right or left mouse button anywhere in the last traded quantity (LTQ) column 1207. This allows a trader to exit the market immediately. Traders will use this feature when they are losing money and want to stop the losses from pilling up. Traders may also use this feature to quickly exit the market upon making a desired profit. The invention also allows a trader to delete all of his. orders from the market at a particular price level. A click with either mouse button in the Entered/Working (E/W) column 1208 will delete all working orders in the cell that was clicked. Thus, if a trader believes that previously sent orders at a particular price that have not been filled would be poor trades, he can delete these orders with a single click.

The process for placing trade orders using the Mercury display and trading method of the present invention as described above is shown in the flowchart of Figure 6. First, in step 1301, the trader has the Mercury display on the trading terminal screen showing the market for a given commodity. In step 1302, the parameters are set in the appropriate fields, such as the L and R fields and the Current Quantity, NetPos or Offset fields from the pull down menu. In step 1303, the mouse pointer is positioned and clicked over a cell in the Mercury display by the trader. In step 1304, the system

determines whether the cell clicked is a tradable cell (i.e. in the AskQ column or BidQ column). If not, then in step 1305, no trade order is created or sent and, rather, other quantities are adjusted or functions are performed based upon the cell selected. Otherwise, in step 1306, the system determines whether it was the left or the right button of the mouse that was clicked. If it was the right, then in step 1307, the system will use the quantity in the R field when it determines the total quantity of the order in step 1310. If the left button was clicked, then in step 1308, the system determines which quantity description was chosen: Offset, NetPos or an actual number.

If Offset was chosen, then the system, in step 1309, will use the quantity in the L field when it determines the total quantity of the. order in step 1310. If NetPos was chosen, then the system, in step 1312, will determine that the total quantity for the trade order will be current NetPos value, i.e. the net position of the trader in the given commodity. If an actual number was used as the quantity description, then, in step 1311, the system will determine that the total quantity for the trade order will be the current quantity entered. In step 1310, the system will determine that the total quantity for the trade order will be the value of the R field (if step 1307 was taken) or the value of the L field (if step 1309 was taken) plus all quantities in the market for prices better than or equal to the price in the row clicked. This will add up the quantities for each order in, the market that will fill the order being entered by the trader (plus the L or R value).

After either steps 1310, 1311 or 1312, the system, in step 1313, determines which column was clicked, BidQ or AskQ. If AskQ was clicked, then, in step 1314, the system sends a sell limit order to the market at the price corresponding to the row for the total quantity as already determined. If BidQ was clicked, then, in-step 1315, the system sends a buy limit order to the market at the price corresponding to the row for the total quantity as already determined.

It should be understood that the above description of the invention and specific examples, while indicating preferred embodiments of the present invention, are given by way of illustration and not limitation. Many changes and modifications within the scope of the present invention may be made without departing from the spirit thereof, and the present invention includes all such changes and modifications.

WE CLAIM:

1. A method of displaying, on an electronic display device, the market depth of a commodity traded in a market, said method comprising:

dynamically displaying a plurality of bids in the market for said commodity;

dynamically displaying of a plurality of asks in the market for said commodity; and

statically displaying prices corresponding to said plurality of bids and asks;

wherein said pluralities of bids and asks are dynamically displayed in alignment with the prices corresponding thereto.

2. A method of displaying, on an electronic display device, the market depth of a commodity traded in a market according to claim 1, wherein said bids and asks are oriented vertically.

3. A method of displaying, on an electronic display device, the market depth of a commodity traded in a market according to claim 1, wherein said bids and asks are oriented horizontally.

4. A method of displaying, on an electronic display device, the market depth of a commodity traded in a market according to claim 1, wherein a plurality of said displayed bids and asks in the market include bid and ask quantities of the commodity.

5. A method of displaying, on an electronic display device, the market depth of a commodity traded in a market according to claim 1, wherein said bids and asks are displayed in different colors.

6. A method of displaying, on an electronic display device, the market depth of a commodity traded in a market according to claim 1, re-centering said prices corresponding to the bids and asks about an inside market price upon receipt of a re-centering instruction.

7. A method of displaying, on an electronic display device, the market depth of a commodity traded in a market according to claim 1, further comprising dynamically displaying entered and working orders in alignment with the prices corresponding thereto.

8. A computer readable medium having program code recorded thereon for execution on a computer for displaying the market depth of a commodity traded in a market, comprising:

a first program code for dynamically displaying a plurality of bids in the market for said commodity;

a second program code for dynamically displaying of a plurality of asks in the market for said commodity; and

a third program code for statically displaying prices corresponding to said plurality of bids and asks;

wherein said pluralities of bids and asks are dynamically displayed in alignment with the prices corresponding thereto.

9. A computer readable medium having program code recorded thereon for execution on a computer for displaying the market depth of a commodity traded in a market according to claim 8, further comprising program code to ensure that said displayed bids, asks and prices are oriented vertically.

10. A computer readable medium having program code recorded thereon for execution on a computer for displaying the market depth of a commodity traded in a market according to claim 8, further comprising program code to ensure that said displayed bids, asks and prices are oriented horizontally.

11. A computer readable medium having program code recorded thereon for execution on a computer for displaying the market depth of a commodity traded in a market according to claim 8, further comprising program code to ensure that a plurality of bids and asks in the market include bid and ask quantities of the commodity.

12. A computer readable medium having program code recorded thereon for execution on a computer for displaying the market depth of a commodity traded in a market according to claim 8, further comprising program code to ensure that bids and asks are displayed in different colors.

13. A computer readable medium having program code recorded thereon for execution on a computer for displaying the market depth of a commodity traded in a market according to claim 8, further comprising program code to ensure that said displayed prices corresponding to the bids and asks are re-centered about an inside market price upon receipt of a re-centering instruction.

14. A computer readable medium having program code recorded thereon for execution on a computer for displaying the market depth of a commodity traded in a market according to claim 8, further comprising program code for dynamically displaying entered and working orders in alignment with the prices corresponding thereto.

15. A graphical user interface for displaying the market depth of a commodity traded in a market, comprising:

a dynamic display of a plurality of bids in the market for said commodity;

a dynamic display of a plurality of asks in the market for said commodity; and

a static display of prices corresponding to said plurality of bids and asks;

wherein said pluralities of bids and asks are dynamically displayed in alignment with the prices corresponding thereto.

16. A graphical user interface according to claim 15, wherein said displays are oriented vertically.

17. A graphical user interface according to claim 15, wherein said displays are oriented horizontally.

18. A graphical user interface according to claim 15, wherein said displays of the pluralities of bids and asks in the market include bid and ask quantities of the commodity.

19. A graphical user interface according to claim 15, wherein said displays are displayed in different colors.

20. A graphical user interface according to claim 15, wherein said display of prices corresponding to the bids and asks is re-centered about an inside market price upon re-centering instruction from a user.

21. A graphical user interface according to claim 15, further comprising a display of entered and working orders displayed in alignment with the prices corresponding thereto.

22. A method of placing a trade order for a commodity on an electronic exchange, using a graphical user interface and a user input device and having preset parameters for trade orders, said method comprising:

displaying the market depth of a commodity traded in a market, through a dynamic display of a plurality of bids and a plurality of asks in the market for the commodity, including the bid and ask quantities of the commodity, aligned with a static display of prices corresponding thereto; and

initiating placement of a trade order of the commodity through a single action of the user input device initiating placement of a trade order of the commodity through a single action of the user input device with a pointer of the user input device positioned over an area in said dynamic displays of bids and asks;

wherein the contents of the trade order are based in part upon the preset parameters and the position of the pointer at the time of said single action.

23. A method of placing a trade order according to claim 22, wherein said trade order is a buy order if the position of the pointer at the time of said single action is within the display of bids and wherein said trade order is a sell order if the position of the pointer at the time of said single action is within the display of asks.

24. A method of placing a trade order according to claim 23, wherein the trade order is for a pre-determined fixed quantity and for a price corresponding to the position of the pointer at the time of said single action.

25. A method of placing a trade order according to claim 23, wherein the trade order is for a quantity equal to a current net position of the user in the commodity and for a price corresponding to the position of the pointer at the time of said single action.

26. A method of placing a trade order according to claim 23, wherein the trade order is for a quantity equal to a pre-determined fixed offset plus the sum of all quantities in the market at prices better than or equal to a price corresponding to the position of the pointer at the time of said single action and for a price corresponding to said position.

27. A method of placing a trade order according to claim 26, wherein said offset is equal to a first pre-determined value if a single action of a first type is taken and said offset is equal to a second pre-determined value if a single action of a second type is taken.

28. A method of placing a trade order according to claim 22, further comprising canceling said trade order in response to a subsequent single action of the user input device.

29. A computer readable medium having program code recorded thereon, for execution on a computer having a graphical user interface and a user input device and having preset parameters for trade orders, to place a trade order for a commodity on an electronic exchange, comprising:

a first program code displaying the market depth of a commodity traded in a market, through a dynamic display of a plurality of bids and a plurality of asks in the market for the commodity, including the bid and ask quantities of the commodity, aligned with a static display of prices corresponding thereto;

a second program code for initiating placement of a trade order of the commodity through a single action of the user input device with a pointer of the user input device positioned over an area in said dynamic displays of bids and asks; and

a third program code for setting characteristics of the trade order based in part upon the preset parameters and the position of the pointer at the time of said single action.

30. A computer readable medium having program code recorded thereon, for execution on a computer to place a trade order according to claim 29, further comprising program code for establishing that said trade order is a buy order if the position of the pointer at the time of said single action is within the display of bids and that said trade order is a sell order if the position of the pointer at the time of said single action is within the display of asks.

31. A computer readable medium having program code recorded thereon, for execution on a computer to place a trade order according to claim 30, further comprising program code for establishing that the trade order is for a pre-determined fixed quantity and for a price corresponding to the position of the pointer at the time of said single action.

32. A computer readable medium having program code recorded thereon, for execution on a computer to place a trade order according to claim 30, further comprising program code for establishing that the trade order is for a quantity equal to a current net position of the user in the commodity and for a price corresponding to the position of the pointer at the time of said single action.

33. A computer readable medium having program code recorded thereon, for execution on a computer to place a trade order according to claim 30, further comprising program code for establishing that the trade order ~~is for~~ a quantity equal to a pre-determined fixed offset plus the sum of all quantities in the market at prices better than or equal to a price corresponding to the position of the pointer at the time of said single action and for a price corresponding to said position.

34. A computer readable medium having program code recorded thereon, for execution on a computer to place a trade order according to claim 33, further comprising program code for establishing that said offset is equal to a first pre-determined value if a single action of a first type is taken and said offset is equal to a second pre-determined value if a single action of a second type is taken.

35. A client system for placing a trade order for a commodity on an electronic exchange, the system comprising:

a display device for displaying the market depth of a commodity traded in a market, through a dynamic display of a plurality of bids and a plurality of asks in the market for the commodity, including the bid and ask quantities of the commodity, aligned with a static display of prices corresponding thereto;

a user input device for positioning a pointer thereof over an area in said dynamic displays of bids and asks and for initiating placement of a trade order of the commodity through a single action of the user input device; and

a trade order characteristics setting component for setting characteristics of the trade order based in part upon preset parameters and the position of the pointer at the time of said single action.

36. A client system for placing a trade order for a commodity according to claim 35, wherein said trade order characteristics setting component establishes that said trade order is a buy order if the position of the pointer at the time of said single action is within the display of bids and that said trade order is a sell order if the position of the pointer at the time of said single action is within the display of asks.

37. A client system for placing a trade order for a commodity according to claim 36, wherein said trade order characteristics setting component establishes that the trade order is for a pre-determined fixed quantity and for a price corresponding to the position of the pointer at the time of said single action.

38. A client system for placing a trade order for a commodity according to claim 36, wherein said trade order characteristics setting component establishes that the trade order is for a quantity equal to a current net position of the user in the commodity and for a price corresponding to the position of the pointer at the time of said single action.

39. A client system for placing a trade order for a commodity according to claim 36, wherein said trade order characteristics setting component establishes that the trade order is for a quantity equal to a predetermined fixed offset plus the sum of all quantities in the market at prices better than or equal to a price corresponding to the position of the pointer at the time of said single action and for a price corresponding to said position.

40. A client system for placing a trade order for a commodity according to claim 39, wherein said trade order characteristics setting component establishes that said offset is equal to a first pre-determined value if a single action of a first type is taken and said offset is equal to a second predetermined value if a single action of a second type is taken.

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ABSTRACT

A method and system for reducing the time it takes for a trader to place a trade when electronically trading on an exchange, thus increasing the likelihood that the trader will have orders filled at desirable prices and quantities. The "Mercury" display and trading method of the present invention ensure fast and accurate execution of trades by displaying market depth on a vertical or horizontal plane, which fluctuates logically up or down, left or right across the plane as the market prices fluctuates. This allows the trader to trade quickly and efficiently.

Atty. Dkt. No. 024051/0135

DECLARATION AND POWER OF ATTORNEY

As a below named inventor, I HEREBY DECLARE:

THAT my residence, post office address, and citizenship are as stated below next to my name;

THAT I believe I am the original, first, and sole inventor (if only one inventor is named below) or an original, first, and joint inventor (if plural inventors are named below or in an attached Declaration) of the subject matter which is claimed and for which a patent is sought on the invention entitled

CLICK BASED TRADING WITH INTUITIVE GRID DISPLAY OF MARKET DEPTH

(Attorney Docket No. 024051/0135)

the specification of which (check one)

___ is attached hereto.

__X__ was filed on June 9, 2000 as United States Application Number or PCT International Application Number 09/590692 and was amended on _____ (if applicable).

THAT I do not know and do not believe that the same invention was ever known or used by others in the United States of America, or was patented or described in any printed publication in any country, before I (we) invented it;

THAT I do not know and do not believe that the same invention was patented or described in any printed publication in any country, or in public use or on sale in the United States of America, for more than one year prior to the filing date of this United States application;

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THAT I have reviewed and understand the contents of the above-identified specification, including the claim(s), as amended by any amendment specifically referred to above;

THAT I believe that the above-identified specification contains 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 invention, and sets forth the best mode contemplated by me of carrying out the invention; and

THAT I acknowledge the duty to disclose to the U.S. Patent and Trademark Office all information known to me to be material to patentability as defined in Title 37, Code of Federal Regulations, §1.56.

I HEREBY CLAIM foreign priority benefits under Title 35, United States Code §119(a)-(d) or § 365(b) of any foreign application(s) for patent or inventor's certificate, or §365(a) of any PCT international application which designated at least one country other than the United States of America, listed below and have also identified below any foreign application for patent or inventor's certificate or of any PCT international application having a filing date before that of the application on which priority is claimed.

Prior Foreign Application Number	Country	Foreign Filing Date	Priority Claimed?	Certified Copy Attached?

I HEREBY CLAIM the benefit under Title 35, United States Code § 119(e) of any United States provisional application(s) listed below.

U.S. Provisional Application Number	Filing Date
60/186,322	March 2, 2000

I HEREBY CLAIM the benefit under Title 35, United States Code, §120 of any United States application(s), or § 365(c) of any PCT international application designating the United States of America, 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 Title 35, United States Code, § 112, I acknowledge the duty to disclose information which is material to patentability as defined in Title 37, Code of Federal Regulations, § 1.56 which became available between the filing date of the prior application and the national or PCT international filing date of this application.

U.S. Parent Application Number	PCT Parent Application Number	Parent Filing Date	Parent Patent Number

I HEREBY APPOINT the following registered attorneys and agents of the law firm of FOLEY & LARDNER to have full power to prosecute this application and any continuations, divisions, reissues, and reexaminations thereof, to receive the patent, and to transact all business in the United States Patent and Trademark Office connected therewith:

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JOHNNY A. KUMAR	Reg. No.	34,649
GLENN LAW	Reg. No.	34,371
PETER G. MACK	Reg. No.	26,001
BRIAN J. MC NAMARA	Reg. No.	32,789
SYBIL MELOY	Reg. No.	22,749
RICHARD C. PEET	Reg. No.	35,792
GEORGE E. QUILLIN	Reg. No.	32,792
COLIN G. SANDERCOCK	Reg. No.	31,298
BERNHARD D. SAXE	Reg. No.	28,665
CHARLES F. SCHILL	Reg. No.	27,590
RICHARD L. SCHWAAB	Reg. No.	25,479
ARTHUR SCHWARTZ	Reg. No.	22,115
HAROLD C. WEGNER	Reg. No.	25,258

and I request that all correspondence be directed to:

William T. Ellis
FOLEY & LARDNER
Washington Harbour
3000 K Street, N.W., Suite 500
Washington, D.C. 20007-5109

Telephone: (202) 672-5485
Facsimile: (202) 672-5399

I UNDERSTAND AND AGREE THAT the foregoing attorneys and agents appointed by me to prosecute this application do not personally represent me or my legal interests, but instead represent the interests of the legal owner(s) of the invention described in this application.

I FURTHER DECLARE THAT all statements made herein of my own knowledge are true, and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application or any patent issuing thereon.

Name of first inventor	Gary Allan Kemp II
Residence	Winnetka, IL
Citizenship	USA
Post Office Address	335 Fairview Avenue, Winnetka, IL 60093
Inventor's signature	
Date	AUGUST 24, 2000

002.349521

Name of second inventor	Jens-Uwe Schluetter
Residence	Evanston, IL
Citizenship	~~USA~~ Germany
Post Office Address	2320 Grey, Evanston, IL 60201
Inventor's signature	
Date	August 25, 2000
Name of third inventor	Harris Brumfield
Residence	Chicago, IL
Citizenship	USA
Post Office Address	1840 Cleveland, Chicago, IL 60614
Inventor's signature	
Date	8/19/00

Please type a plus sign (+) inside this box → [+]

PTO/SB/81 (10-00)
Approved for use through 10/31/2002. OMB 0651-0035
U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE
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POWER OF ATTORNEY OR AUTHORIZATION OF AGENT

Application Number	To Be Assigned
Filing Date	HEREWITH
First Named Inventor	Gary Alan Kemp II, et al
Group Art Unit	****
Examiner Name	****
Attorney Docket Number	120046-00003

I hereby appoint:

☒ Practitioners at Customer Number 25555 → *Place Customer Number Bar Code Label here*

OR

☐ Practitioner(s) named below:

Name	Registration Number

as my/our attorney(s) or agent(s) to prosecute the application identified above, and to transact all business in the Patent and Trademark Office connected therewith.

Please change the correspondence address for the above-identified application to:

☐ The above-mentioned Customer Number.

OR

☒ Firm or Individual Name	Jackson Walker L.L.P.				
Address	2435 North Central Expressway				
Address	Suite 600				
City	Richardson	State	Texas	ZIP	75080
Country	United States of America				
Telephone	972-744-2905	Fax	972-744-2909		

I am the:

☐ Applicant.

☒ Assignee of record of the entire interest. See 37 CFR 3.71.

Certificate under 37 CFR 3.73(b) is enclosed. (Form PTO/SB/96).

SIGNATURE of Applicant or Assignee of Record

Name	Michael G. Ryan
Signature	Michael G. Ryan
Date	JUNE 22, 2001

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*.

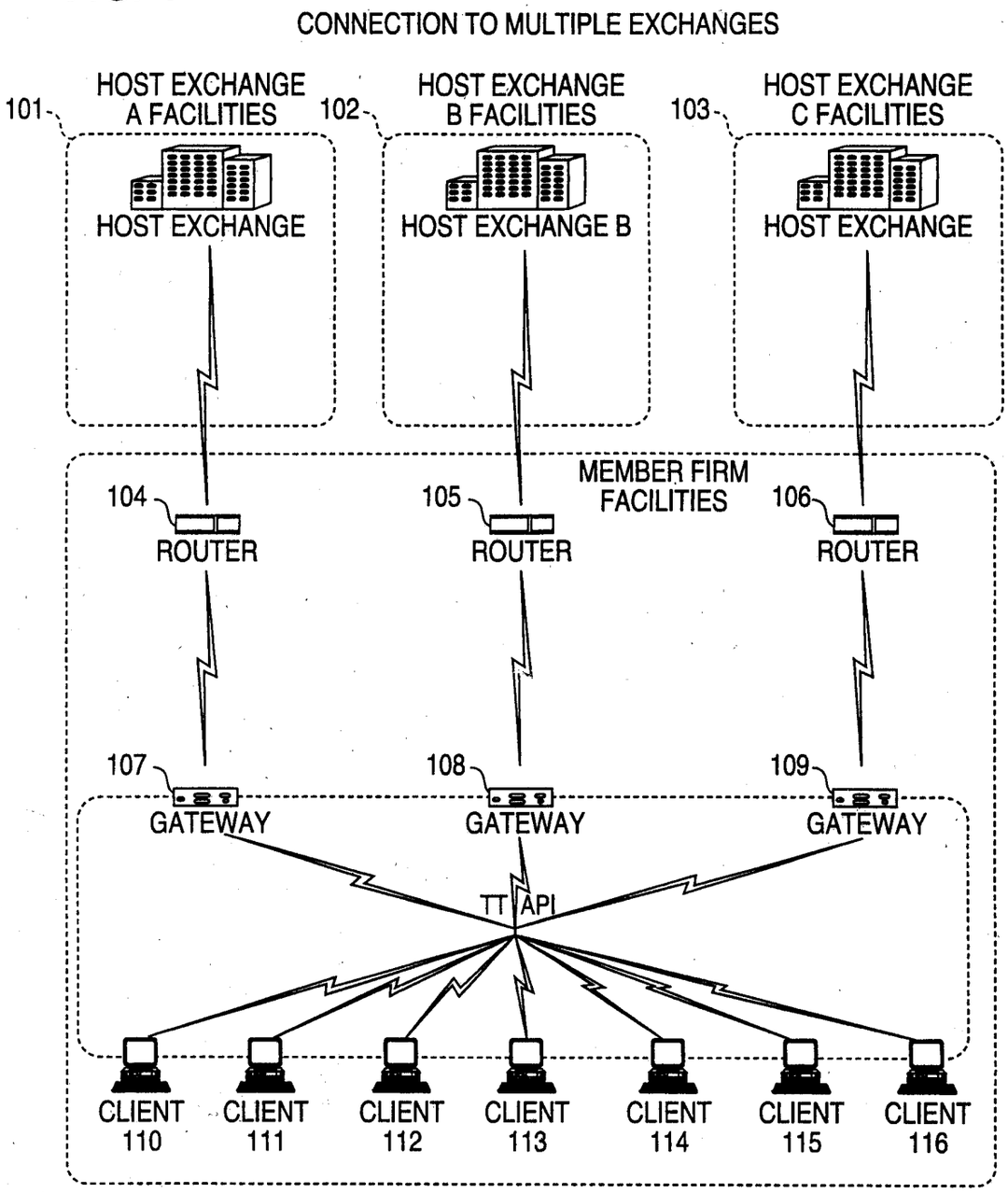
☒ *Total of 1 forms are submitted.

Burden Hour Statement: This form is estimated to take 3 minutes to complete. Time will vary depending upon the needs of the individual case. Any Comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

JWDOCS 2648871v1

PRINT OF DRAWINGS
AS ORIGINALLY FILED

FIG. 1



PRINT OF DRAWINGS
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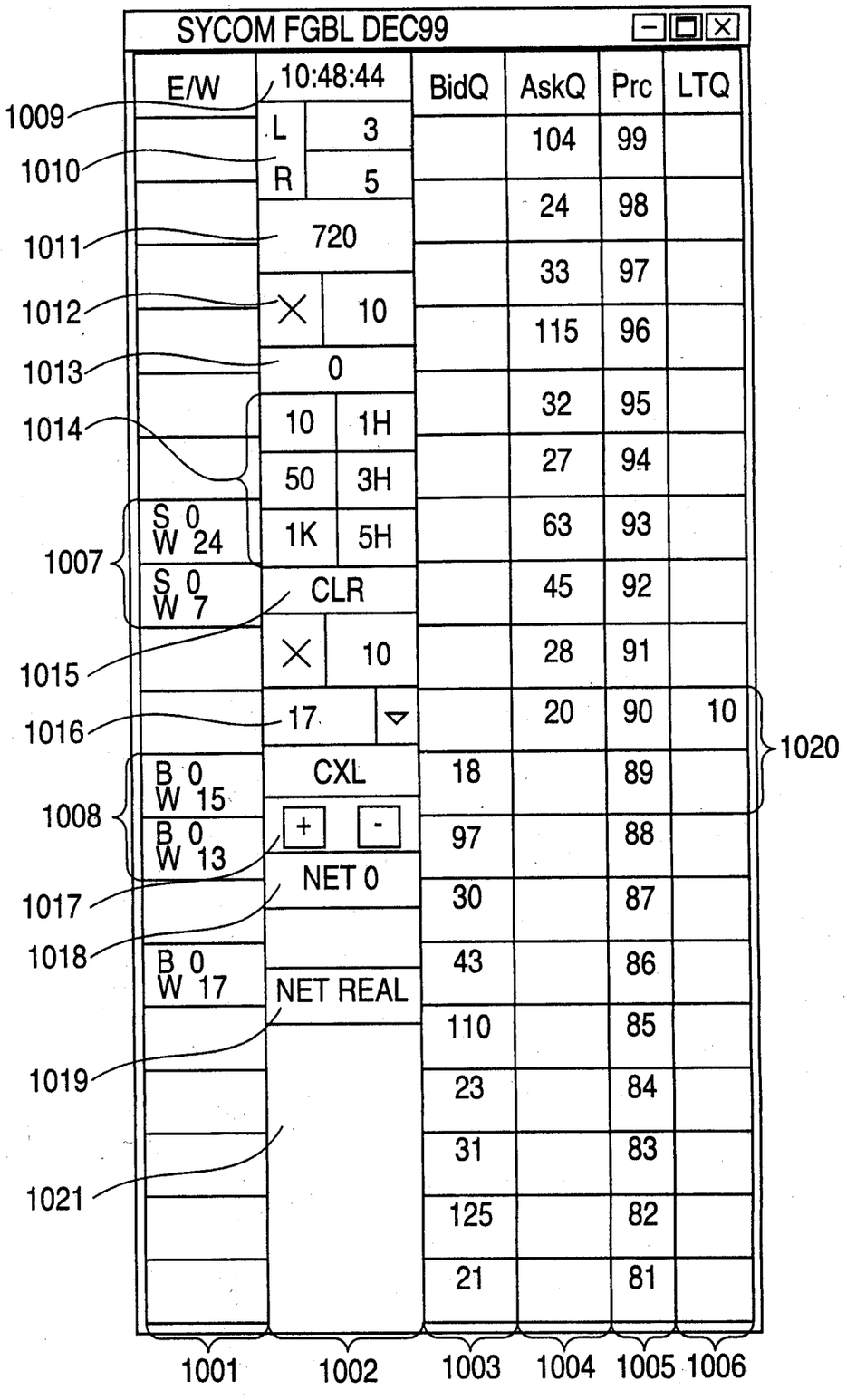
LICK BASED TRADING WITH
ITUITIVE GRID DISPLAY OF
MARKET DEPTH
r(s): Gary Alan KEMP et al.
Appl. No.: 09/894,637

FIG. 2

	201 Contract	202 Depth	203 BidQty	204 BidPrc	205 AskPrc	AskQty	LastPrc	LastQty	Total
1	CDHO	•	785	7626	7627	21	7627	489	8230
2			626	7625	7629	815			
3			500	7624	7630	600			
4			500	7623	7631	2456			
5			200	7622	7632	800			

PRINT OF DRAWINGS
AS ORIGINALLY FILED

FIG. 3



PRINT OF DRAWINGS
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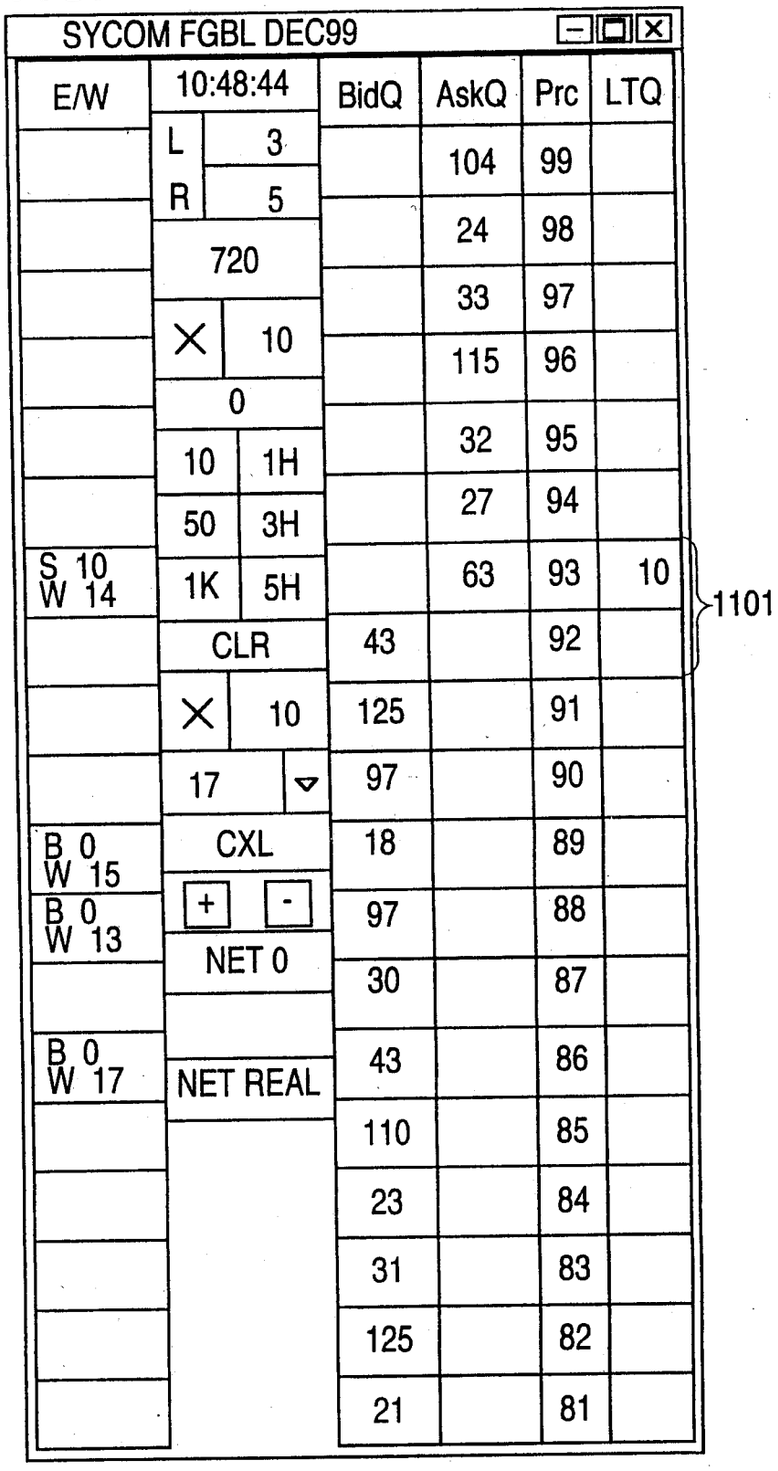
FIG. 4



PRINT OF DRAWINGS
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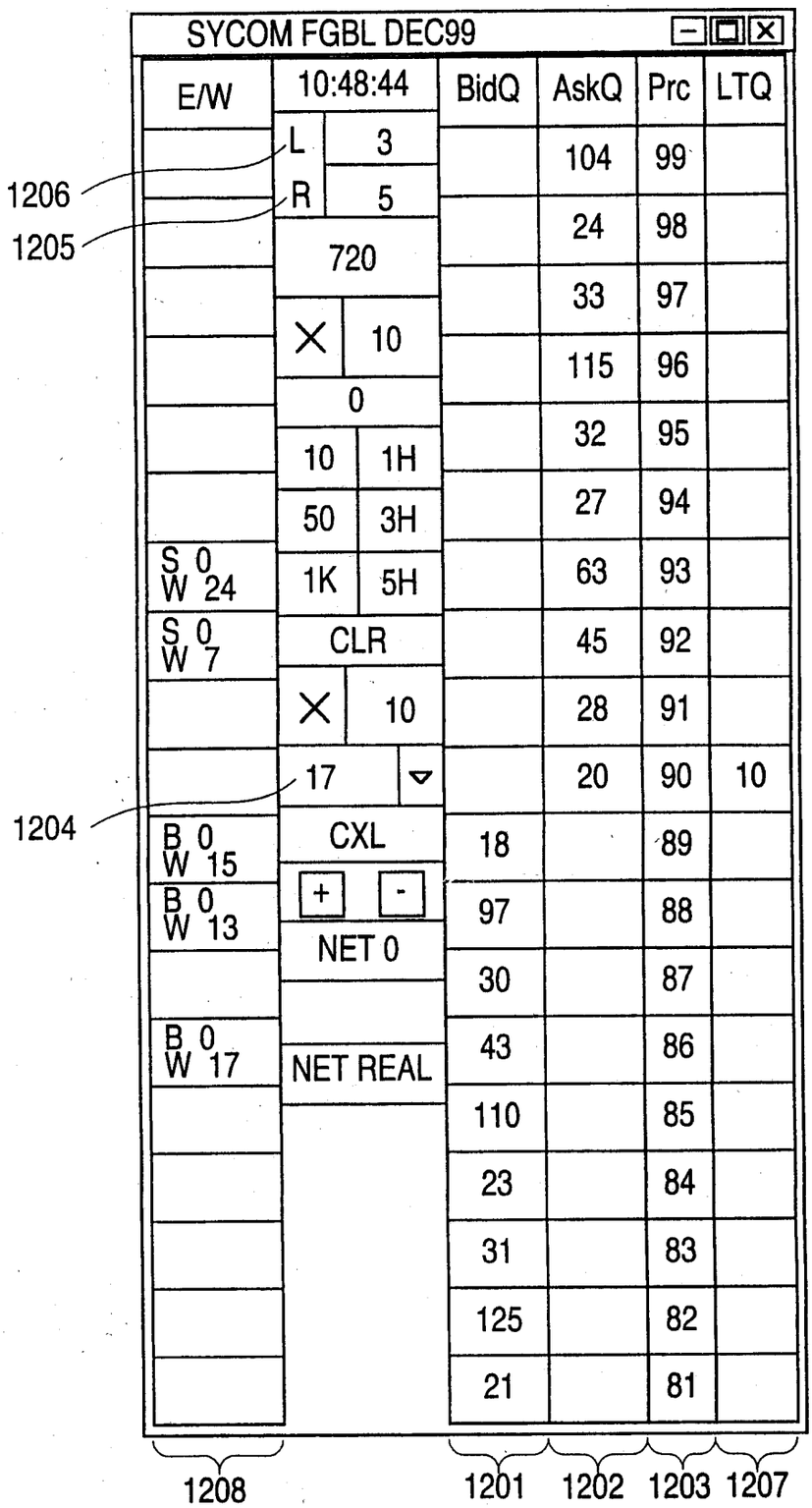
FIG. 5



PRINT OF DRAWINGS
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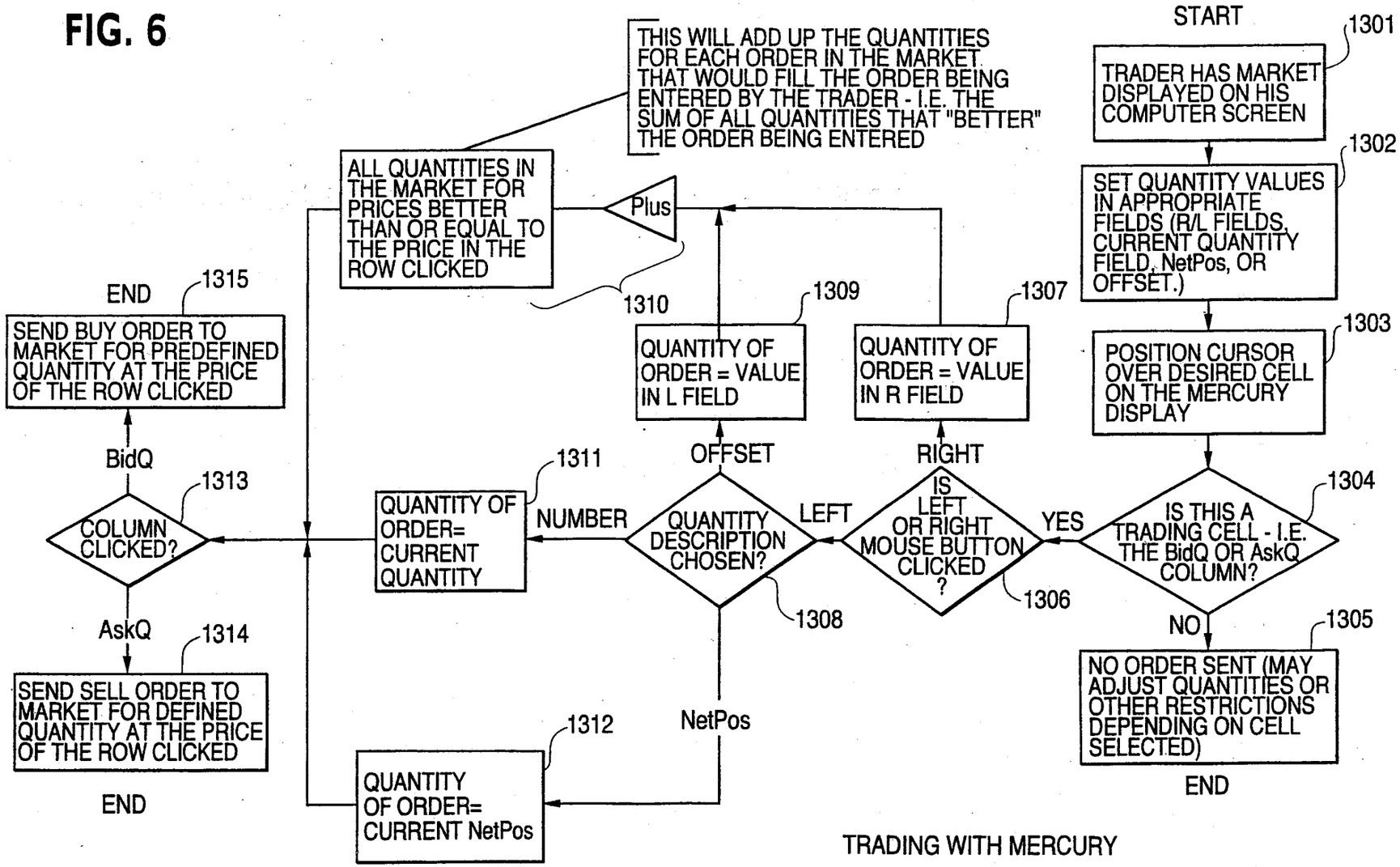
K BASED TRADING WITH
IVE GRID DISPLAY OF
MARKET DEPTH
: Gary Alan KEMP II et ...
Appl. No.: 09/894,637

FIG. 6



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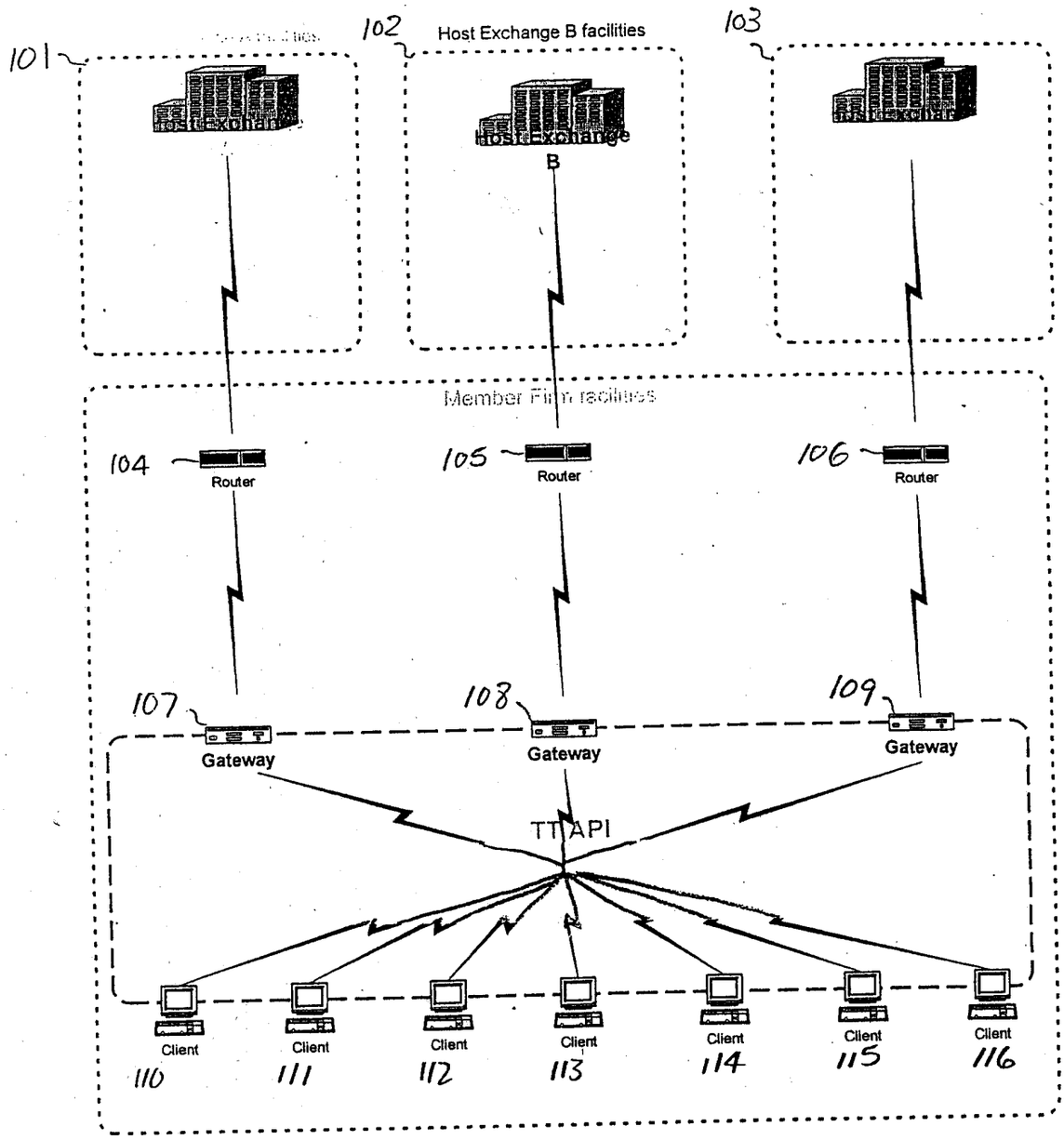

FIGURE 1

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AS ORIGINALLY [illegible]D

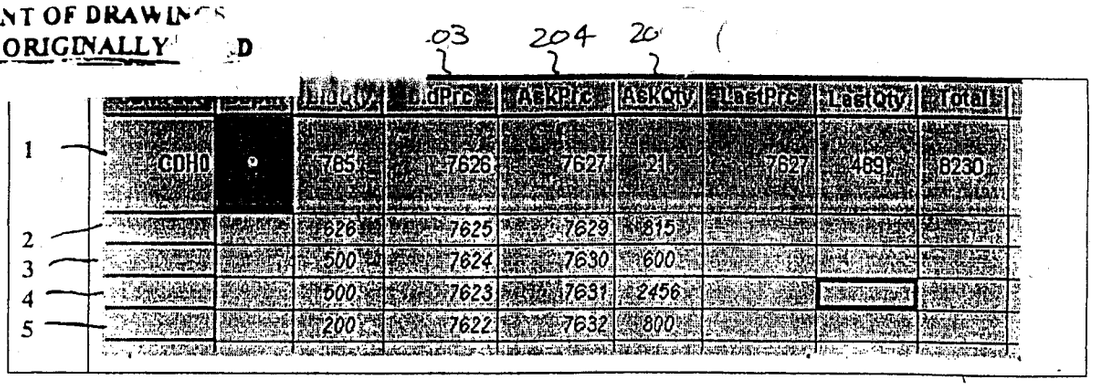


FIGURE 2

PRINT OF DRAWINGS
AS ORIGINALLY FILED

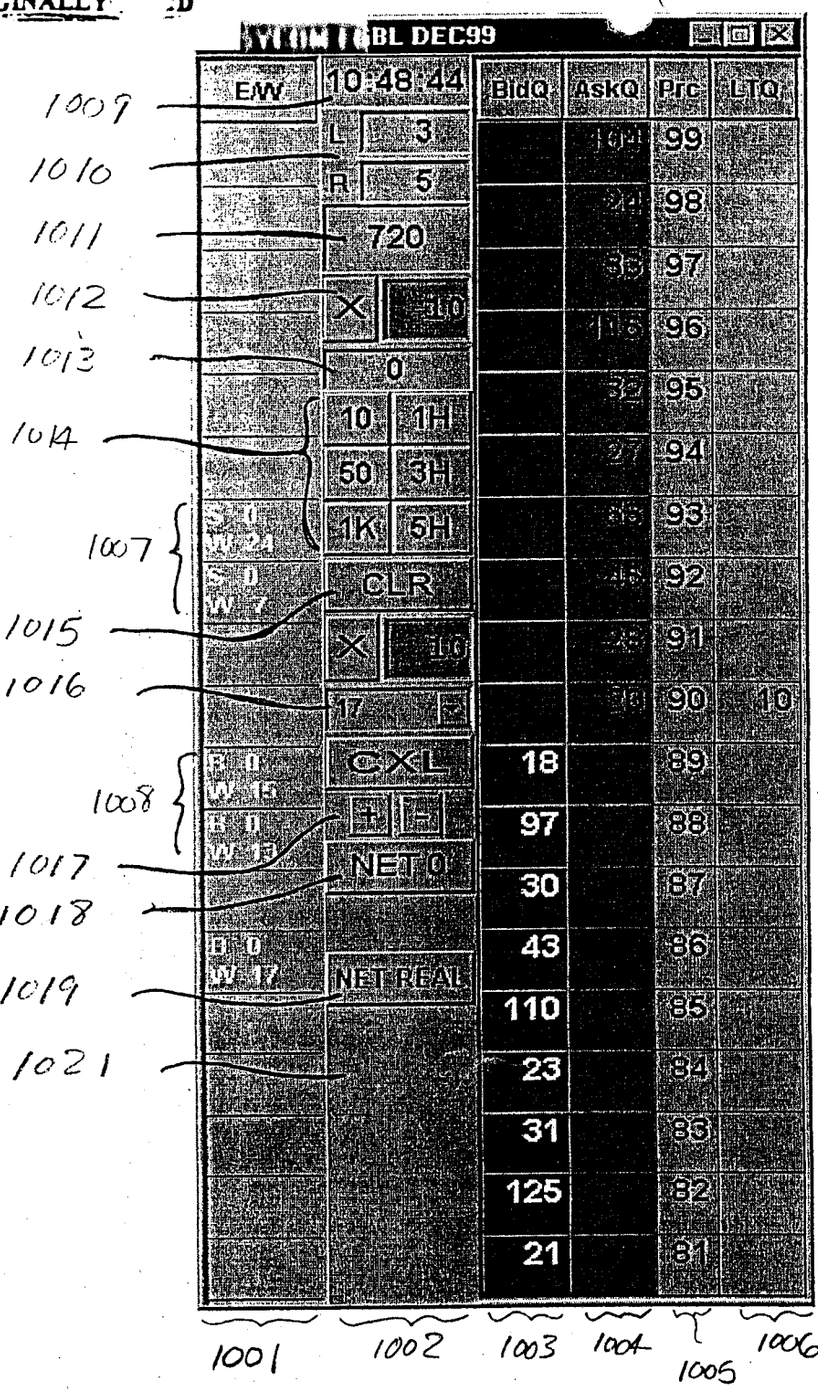
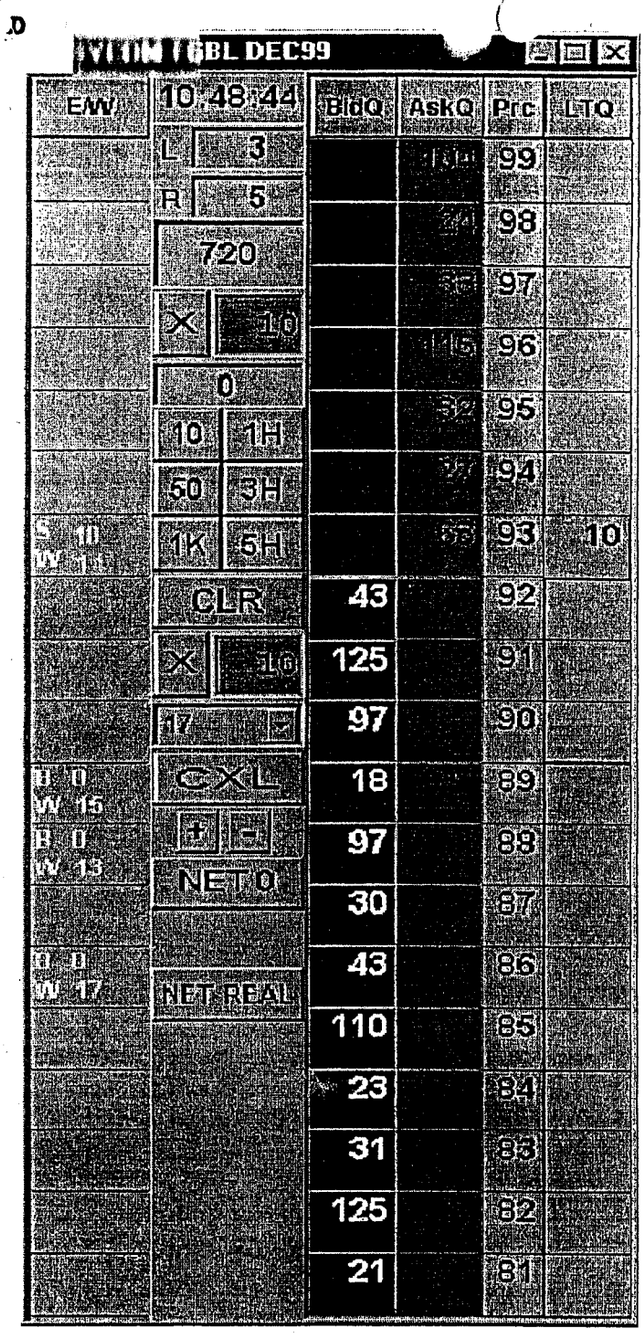


FIGURE 3

PRINT OF DRAWINGS
AS ORIGINALLY FILED



1101

FIGURE 4

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AS ORIGINALLY D

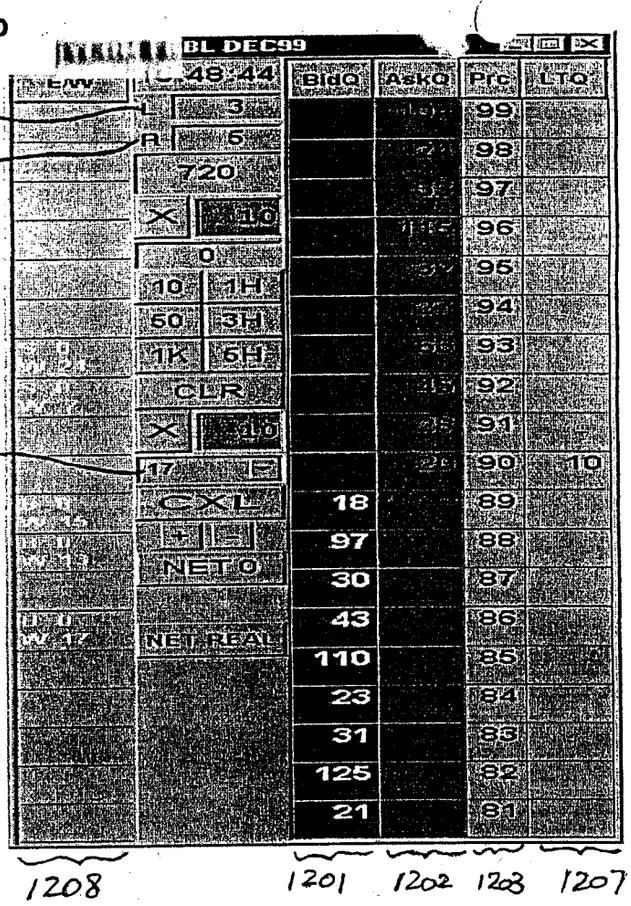

FIGURE 5

PRINT OF DRAWING AS ORIGINALLY FILED

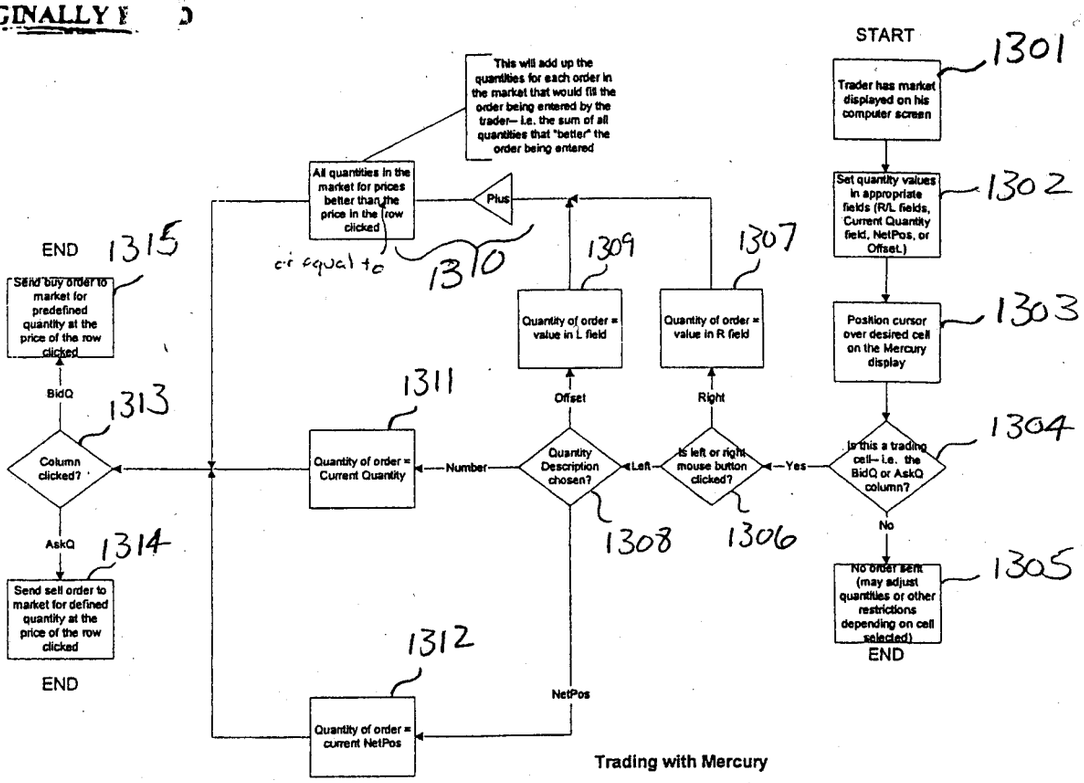

FIGURE 6

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE,

Applicant: Gary Allan Kemp II, et al

Serial No.: ****

Filing Date: HEREWITH

Docket No.: 120046-00003

PRELIMINARY AMENDMENT

June 27, 2001

Assistant Commissioner for Patents
Washington, D.C. 20231

MAILING CERTIFICATE UNDER 37 C.F.R. §1.8(A)
I hereby certify that the above correspondence is being deposited with the U.S. Postal Service as First Class Mail in an envelope addressed to: Assistant Commissioner for Patents, Washington, D.C. 20231 on June 27, 2001.

Trish Paramore

Dear Sir:

Prior to the Examination of the above referenced Divisional patent application, please delete Claims 22-40. If there are any additional questions, please contact the undersigned attorney.

Respectfully submitted,

Robert C. Klinger
Reg. No. 34,365

Robert C. Klinger
Jackson Walker L.L.P.
2435 North Central Expressway, Suite 600
Richardson, Texas 75080
Phone: (972) 744-2900
Fax: (972) 744-2909

2

UNITED STATES PATENT AND TRADEMARK OFFICE

COMMISSIONER FOR PATENTS
UNITED STATES PATENT AND TRADEMARK OFFICE
WASHINGTON, D.C. 20231
www.uspto.gov

APPLICATION NUMBER	FILING/RECEIPT DATE	FIRST NAMED APPLICANT	ATTORNEY DOCKET NUMBER
09/894,637	06/27/2001	Gary Allan Kemp II	120046-00003

CONFIRMATION NO. 1527

FORMALITIES LETTER

OC000000006348497

Robert C. Klinger
Jackson Walker L.L.P.
Suite 600
2435 North Central Expressway
Richardson, TX 75080

Date Mailed: 07/26/2001

NOTICE TO FILE CORRECTED APPLICATION PAPERS

Filing Date Granted

This application has been accorded an Application Number and Filing Date. The application, however, is informal since it does not comply with the regulations for the reason(s) indicated below. Applicant is given **TWO MONTHS** from the date of this Notice within which to correct the informalities indicated below. Extensions of time may be obtained by filing a petition accompanied by the extension fee under the provisions of 37 CFR 1.136(a)

The required item(s) identified below must be timely submitted to avoid abandonment:

- Substitute drawings in compliance with 37 CFR 1.84 because:
  - drawing sheets do not have the appropriate margin(s) (see 37 CFR 1.84(g)). Each sheet must include a top margin of at least 2.5 cm. (1 inch), a left side margin of at least 2.5 cm. (1 inch), a right side margin of at least 1.5 cm. (5/8 inch), and a bottom margin of at least 1.0 cm. (3/8 inch);

A copy of this notice MUST be returned with the reply.

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PART 3 - OFFICE COPY

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OIPE JC152
SEP 07 2001
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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

ATTORNEY DOCKET NO. 024051-0155

Applicant: Gary Alan KEMP II et al.

Title: CLICK BASED TRADING WITH INTUITIVE GRID DISPLAY OF MARKET DEPTH

Appl. No.: 09/894,637

Filing Date: 06/27/2001

Examiner: Unassigned

Art Unit: 2164

TRANSMITTAL OF CORRECTED APPLICATION PAPERS

Commissioner for Patents
Washington, D.C. 20231

Attn: BOX MISSING PARTS

Sir:

In response to the Notice to File Corrected Application Papers mailed on July 26, 2001, in the above-identified application, transmitted herewith are the missing documents needed to complete the filing of the subject patent application.

Enclosed are:

[X] Formal Drawings (6 Sheets, Figures 1-6).

[X] Petition to Make Special Under 37 C.F.R. §1.102(d) and Statement by Applicant.

[X] Information Disclosure Statement.

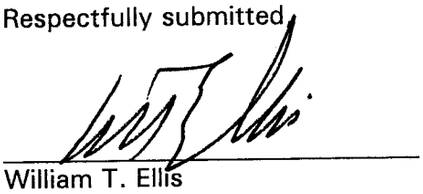
[X] Form PTO-1449.

[X] Copy of Notice to File Corrected Application Papers.

The Commissioner is hereby authorized to charge any additional fees which may be required regarding this application under 37 C.F.R. §§ 1.16-1.17, or credit any overpayment, to Deposit Account No. 19-0741. Should no proper payment be enclosed

herewith, as by a check being in the wrong amount, unsigned, post-dated, otherwise improper or informal or even entirely missing, the Commissioner is authorized to charge the unpaid amount to Deposit Account No. 19-0741.

Respectfully submitted,



September 7, 2001
Date

William T. Ellis
Attorney for Applicant
Registration No. 26,874

FOLEY & LARDNER
3000 K Street, N.W.
Suite 500
Washington, D.C. 20007-5109
Telephone No.: (202) 672-5300

OIPE JC152
SEP 07 2001
PATENT & TRADEMARK OFFICE

#3

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

ATTORNEY DOCKET NO. 024051-0155

Applicant: Gary Alan KEMP II et al.

Title: CLICK BASED TRADING WITH INTUITIVE GRID DISPLAY OF MARKET DEPTH

Appl. No.: 09/894,637

Filing Date: 06/27/2001

Examiner: Unassigned

Art Unit: 2164

TRANSMITTAL OF FORMAL DRAWINGS

Commissioner for Patents
Washington, D.C. 20231

ATTENTION: DRAWING REVIEW BRANCH

Sir:

Transmitted herewith are the formal drawings (6 sheets, Figures 1-6) for the above-identified application. The Official Draftsperson is respectfully requested to approve these drawings for entry into the application.

Respectfully submitted,

September 7, 2001
Date

William T. Ellis
Attorney for Applicant
Registration No. 26,874

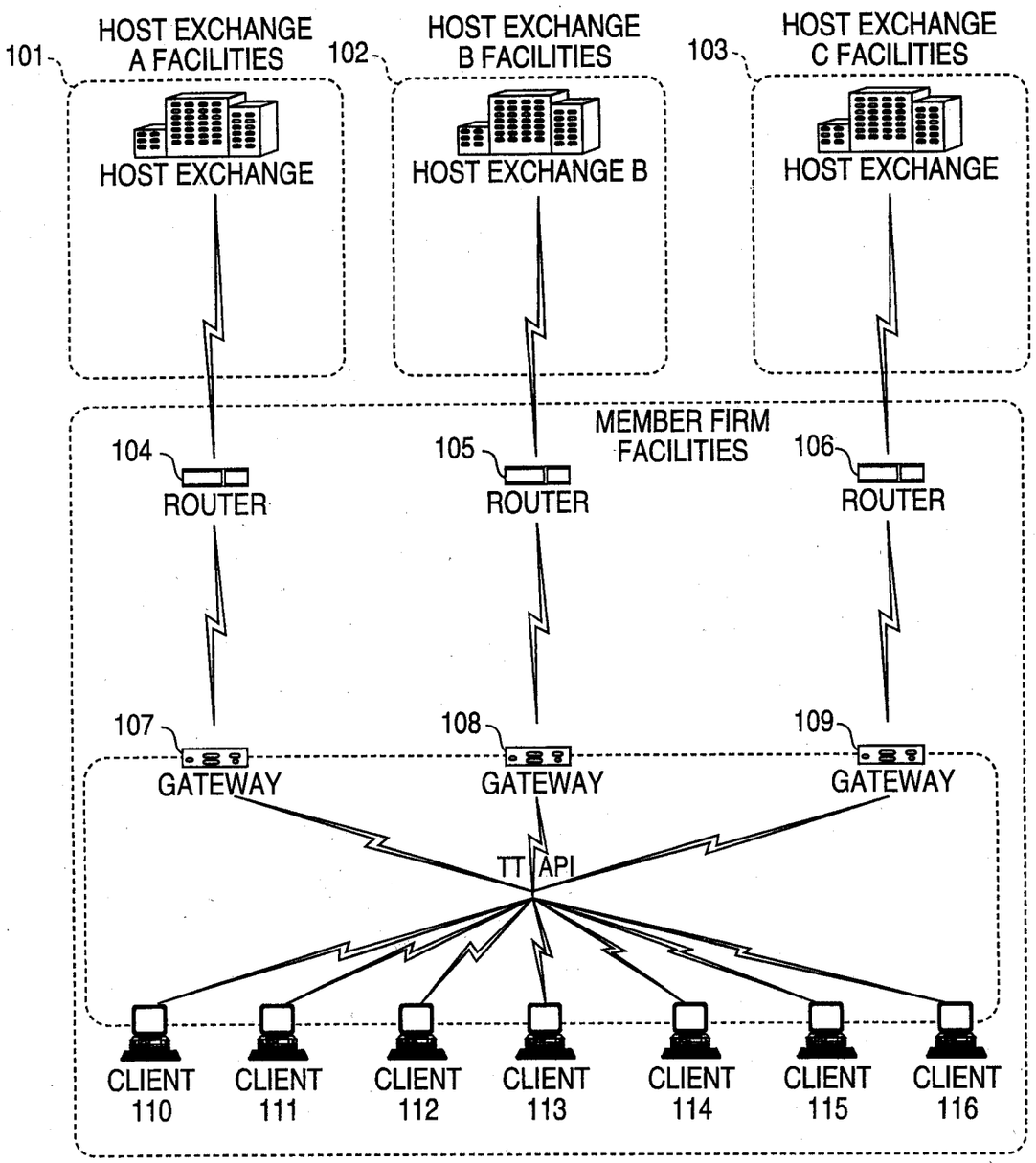
FOLEY & LARDNER
3000 K Street, N.W.
Suite 500
Washington, D.C. 20007-5109
Telephone No.: (202) 672-5300

002.634697.1

6766304

Title: CLICK BASED TRADING WITH INTUITIVE GRID DISPLAY OF MARKET DEPTH
Inventor(s): Gary Alan KEMP II et al.
Appl. No.: 09/894,637

FIG. 1



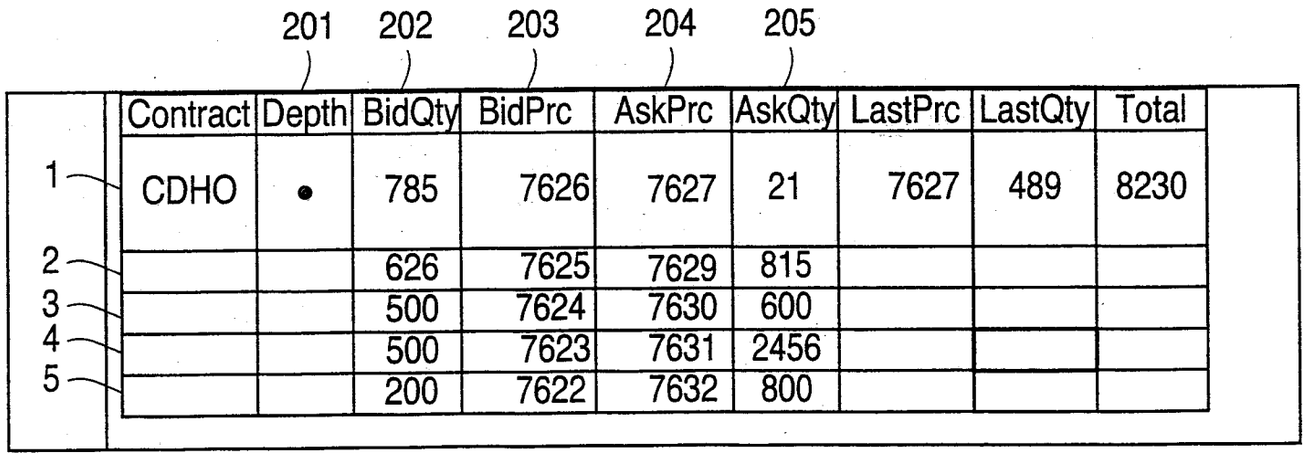


FIG. 2

	Contract	Depth (201)	BidQty (202)	BidPrc (203)	AskPrc (204)	AskQty (205)	LastPrc	LastQty	Total
1	CDHO	•	785	7626	7627	21	7627	489	8230
2			626	7625	7629	815			
3			500	7624	7630	600			
4			500	7623	7631	2456			
5			200	7622	7632	800			

FIG. 3

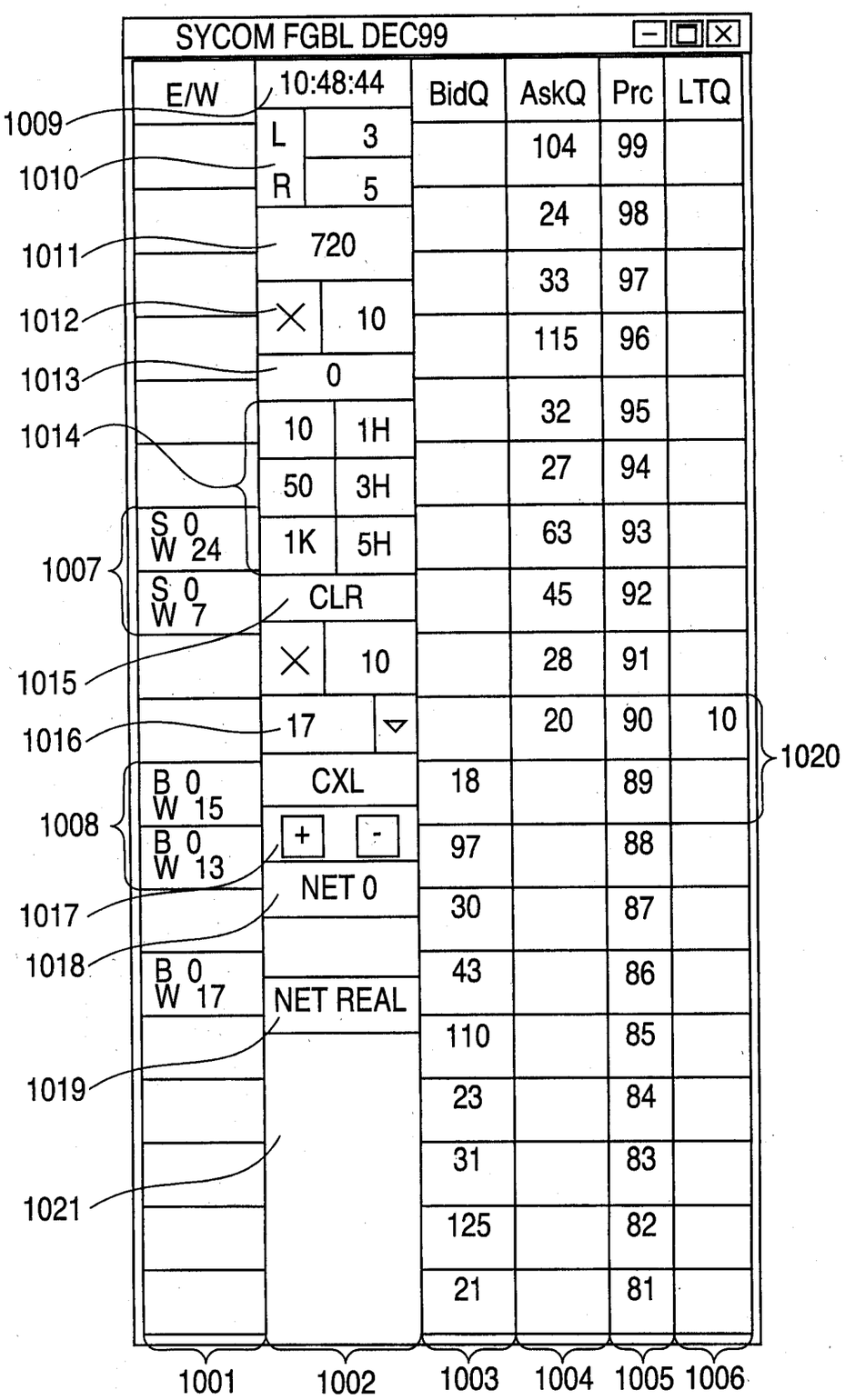

SYCOM FGBL DEC99
E/W
10:48:44
BidQ
AskQ
Prc
LTQ
L 3
R 5
720
10
0
10 1H
50 3H
1K 5H
CLR
10
17
CXL
NET 0
NET REAL
S 0 W 24
S 0 W 7
B 0 W 15
B 0 W 13
B 0 W 17
104 99
24 98
33 97
115 96
32 95
27 94
63 93
45 92
28 91
20 90 10
18 89
97 88
30 87
43 86
110 85
23 84
31 83
125 82
21 81
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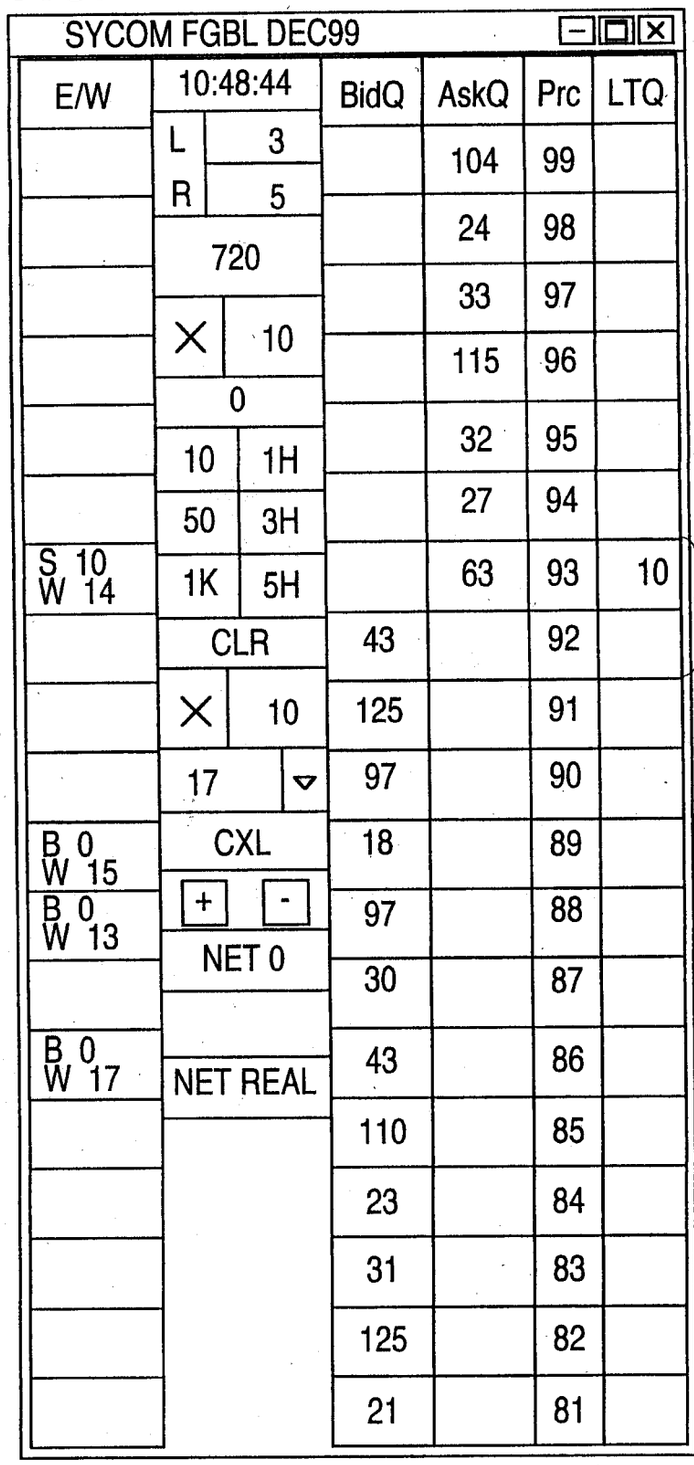
FIG. 4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S 10
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CXL
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NET 0
B 0
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B 0
W 13
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NET REAL
104 99
24 98
33 97
115 96
32 95
27 94
63 93 10
43 92
125 91
97 90
18 89
97 88
30 87
43 86
110 85
23 84
31 83
125 82
21 81
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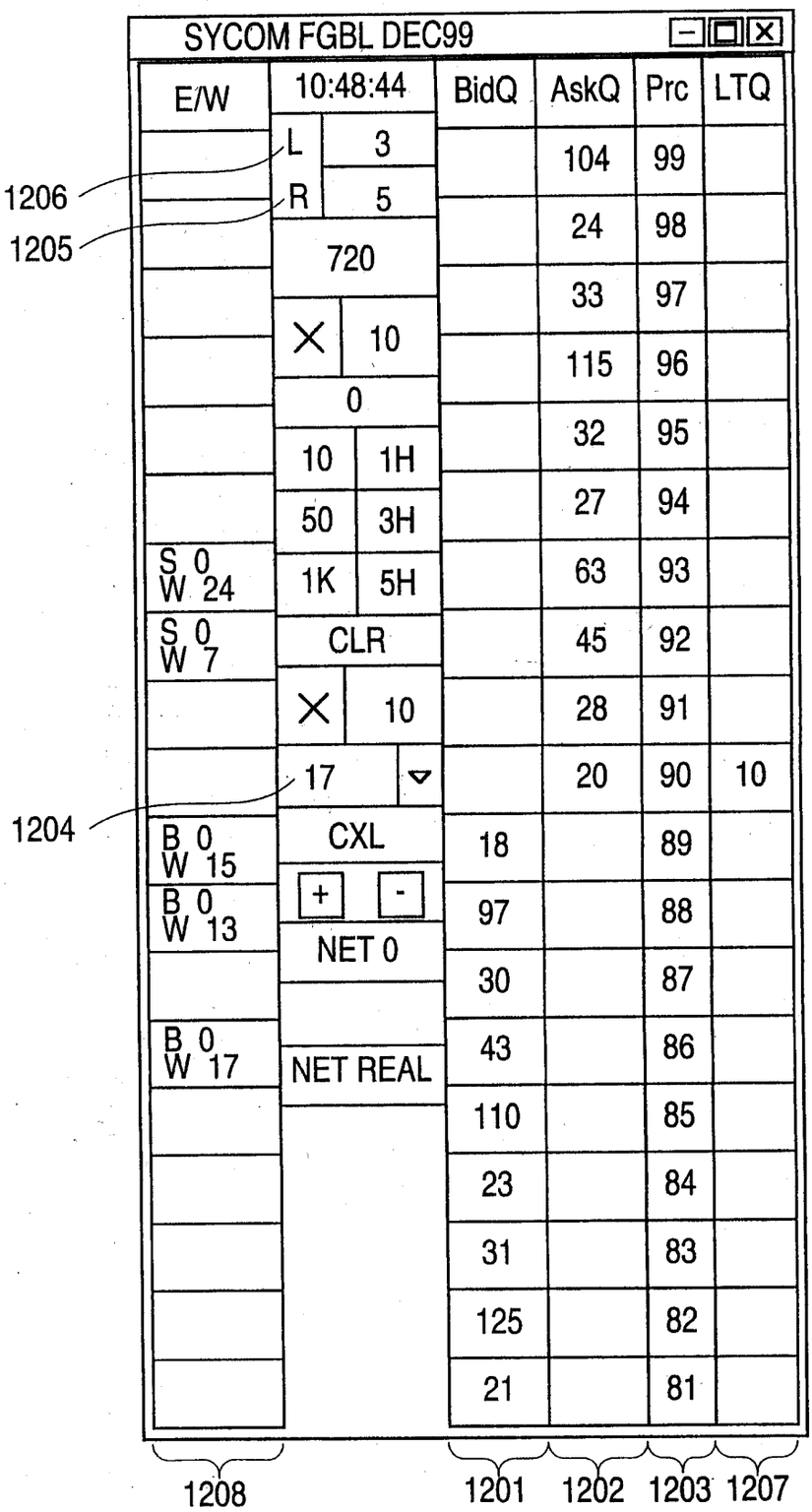
FIG. 5


SYCOM FGBL DEC99
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10:48:44
BidQ
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L 3
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CLR
17
CXL
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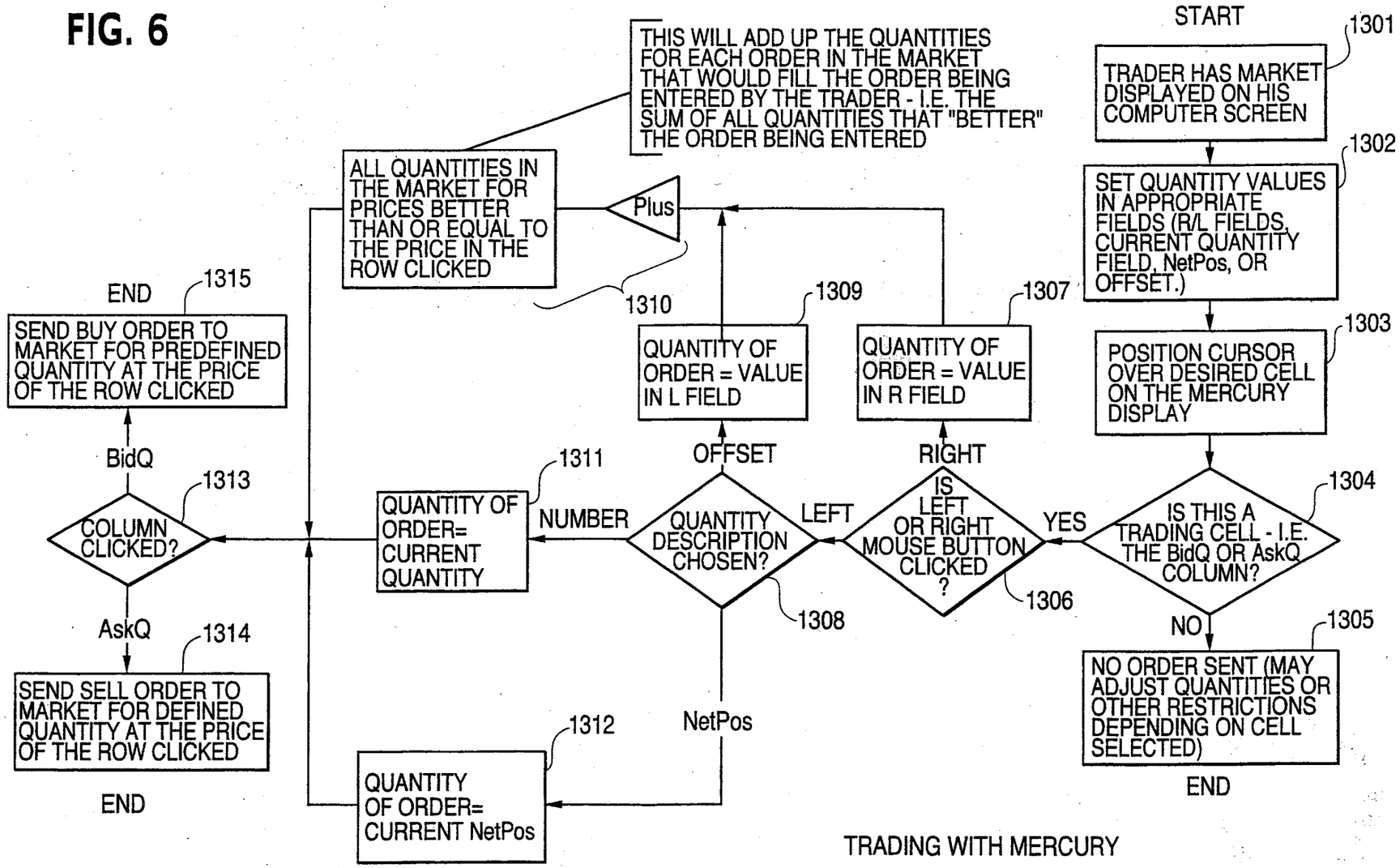
NET 0
NET REAL
S 0 W 24
S 0 W 7
B 0 W 15
B 0 W 13
B 0 W 17
104 99
24 98
33 97
115 96
32 95
27 94
63 93
45 92
28 91
20 90 10
18 89
97 88
30 87
43 86
110 85
23 84
31 83
125 82
21 81
1206
1205
1204
1208
1201
1202
1203
1207

Title: CLICK BASED TRADING WITH INTUITIVE GRID DISPLAY OF MARKET DEPTH
Inventor(s): Gary Alan KEMP II et al.
Appl. No.: 09/894,637

FIG. 6



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UNITED STATES PATENT AND TRADEMARK OFFICE

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UNITED STATES PATENT AND TRADEMARK OFFICE
WASHINGTON, D.C. 20231
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APPLICATION NUMBER	FILING/RECEIPT DATE	FIRST NAMED APPLICANT	ATTORNEY DOCKET NUMBER
09/894,637	06/27/2001	Gary Allan Kemp II	120046-00003

CONFIRMATION NO. 1527

FORMALITIES LETTER

OC000000006348497

Robert C. Klinger
Jackson Walker L.L.P.
Suite 600
2435 North Central Expressway
Richardson, TX 75080

Response due: Sept 26 2001

Date Mailed: 07/26/2001

NOTICE TO FILE CORRECTED APPLICATION PAPERS

Filing Date Granted

This application has been accorded an Application Number and Filing Date. The application, however, is informal since it does not comply with the regulations for the reason(s) indicated below. Applicant is given **TWO MONTHS** from the date of this Notice within which to correct the informalities indicated below. Extensions of time may be obtained by filing a petition accompanied by the extension fee under the provisions of 37 CFR 1.136(a)

The required item(s) identified below must be timely submitted to avoid abandonment:

- Substitute drawings in compliance with 37 CFR 1.84 because:
  - drawing sheets do not have the appropriate margin(s) (see 37 CFR 1.84(g)). Each sheet must include a top margin of at least 2.5 cm. (1 inch), a left side margin of at least 2.5 cm. (1 inch), a right side margin of at least 1.5 cm. (5/8 inch), and a bottom margin of at least 1.0 cm. (3/8 inch);

A copy of this notice MUST be returned with the reply.

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Initial Patent Examination Division (703) 308-1202

PART 1 - ATTORNEY/APPLICANT COPY

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PATENT & TRADEMARK OFFICE

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

ATTORNEY DOCKET NO. 024051-0155

Applicant: Gary Alan KEMP II et al.

Title: CLICK BASED TRADING WITH INTUITIVE GRID DISPLAY OF MARKET DEPTH

Serial No.: 09/894,637

Filed: 06/27/2001

Examiner: Unassigned

Art Unit: 2164

PETITION TO MAKE SPECIAL UNDER 37 CFR § 1.102(d) AND STATEMENT BY APPLICANT

Commissioner for Patents
Washington, D.C. 20231

Sir:

Pursuant to 37 C.F.R. §1.102 and M.P.E.P. 708.02 II (INFRINGEMENT), Applicant hereby requests that the above-captioned application be granted special status and examined expeditiously.

Special status has been granted in the parent application (09/590,692) to the present divisional application. Applicant submits, in addition to the present Petition to Make Special, the requisite fee under 37 C.F.R. §1.17(i) and a statement alleging the following under lettered headings that correspond with the lettered paragraphs of M.P.E.P. 708.02 II.

STATEMENT BY APPLICANT

Applicant hereby states as follows:

(A) Infringing Products on the Market

That there is an infringing device or product actually on the market or method in use.

(B) Comparison and Infringement

That Applicant has made a rigid comparison of the infringing device, product or method with the claims of the present application, and that, in its opinion, some of the claims are unquestionably infringed.

(C) Pre-Examination Search

A careful and thorough search of the prior art was conducted by a professional patent search firm. The search was conducted in the following areas of classification: Class 340, Subclass 825.27, Class 705, Subclasses 35-37. In addition, a key word search was performed on the U.S. Patent and Trademark Office Automated Patent System (APS) computer database.

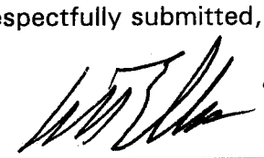
Applicant has submitted, in the above-mentioned parent application, a copy of each of the references deemed most closely related to the subject matter encompassed by the claims of the present divisional application. A list of these references has also been submitted via an Information Disclosure Statement filed in the present application. Accordingly, the relevant references are already of record.

Further, Applicant hereby states that if all claims presented are not obviously directed to a single invention, that Applicant will make an election without traverse in response to an Examiner's telephone request.

Applicant's undersigned representative makes the aforementioned statement on behalf of Applicant.

Inasmuch as all of the requirements for special status under M.P.E.P. 708.02 II have been met, it is respectfully requested that the application be granted special status, and be examined expeditiously.

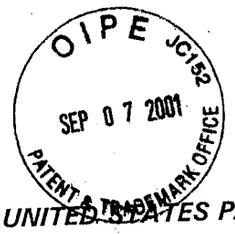
Respectfully submitted,



September 7, 2001
Date

William T. Ellis
Attorney for Applicant
Registration No. 26,874

FOLEY & LARDNER
3000 K Street, N.W.
Suite 500
Washington, D.C. 20007-5109
Telephone No.: (202) 672-5300



#5

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

ATTORNEY DOCKET NO. 024051-0155

Applicant: Gary Alan KEMP II et al.

Title: CLICK BASED TRADING WITH INTUITIVE GRID DISPLAY OF MARKET DEPTH

Serial No.: 09/894,637

Filed: 06/27/2001

Examiner: Unassigned

Art Unit: 2164

INFORMATION DISCLOSURE STATEMENT UNDER 37 CFR §1.56

Commissioner for Patents
Washington, D.C. 20231

Sir:

Applicants submit herewith on Form PTO-1449 a listing of the documents cited by or submitted to the United States Patent & Trademark Office in the parent application Serial No. 09/590,692, filed June 9, 2000. As provided in 37 CFR §1.98(d), copies of the documents are not being provided since they were previously submitted to the United States Patent & Trademark Office in the above-identified parent application.

The submission of any document herewith, which is not a statutory bar, is not intended as an admission that such document constitutes prior art against the claims of the present application or that such document is considered material to patentability as defined in 37 CFR §1.56(b). Applicants do not waive any rights to take any action which would be appropriate to antedate or otherwise remove as a competent reference any document which is determined to be a *prima facie* art reference against the claims of the present application.

TIMING OF THE DISCLOSURE

The listed documents are being submitted in compliance with 37 CFR §1.97(b), within three (3) months of the filing date of the application.

RELEVANCE OF EACH DOCUMENT

All of the documents are in English. Documents A1-A9 were submitted to the USPTO by Applicant in the parent application. Documents A10 and A11 were cited by the Examiner via form PTO-892 in the parent application and the listings are copied therefrom.

Applicants respectfully request that any listed document be considered by the Examiner and be made of record in the present application and that an initialed copy of Form PTO-1449 be returned in accordance with MPEP §609.

The Commissioner is hereby authorized to charge any additional fees which may be required regarding this application under 37 C.F.R. §§ 1.16-1.17, or credit any overpayment, to Deposit Account No. 19-0741. Should no proper payment be enclosed herewith, as by a check being in the wrong amount, unsigned, post-dated, otherwise improper or informal or even entirely missing, the Commissioner is authorized to charge the unpaid amount to Deposit Account No. 19-0741.

Respectfully submitted,

September 7, 2001
Date

William T. Ellis
Attorney for Applicant
Registration No. 26,874
Ankur S. Shah
Registration No. 41,514

FOLEY & LARDNER
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SEP 07 2001
PATENT & TRADEMARK OFFICE

SHEET 1 of 1

FORM PTO 1449 (*modified*) U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE LIST OF REFERENCES CITED BY APPLICANT(S) (Use several sheets if necessary) Date Submitted to PTO: September 7, 2001	ATTY DOCKET NO. 024051/0155	SERIAL NO. 09/894,637
	APPLICANT: Gary Alan KEMP II, et al.	
	FILING DATE: June 27, 2001	GROUP: Unassigned

U.S. PATENT DOCUMENTS

*EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
	A1	4,674,044	06/16/87	KALMUS et al.	364	408	
	A2	4,750,135	06/07/88	BOILEN	364	514	
	A3	5,270,922	12/14/93	HIGGINS	364	408	
	A4	5,297,032	03/22/94	TROJAN et al.	364	408	
	A5	5,924,083	07/13/99	SILVERMAN et al.	705	37	
	A6	6,014,643	01/11/00	MINTON	705	37	
	A7	5,077,665	12/31/91	SILVERMAN et al.	364	408	
	A8	5,136,501	08/08/92	SILVERMAN et al.	364	408	
	A9	5,963,923	10/05/99	GARBER	705	37	

FOREIGN PATENT DOCUMENTS

		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION YES NO

OTHER DOCUMENT(S) (Including Author, Title, Date, Pertinent Pages, Etc.)

	A10	www.tradingtechnologies.com/products/xtrade_full.html (viewed 5/22/2001) < 6/9/2000
	A11	Kharouf, A trading room with a view, Fututes, 27, 11 – 11/1998

EXAMINER _____ DATE CONSIDERED 3/06

*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.

002.630448.1

8/26/02
PH
#6

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Attorney Docket No. 024051/0155

Applicant: Gary Alan KEMP II et al.

Title: CLICK BASED TRADING WITH INTUITIVE GRID DISPLAY OF MARKET DEPTH

Serial No.: 09/894,637

Filed: June 27, 2001

Examiner: Unassigned

Art Unit: 2164

RECEIVED
AUG 20 2002
GROUP 3600

ASSOCIATE POWER OF ATTORNEY

RECEIVED
AUG 20 2002
Technology Center 2100

Commissioner for Patents
Washington, D.C. 20231

Sir:

The undersigned attorney of record hereby grants

Steven F. Borsand, Reg. No. 36,752,
Mark W. Triplett, Reg. 49,002, and
Monika Dudek, Reg. No. 47,538

an associate power, with full powers of substitution and revocation, to prosecute the above-identified application and transact all business in the Patent and Trademark Office connected therewith.

Respectfully submitted,

August 16, 2002
Date

Ankur D. Shah
Registration No. 41,514

FOLEY & LARDNER
Washington Harbour
3000 K Street, N.W., Suite 500
Washington, D.C. 20007-5109
Telephone: (202) 672-5300
Facsimile: (202) 672-5399

Atty. Dkt. No. 024051-0155

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Gary Alan KEMP II et al.

Title: CLICK BASED TRADING WITH INTUITIVE GRID DISPLAY OF MARKET DEPTH

Appl. No.: 09/894,637

Filing Date: 06/27/2001

Examiner: R. Weisberger

Art Unit: 3624

RECEIVED
TECHNOLOGY CENTER 3600
02 SEP 27 AM 10:31

AMENDMENT

Commissioner for Patents
Box NON-FEE AMENDMENT
Washington, D.C. 20231

Sir:

Please amend this application as set forth below and consider the accompanying remarks.

In the Specification:

Please amend the specification as follows:

Page 8, delete paragraph starting at line 24, and replace this paragraph with the following in accordance with 37 CFR § 1.121. A marked up version showing the changes in the specification is attached.

-- Figure 2 illustrates a screen display of an invention described in a commonly owned co-pending application entitled "Click Based Trading with Market Depth Display" serial no. 09/589,751, filed on June 9, 2000, the contents of which are incorporated herein by reference. This display shows the inside market and the market depth of a given commodity being traded. Row 1 represents the "inside market" for the commodity being traded which is the best (highest) bid price and quantity and the best (lowest) ask price and quantity. Rows 2-5 represent the "market depth" for the commodity being traded. In the preferred embodiment of the present invention, the

display of market depth (rows 2-5) lists the available next-best bids, in column 203, and asks, in column 204. The working bid and ask quantity for each price level is also displayed in columns 202 and 205 respectively (inside market - row 1). Prices and quantities for the inside market and market depth update dynamically on a real time basis as such information is relayed from the market.--

Page 13, delete paragraph starting at line 13, and replace this paragraph with the following in accordance with 37 CFR § 1.121. A marked up version showing the changes in the specification is attached.

-- The values in the price column are static; that is, they do not normally change positions unless a re-centering command is received (discussed in detail later). The values in the Bid and Ask columns however, are dynamic; that is, they move up and down (in the vertical example) to reflect the market depth for the given commodity. The LTQ column 1006 shows the last traded quantity of the commodity. The relative position of the quantity value with respect to the Price values reflects the price at which that quantity was traded. Column 1001 labeled E/W (entered/working) displays the current status of the trader's orders. The status of each order is displayed in the price row where it was entered. For example, in cells 1007, the number next to S indicates the number of the trader's ordered lots that have been sold at the price in the specific row. The number next to W indicates the number of the trader's ordered lots that are in the market, but have not been filled - i.e. the system is working on filling the order. Blanks in this column indicate that no orders are entered or working at that price. In cells 1008, the number next to B indicates the number of the trader's ordered lots that have been bought at the price in the specific row. The number next to W indicates the number of the trader's ordered lots that are in the market, but have not been filled - i.e. the system is working on filling the order.

Page 17, delete paragraph starting at line 10, and replace this paragraph with the following in accordance with 37 CFR § 1.121. A marked up version showing the changes in the specification is attached.

-- Using the screen display and values from Figure 5, the placement of trade orders using the Mercury display and trading method is now described using examples. A left click on the 18 in the BidQ column 1201 will send an order to market to buy 17 lots (quantity # chosen on the Quantity Description pull down menu cell 1204) of the commodity at a price of 89 (the corresponding price in the Prc column 1203). Similarly, a left click on the 20 in the AskQ column 1202 will send an order to market to sell 17 lots at a price of 90.--

In the Claims:

Please cancel claims 1-21 without prejudice or disclaimer.

Please add the following new claims:

41. (New) A method for displaying market information relating to a commodity being traded in a market having an inside market with a highest bid price and a lowest ask price on a graphical user interface, the method comprising:

dynamically displaying a first indicator in one of a plurality of locations in a bid display region in association with price levels along a common static price axis, the first indicator representing quantity associated with at least one order to buy the commodity at the highest bid price currently available in the market;

dynamically displaying a second indicator in one of a plurality of locations in an ask display region in association with the price levels along the common static price 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; and

displaying the bid and ask display regions in relation to fixed price levels positioned along the common static price axis such that the first and second indicators can move in the bid and ask display regions relative to the common static price axis when the inside market changes.

42. (New) The method of claim 41 wherein the bid and ask display regions comprise columns with a plurality of cells that are displayed as a grid such that the cells of each column are aligned.

43. (New) The method of claim 41 wherein the bid and ask display regions are oriented vertically.

44. (New) The method of claim 41 wherein the bid and ask display regions are oriented horizontally.

45. (New) The method of claim 41 wherein one of the plurality of locations of the bid display region comprises a blank region in which there is no first indicator displayed.

46. (New) The method of claim 41 wherein one of the plurality of locations of the ask display region comprises a blank region in which there is no first indicator displayed.

47. (New) The method of claim 41 further comprising the step of displaying at least a portion of the common static price axis in a price display region.

48. (New) The method of claim 47 wherein the bid display region, the ask display region, and the price display region comprise columns with a plurality of cells that are displayed as a grid such that the cells of each column are aligned.

49. (New) The method of claim 47 wherein the bid display region, the ask display region, and the price display region are oriented vertically.

50. (New) The method of claim 47 wherein the bid display region, the ask display region, and the price display region are oriented horizontally.

51. (New) The method of claim 41 further comprising the steps of:

dynamically displaying a third indicator at one of the plurality of locations in the bid display region, the third indicator representing quantity associated with at least one order to buy the commodity at a price different than the highest bid price currently available in the market; and

dynamically displaying a fourth indicator at one of the plurality of locations in the ask display region, the fourth indicator representing quantity associated with at least one order to sell the commodity at a price different than the lowest ask price currently available in the market.

52. (New) The method of claim 51 wherein one of the plurality of locations of the bid display region comprises a blank region in which there is no first or third indicator displayed.

53. (New) The method of claim 41 wherein one of the plurality of locations of the ask display region comprises a blank region in which there is no second or fourth indicator displayed.

54. (New) The method of claim 41 further comprising the steps of:

displaying a bid order entry region comprising a plurality of locations for receiving commands to send buy orders; and

displaying an ask order entry region comprising a plurality of locations for receiving commands to send sell orders.

55. (New) The method of claim 54 wherein the bid and ask order entry regions are displayed in association with the common static price axis such that each of the plurality of locations for receiving commands is associated with a price level on the common static price axis.

56. (New) The method of claim 54 wherein the bid order entry region comprises the bid display region and the ask order entry region comprises the ask display region.

57. (New) The method of claim 41 further comprising dynamically displaying an entered order indicator in association with the price levels arranged along the common static price axis.

58. (New) The method of claim 57 wherein the entered order indicator is displayed in an entered order region.

59. (New) The method of claim 41 further comprising dynamically displaying a last trade indicator in association with the common static price axis.

60. (New) The method of claim 59 wherein the last trade indicator is displayed in a last trade region.

61. (New) The method of claim 41 further comprising the steps of:

displaying the first indicator at a first location associated with a first price level on the common static price axis at a first time; and

updating the display to display the first indicator at a second location associated with a different price level on the common static price axis at a second time subsequent to the first time.

62. (New) The method of claim 41 further comprising the steps of:

displaying the second indicator at a first location associated with a first price level on the common static price axis at a first time; and

updating the display to display the second indicator at a second location associated with a different price level on the common static price axis at a second time subsequent to the first time.

63. (New) The method of claim 41 further comprising the steps of:

displaying the first indicator at a first location associated with a particular price level on the common static price axis; and

repositioning the common static price axis such that the first indicator is displayed at a second location associated with the particular price level on the common static price axis.

64. (New) The method of claim 41 further comprising the steps of:

displaying the second indicator at a first location associated with a particular price level on the common static price axis; and

repositioning the common static price axis such that the second indicator is displayed at a second location associated with the particular price level on the common static price axis.

65. (New) The method of claim 41 wherein the bid and ask display regions are displayed in different colors.

66. (New) The method of claim 41 wherein the first and second indicators are displayed in different colors.

67. (New) The method of claim 41 wherein the bid and ask display regions are displayed in a window further comprising centering the display of the first and second indicators in the window upon receipt of a centering instruction.

68. (New) A computer readable medium having program code recorded thereon for execution on a computer for displaying market information relating to a commodity being traded in a market having an inside market with a highest bid price and a lowest ask price on a graphical user interface, the program code causing a machine to perform the following method steps:

dynamically displaying a first indicator in one of a plurality of locations in a bid display region in association with price levels along a common static price axis, the first indicator representing quantity associated with at least one order to buy the commodity at the highest bid price currently available in the market;

dynamically displaying a second indicator in one of a plurality of locations in an ask display region in association with the price levels along the common static price 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;

displaying the bid and ask display regions in relation to fixed price levels positioned along the common static price axis such that the first and second indicators can move in the bid and ask display regions relative to the common static price axis when the inside market changes.

REMARKS

Claims 1-21 were pending in the present application. By way of this amendment, claims 1-21 have been cancelled without prejudice or disclaimer and claims 41-68 have been added. These new claims are directed to a particular aspect of the invention. The specification has been amended editorially to correct typographical errors and to reiterate changes made in the parent application. No new matter has been introduced. Accordingly, claims 41-68 are pending for consideration.

Applicant appreciates the courtesies extended by the Examiner during an interview conducted on September 18, 2002 and continued in a telephone conversation on September 25, 2002. These discussions resulted in an agreement that the new claims are allowable. Accordingly, the claims are believed to be in condition for allowance and early notification of the same is earnestly solicited.

As discussed with the Examiner, the new claims are directed to a method of dynamically displaying market information relative to a static price axis. Independent claims 41 and 68 provide for the display of indicators relating to the inside market relative to a common static price axis. These claims do not require the display of indicators relating to additional market depth. Dependent claim 51 further requires the display of indicators relating to additional orders in the market (e.g., additional market depth outside of the inside market). The other dependent claims further define various embodiments of the invention.

As discussed with the Examiner, Applicant intends on pursuing claims 1-21 and possibly other claims in one or more continuation applications. There has been no prior art cited that would preclude the patentability of claims 1-21. As discussed with the Examiner, Applicant cancelled these claims without prejudice and decided to pursue the new claims to expedite the allowance of this application.

Based on Applicant's discussions with the Examiner and in view of the foregoing amendments, Applicant believes that the present application is in condition for allowance. Favorable consideration of the application as amended is respectfully requested. Should there be any questions or concerns regarding the present application, the Examiner is invited to contact Applicant's undersigned representative by telephone.

Respectfully submitted,

Date SEPT. 26, 2002 By _____

FOLEY & LARDNER
Washington Harbour
3000 K Street, N.W., Suite 500
Washington, D.C. 20007-5143
Telephone: (202) 672-5300
Facsimile: (202) 672-5399

Ankur D. Shah
Attorney for Applicant
Registration No. 41,514

Should additional fees be necessary in connection with the filing of this paper, or if a petition for extension of time is required for timely acceptance of same, the Commissioner is hereby authorized to charge Deposit Account No. 19-0741 for any such fees and applicant(s) hereby petition for any needed extension of time.

MARKED UP VERSION SHOWING CHANGES MADE

Below are the marked up replacement paragraph(s):

Page 8, paragraph starting at line 24...

Figure 2 illustrates a screen display of an invention described in a commonly owned co-pending application entitled "Click Based Trading with Market Depth Display" serial no. [_____] 09/589,751, filed on [_____] June 9, 2000, the contents of which are incorporated herein by reference. This display shows the inside market and the market depth of a given commodity being traded. Row 1 represents the "inside market" for the commodity being traded which is the best (highest) bid price and quantity and the best (lowest) ask price and quantity. Rows 2-5 represent the "market depth" for the commodity being traded. In the preferred embodiment of the present invention, the display of market depth (rows 2-5) lists the available next-best bids, in column 203, and asks, in column 204. The working bid and ask quantity for each price level is also displayed in columns 202 and 205 respectively (inside market - row 1). Prices and quantities for the inside market and market depth update dynamically on a real time basis as such information is relayed from the market.

Page 13, paragraph starting at line 13...

The values in the price column are static; that is, they do not normally change positions unless a re-centering command is received (discussed in detail later). The values in the Bid and Ask columns however, are dynamic; that is, they move up and down (in the vertical example) to reflect the market depth for the given commodity. The LTQ column 1006 shows the last traded quantity of the commodity. The relative position of the quantity value with respect to the Price values reflects the price at which that quantity was traded. Column 1001 labeled E/W (entered/working) displays the current status of the trader's orders. The status of each order is displayed in the price row where it was entered. For example, in cells 1007, the number next to S indicates the number of the trader's ordered lots that have been sold at the price in the specific row. The number next to W indicates the number of the trader's ordered lots that are in

the market, but have not been filled - i.e. the system is working on filling the order. Blanks in this column indicate that no orders are entered or working at that price. In cells 1008, the number next to B indicates the number of the trader's ordered lots that have been bought at the price in the specific row. The number next to W indicates the number of the trader's ordered lots that are in the market, but have not been filled - i.e. the system is working on filling the order.

Page 17, paragraph starting at line 10...

Using the screen display and values from Figure 5, the placement of trade orders using the Mercury display and trading method is now described using examples. A left click on the 18 in the BidQ column 1201 will send an order to market to [sell] buy 17 lots (quantity # chosen on the Quantity Description pull down menu cell 1204) of the commodity at a price of 89 (the corresponding price in the Prc column 1203). Similarly, a left click on the 20 in the AskQ column 1202 will send an order to market to [buy] sell 17 lots at a price of 90.

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Attorney Docket No. 024051/0155

Applicant: Gary Alan KEMP II et al.

Title: CLICK BASED TRADING WITH INTUITIVE GRID DISPLAY OF MARKET DEPTH

#7

Appl. No.: 09/894,637

Filing Date: 06/27/2001

Examiner: R. Weisberger

Art Unit: 3624

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AMENDMENT TRANSMITTAL

Commissioner for Patents
Washington, D.C. 20231

Sir:

Transmitted herewith is an amendment in the above-identified application.

[X] Small Entity status under 37 C.F.R. § 1.9 and § 1.27 has been established by a Small Entity statement previously submitted.

[ ] Small Entity statement is enclosed.

[X] The fee required for additional claims is calculated below:

	Claims as Amended		Previously Paid For		Extra Claims Present		Rate		Additional Claims Fee
Total Claims:	28	–	21	=	7	x	$18.00	=	$126.00
Independents:	2	–	3	=	0	x	$84.00	=	$0.00
First presentation of any Multiple Dependent Claims:						+	$280.00	=	$0.00
							CLAIMS FEE TOTAL:	=	$126.00
							Small Entity Fees Apply (subtract ½ of above):		$63.00
							TOTAL FEE:		$63.00

[X] A check in the amount of $63.00 is enclosed.

[X] The Commissioner is hereby authorized to charge any additional fees which may be required regarding this application under 37 C.F.R. §§ 1.16-1.17, or credit any overpayment, to Deposit Account No. 19-0741. Should no proper payment be enclosed herewith, as by a check being in the wrong amount, unsigned, post-dated, otherwise improper or informal or even entirely missing, the Commissioner is authorized to charge the unpaid amount to Deposit Account No. 19-0741.

Please direct all correspondence to the undersigned attorney or agent at the address indicated below.

Respectfully submitted,

Date SEPT. 26, 2002

By _____

Ankur D. Shah
Attorney for Applicant
Registration No. 41,514

FOLEY & LARDNER
Washington Harbour
3000 K Street, N.W., Suite 500
Washington, D.C. 20007-5143
Telephone: (202) 672-5300
Facsimile: (202) 672-5399

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05/26/2004 SWILLIAM 00000002 190741
01 FC:1202 126.00 DA

Received from < 312 476 1182 > at 3/19/03 12:22:51 PM [Eastern Standard Time]

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Attorney Docket No. 024051/0155

#9 OR 3/21/03

Applicant: Gary Allan KEMP II et al.

Title: CLICK BASED TRADING WITH INTUITIVE GRID DISPLAY OF MARKET DEPTH

Serial No.: 09/894,637

Filed: June 27, 2001

Examiner: R. Weisberger

Art Unit: 3624

REQUEST FOR CONTINUED EXAMINATION (RCE) TRANSMITTAL

Commissioner for Patents
Box RCE
Washington, D.C. 20231

Sir:

This is a Request for Continued Examination (RCE) under 37 C.F.R. § 1.114 of the above-identified application. This RCE and the enclosed items listed below are being filed prior to the earliest of: (1) payment of the issue fee (unless a petition under 37 C.F.R. § 1.313 is granted); (2) abandonment of the application; or (3) the filing of a notice of appeal to the U.S. Court of Appeals for the Federal Circuit under 35 U.S.C. §141, or the commencement of a civil action under 35 U.S.C. §145 or §146 (unless the appeal or civil action is terminated).

1. Submission required under 37 C.F.R. §1.114: (check items that apply)

a. Previously submitted:

[ ] Please enter and consider the amendment/reply previously filed on ___.

[ ] Please consider the Affidavit(s)/Declaration(s) previously filed on ___ but not considered.

[ ] Please consider the arguments in the Appeal Brief or Reply Brief under 37 C.F.R. § 1.116 previously filed on ___.

[X] Other: Information Disclosure Statements previously filed on November 14, 2002; December 18, 2002; and February 11, 2003.

b. Enclosed are:

[ ] Amendment/Reply.

[ ] Affidavit(s)/Declaration(s).

[ ] Information Disclosure Statement.

[ ] Form PTO-1449 with copies of ___ listed reference(s).

[X] Remarks Accompanying RCE.

Mar 19 2003 12:28PM Trading technologies, Inc 312-476-1182 P.5

Received from < 312 476 1182 > at 3/19/03 12:22:51 PM [Eastern Standard Time]

Miscellaneous:

[ ] Suspension of action of the above-identified application is requested under 37 C.F.R. § 1.103(c) for a period of ___ months.

The filing fee is calculated below:

	Claims as Amended		Previously Paid For		Extra Claims Present		Rate		Fee Totals
RCE Fee 1.17(e)							$750.00		$750.00
Total Claims:	28	–	28	=	0	x	$18.00	=	$0.00
Independents:	2	–	3	=	0	x	$84.00	=	$0.00
First presentation of any Multiple Dependent Claims:						+	$280.00	=	$0.00
							CLAIMS FEE TOTAL:	=	$750.00

[ ] Applicant hereby petitions for an extension of time under 37 C.F.R. §1.136(a) for the total number of months checked below:

[ ]	Extension for response filed within the first month:	$110.00	$0.00
[ ]	Extension for response filed within the second month:	$410.00	$0.00
[ ]	Extension for response filed within the third month:	$930.00	$0.00
[ ]	Extension for response filed within the fourth month:	$1,450.00	$0.00
[ ]	Extension for response filed within the fifth month:	$1,970.00	$0.00
		EXTENSION FEE TOTAL:	$0.00
		CLAIMS AND EXTENSION FEE TOTAL:	$750.00
[X]		Small Entity Fees Apply (subtract ½ of above):	$375.00
[ ]		Suspension of action requested under 37 C.F.R. § 1.103(c)	$0.00
		TOTAL FEE:	$375.00

[X] A check in the amount of $375.00 to cover the filing fee is enclosed.

[X] The Commissioner is hereby authorized to charge any additional fees which may be required regarding this application under 37 C.F.R. §§ 1.16-1.17, or credit any overpayment, to Deposit Account No. 19-0741. Should no proper payment be enclosed herewith, as by a check being in the wrong amount, unsigned, post-dated, otherwise improper or informal or even entirely missing, the Commissioner is authorized to charge the unpaid amount to Deposit Account No. 19-0741.

Please direct all correspondence to the undersigned attorney or agent at the address indicated below.

Respectfully submitted,

MARCH 10, 2003
Date

Ankur D. Shah
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Mar 19 2003 12:28PM Trading technologies, Inc 312-476-1182 p.6

Received from < 312 476 1182 > at 3/19/03 12:22:51 PM [Eastern Standard Time]

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Attorney Docket No. 024051/0155

Applicant:	Gary Allan KEMP II et al.
Title:	CLICK BASED TRADING WITH INTUITIVE GRID DISPLAY OF MARKET DEPTH
Serial No.:	09/894,637
Filed:	June 27, 2001
Examiner:	R. Weisberger
Art Unit:	3624

REMARKS ACCOMPANYING REQUEST FOR CONTINUED EXAMINATION

Commissioner for Patents
Washington, D.C. 20231

Sir:

Applicant has filed concurrently herewith a Request for Continued Examination (RCE) in the subject application. Examiner Weisberger has recently indicated via telephone that prosecution in the application has been closed and that a notice of allowability has been entered. Applicant's review of data from the USPTO PAIR on-line database confirms that a notice of allowability was entered on September 30, 2002.

Believing prosecution in the present case to be closed, Applicant now submits the present RCE, per the Examiner's request, in order to ensure full consideration of the references cited in the Information Disclosure Statements previously filed on November 14, 2002, December 18, 2002 and February 11, 2003.

Mar 19 2003 12:28PM Trading technologies, Inc 312-476-1182 p.7

Received from < 312 476 1182 > at 3/19/03 12:22:51 PM [Eastern Standard Time]

Respectfully submitted,

MARCH 10, 2003
Date

Ankur D. Shah
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Mar 19 2003 12:29PM Trading technologies, Inc 312-476-1182 p.8

Notice of Allowability	Application No.	Applicant(s)	
	09/894,637	KEMP ET AL.	
	Examiner	Art Unit	
	Richard C Weisberger	3624	

-- 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 *amendment, terminal disclaimer, interview summary*.
2. ☒ The allowed claim(s) is/are *41-54 and 56-81*.
3. ☒ The drawings filed on *09/01* are accepted by the Examiner.
4. ☐ 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: _____.
5. ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
   (a) ☐ The translation of the foreign language provisional application has been received.
6. ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

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.**

7. ☐ 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.

8. ☐ CORRECTED DRAWINGS 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. ____.
   (b) ☐ including changes required by the proposed drawing correction filed _____, which has been approved by the Examiner.
   (c) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No. _____.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the top margin (not the back) of each sheet. The drawings should be filed as a separate paper with a transmittal letter addressed to the Official Draftsperson.

9. ☐ 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☐ Notice of References Cited (PTO-892)
2☐ Notice of Informal Patent Application (PTO-152)
3☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
4☐ Interview Summary (PTO-413), Paper No.____ .
5☒ Information Disclosure Statements (PTO-1449), Paper No. ____.
6☐ Examiner's Amendment/Comment
7☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
8☐ Examiner's Statement of Reasons for Allowance
9☐ Other

The application has been amended as follows:

To the beginning of the specification, add;

C'
JHH 6-23-04

This application is a divisional application of serial number 09/590,692 filed 06/09/2000 which claims benefit of 60/186,322, filed March 2, 2000.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Richard C Weisberger whose telephone number is 703 308 4408.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vince Millin can be reached on 703 308 1065. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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).

Richard C Weisberger
Primary Examiner
Art Unit 3624

C

Allowable Subject Matter

1. The following is an examiner's statement of reasons for allowance: The following is an examiner's statement of reasons for allowance: This statement of reasons for allowance includes the major differences in the claims not found in the prior art of record and reasons why that differences are considered to define patentably over the prior art. The statement is not intended to necessarily state all the reasons for allowance or all the details why claims are allowed and should not be relied upon for this purpose. Rather, this statement reflects what the examiner considers important and therefore the primary reasons for the allowance of the claims.

The primary reason for allowance is the limitation directed to the "dynamic display" of a plurality of the quantity of bids and asks aligned with a "static display" of corresponding prices. Here, unlike the prior art, the "static" display of prices is just that, static, and does not move in response to a change in the inside market. With this display of market depth, claimed in each of the independent claims, a trader places a trade order with the pointer in the area of the order entry region of the dynamic market depth region, through a single computer implemented action, see Figures 3 and 4. For example, in figure 3, a click on Bid Q 18 will send an order to the market to sell 17 lots of the commodity at a price of 89.

The closest prior art including US Patent 6,408,282, PCT WO 01/16852 and commonly owned non-patent literature "X Trader" (see, applicant's response to USPTO's request for information) all lack this feature. The PTO also inquired as to the subject matter of alleged infringement referenced in applicant's petition to make special

in related case SN 09/590,692. The USPTO found no evidence of public use or any printed publication of the system known as J Trader, the subject matter of potential infringement and the applicant's basis for his petition to make special, earlier than November 6, 2000. Therefore, the USPTO has concluded that the system known as J trader is not prior art to the instant application, which has a filing date of June 06, 2000.

2. 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."

Respectfully

By, _____

Richard Weisberger

C

C

Interview Summary	Application No.	Applicant(s)	
	09/894,637	KEMP ET AL.	
	Examiner	Art Unit	
	Richard C Weisberger	3624	

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

(1) *Richard C Weisberger*. (3)_____.

(2) *Steve Borsand*. (4)_____.

Date of Interview: *01 Septembery 2003*.

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: _____.

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: *The PTO inquired as to the identity of the infringing system referenced in the petition to make special of related case # 09/509,692. The applicant identified the product to be "J- Trader".*

(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 ONE MONTH FROM THIS INTERVIEW DATE, OR THE MAILING DATE OF THIS INTERVIEW SUMMARY FORM, WICHEVER 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.

Examiner Note: You must sign this form unless it is an Attachment to a signed Office action.

_____
Examiner's signature, if required

ummary of Record of Interview Requi

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.

Interview Summary	Application No.	Applicant(s)	
	09/894,637	KEMP ET AL.	
	Examiner	Art Unit	
	Richard C Weisberger	3624	

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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: *The PTO inquired as to the identity of the Infringing party referenced in related case S/N 09509.692. The applicnat identified the system to be that known as 'J trader'.* .

(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.)

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Examiner's signature, if required

Summary of Record of Interview Requirements

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- 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.
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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.

Notice of References Cited	Application/Control No. 09/894,637	Applicant(s)/Patent Under Reexamination KEMP ET AL.	
	Examiner Richard C Weisberger	Art Unit 3624	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	Patsystems News Release, Patsystems Launches J Trader, November 06, 2001.
	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.

Attachment for PTO-948 (Rev. 03/01, or earlier)
6/18/01

The below text replaces the pre-printed text under the heading, "Information on How to Effect Drawing Changes," on the back of the PTO-948 (Rev. 03/01, or earlier) form.

INFORMATION ON HOW TO EFFECT DRAWING CHANGES

1. Correction of Informalities -- 37 CFR 1.85

New corrected drawings must be filed with the changes incorporated therein. Identifying indicia, if provided, should include the title of the invention, inventor's name, and application number, or docket number (if any) if an application number has not been assigned to the application. If this information is provided, it must be placed on the front of each sheet and centered within the top margin. If corrected drawings are required in a Notice of Allowability (PTOL-37), the new drawings MUST be filed within the THREE MONTH shortened statutory period set for reply in the Notice of Allowability. Extensions of time may NOT be obtained under the provisions of 37 CFR 1.136(a) or (b) for filing the corrected drawings after the mailing of a Notice of Allowability. The drawings should be filed as a separate paper with a transmittal letter addressed to the Official Draftsperson.

2. Corrections other than Informalities Noted by Draftsperson on form PTO-948.

All changes to the drawings, other than informalities noted by the Draftsperson, MUST be made in the same manner as above except that, normally, a highlighted (preferably red ink) sketch of the changes to be incorporated into the new drawings MUST be approved by the examiner before the application will be allowed. No changes will be permitted to be made, other than correction of informalities, unless the examiner has approved the proposed changes.

Timing of Corrections

Applicant is required to submit the drawing corrections within the time period set in the attached Office communication. See 37 CFR 1.85(a).

Failure to take corrective action within the set period will result in ABANDONMENT of the application.

Oct 01 01

UNITED STATES PATENT AND TRADEMARK OFFICE

MW

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

7590 02/10/2004

Robert C. Klinger
Jackson Walker L.L.P.
Suite 600
2435 North Central Expressway
Richardson, TX 75080

EXAMINER	
WEISBERGER, RICHARD C	
ART UNIT	PAPER NUMBER
3624	

DATE MAILED: 02/10/2004

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/894,637	06/27/2001	Gary Allan Kemp II	024051-0155	1527

TITLE OF INVENTION: CLICK BASED TRADING WITH INTUITIVE GRID DISPLAY OF MARKET DEPTH

APPLN. TYPE	SMALL ENTITY	ISSUE FEE	PUBLICATION FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	$1330	$300	$1630	05/10/2004

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 REFLECTS A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE APPLIED IN THIS APPLICATION. THE PTOL-85B (OR AN EQUIVALENT) MUST BE RETURNED WITHIN THIS PERIOD EVEN IF NO FEE IS DUE OR THE APPLICATION WILL BE REGARDED AS ABANDONED.

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 is changed, pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above and notify the United States Patent and Trademark Office of the change in status, 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 the box below and enclose the PUBLICATION FEE and 1/2 the ISSUE FEE shown above.

☐ Applicant claims SMALL ENTITY status. See 37 CFR 1.27.

II. PART B - FEE(S) TRANSMITTAL should be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). Even if the fee(s) have already been paid, Part B - Fee(s) Transmittal should be completed and returned. 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.

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.

PTOL-85 (Rev. 11/03) Approved for use through 04/30/2004.

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 4 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: Legibly mark-up with any corrections or use Block 1)

7590 02/10/2004

Robert C. Klinger
Jackson Walker L.L.P.
Suite 600
2435 North Central Expressway
Richardson, TX 75080

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, on the date indicated below.

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

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/894,637	06/27/2001	Gary Allan Kemp II	024051-0155	1527

TITLE OF INVENTION: CLICK BASED TRADING WITH INTUITIVE GRID DISPLAY OF MARKET DEPTH

APPLN. TYPE	SMALL ENTITY	ISSUE FEE	PUBLICATION FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	$1330	$300	$1630	05/10/2004

EXAMINER	ART UNIT	CLASS-SUBCLASS
WEISBERGER, RICHARD C	3624	705-037000

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 _____

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. Inclusion of assignee data is only appropriate when an assignment has been previously submitted to the USPTO or is being submitted under separate cover. 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 enclosed:

❑ Issue Fee

❑ Publication Fee

❑ 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 _____ (enclose an extra copy of this form).

Director for Patents 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.

(Authorized Signature) (Date)

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.

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, Alexandria, Virginia 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, Alexandria, Virginia 22313-1450.

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TRANSMIT THIS FORM WITH FEE(S)

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

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/894,637	06/27/2001	Gary Allan Kemp II	024051-0155	1527

7590 02/10/2004

EXAMINER
WEISBERGER, RICHARD C

ART UNIT	PAPER NUMBER
3624	

Robert C. Klinger
Jackson Walker L.L.P.
Suite 600
2435 North Central Expressway
Richardson, TX 75080

DATE MAILED: 02/10/2004

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 532 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 532 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) system (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 (703) 305-1383. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at (703) 305-8283.

PTOL-85 (Rev. 11/03) Approved for use through 04/30/2004.

OIPE JC98
SEP 20 2002
PATENT & TRADEMARK OFFICE

#11 9-29-03 CW

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Attorney Docket No. 024051/0155

Applicant: Gary Allan KEMP II et al.

Title: CLICK BASED TRADING WITH INTUITIVE GRID DISPLAY OF MARKET DEPTH

Serial No.: 09/894,637

Filed: June 27, 2001

Examiner: R. Weisberger

Art Unit: 3624

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SEP 24 2002
GROUP 3600

INFORMATION DISCLOSURE STATEMENT UNDER 37 CFR §1.56

Commissioner for Patents
Washington, D.C. 20231

Sir:

Applicants submit herewith on Form PTO/SB/08 a listing of the documents cited by or submitted to the U.S. PTO in parent application Serial No. 09/590,692, filed 06/09/2000. As provided in 37 CFR §1.98(d), copies of the documents are not being provided since they were previously submitted to the United States Patent & Trademark Office in the above-identified parent application.

The submission of any document herewith, which is not a statutory bar, is not intended as an admission that such document constitutes prior art against the claims of the present application or that such document is considered material to patentability as defined in 37 CFR §1.56(b). Applicants do not waive any rights to take any action which would be appropriate to antedate or otherwise remove as a competent reference any document which is determined to be a *prima facie* art reference against the claims of the present application.

TIMING OF THE DISCLOSURE

The instant Information Disclosure Statement is believed to be filed in accordance with 37 C.F.R. 1.97(b), prior to the mailing date of a first Office Action on the merits.

RELEVANCE OF EACH DOCUMENT

The relevance of the listed documents is described in the parent application.

Applicant respectfully requests that the listed documents be considered by the Examiner and formally be made of record in the present application and that an initialed copy of Form PTO SB/08 be returned in accordance with MPEP §609.

Respectfully submitted,

SEPTEMBER 20, 2002
Date

Ankur D. Shah
Registration No. 41,514

FOLEY & LARDNER
Washington Harbour
3000 K Street, N.W., Suite 500
Washington, D.C. 20007-5109
Telephone: (202) 672-5300
Facsimile: (202) 672-5399

PTO/SB/08 (08-00)
Approved for use through 10/31/2002. OMB 0651-0031
U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE
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Substitute for form 1449B/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

Date Submitted: September 20, 2002

(use as many sheets as necessary)

Sheet 1 of 1

Complete If Known	
Application Number	09/894,637
Filing Date	June 27, 2001
First Named Inventor	Gary Allan Kemp II et al.
Group Art Unit	3624
Examiner Name	R. Weisberger
Attorney Docket Number	024051/0155

OIPE JC98 SEP 20 2002 PATENT & TRADEMARK OFFICE

U.S. PATENT DOCUMENTS

Examiner Initials*	Cite No.[1]	U.S. Patent Document Number	Kind Code[2] (*if known*)	Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
	A1	5,038,284		KRAMER	08/06/1991	
	A2	5,297,031		GUTTERMAN et al.	03/22/1994	
	A3	5,689,651		LOZMAN	11/18/1997	
	A4	5,774,877		PATTERSON, JR. et al.	06/30/1998	
	A5	5,793,301		PATTERSON, JR. et al.	08/11/1998	
	A6	5,797,002		PATTERSON, JR. et al.	08/18/1998	
	A7	5,845,266		LUPIEN et al.	12/01/1998	
	A8	5,915,245		PATTERSON, JR. et al.	06/22/1999	
	A9	5,924,082		SILVERMAN et al.	07/13/1999	
	A10	6,012,046		LUPIEN et al.	01/04/2000	
	A11	6,014,643		MINTON	01/11/2000	
	A12	6,098,051		LUPIEN et al.	08/01/2000	
	A13	6,131,087		LUKE et al.	10/10/2000	
	A14	6,134,535		BELZBERG	10/17/2000	
	A15	6,195,647		MARTYN et al.	02/27/2001	
	A16	6,272,474		GARCIA	08/07/2001	
	A17	6,278,982		KORHAMMER et al.	08/21/2001	
	A18	6,282,521		HOWORKA	08/28/2001	

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FOREIGN PATENT DOCUMENTS

Examiner Initials*	Cite No.[1]	Foreign Patent Document Office[3]	Number[4]	Kind Code[5] (*if known*)	Name of Patentee or Applicant of Cited Documents	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T[6]
	A19	WO	99/30259		NIPPON STEEL CORPORATION	06/17/1999		

OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS

Examiner Initials*	Cite No.[1]	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, page(s), volume-issue number(s), publisher, city and/or country where published.	T[6]
	A20	USPTO Presentation, NASDAQ, November 8, 2001, enclosed pages 1-13.	

Examiner Signature		Date Considered	3/18

*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.

[1] Unique citation designation number. [2]See attached Kinds of U.S. Patent Documents. [3]Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). [4]For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. [5]Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. [6]Applicant is to place a check mark here if English language Translation is attached.

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#12
9-29-03 CW

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Attorney Docket No. 024051/0155

Applicant: Gary Allan KEMP II et al.

Title: CLICK BASED TRADING WITH INTUITIVE GRID DISPLAY OF MARKET DEPTH

Serial No.: 09/894,637

Filed: June 27, 2001

Examiner: R. Weisberger

Art Unit: 3624

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GROUP 3600

INFORMATION DISCLOSURE STATEMENT
UNDER 37 CFR §1.56 and 37 CFR §1.97

Commissioner for Patents
Washington, D.C. 20231

Sir:

Submitted herewith on Form PTO-SB/08 is a listing of documents known to Applicants in order to comply with Applicants' duty of disclosure pursuant to 37 CFR 1.56. A copy of each listed document is being submitted to comply with the provisions of 37 CFR 1.97 and 1.98.

The submission of any document herewith, which is not a statutory bar, is not intended as an admission that such document constitutes prior art against the claims of the present application or that such document is considered material to patentability as defined in 37 CFR §1.56(b). Applicants do not waive any rights to take any action which would be appropriate to antedate or otherwise remove as a competent reference any document which is determined to be a prima facie prior art reference against the claims of the present application.

TIMING OF THE DISCLOSURE

The instant Information Disclosure Statement is believed to be filed in accordance with 37 C.F.R. 1.97(b), prior to the mailing date of a first Office Action on the merits.

RELEVANCE OF EACH DOCUMENT

Documents A1-A6 were listed in a Search Report for a counterpart British application. A copy of the Search Report is also being provided herewith.

Applicant respectfully requests that the listed documents be considered by the Examiner and formally be made of record in the present application and that an initialed copy of Form PTO SB/08 be returned in accordance with MPEP §609.

Respectfully submitted,

FEBRUARY 13, 2003
Date

Ankur D. Shah
Registration No. 41,514

FOLEY & LARDNER
Washington Harbour
3000 K Street, N.W., Suite 500
Washington, D.C. 20007-5109
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Should additional fees be necessary in connection with the filing of this paper, or if a petition for extension of time is required for timely acceptance of same, the Commissioner is hereby authorized to charge Deposit Account No. 19-0741 for any such fees; and applicant(s) hereby petition for any needed extension of time.

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INVESTOR IN PEOPLE

Application No: GB 0219306.8 **Examiner:** Graham Russell
Claims searched: New Claims 1-31 **Date of search:** 27 November 2002

Patents Act 1977
Search Report under Section 17

Databases searched:

UK Patent Office collections, including GB, EP, WO & US patent specifications, in:

UK Cl (Ed.T):

Int Cl (Ed.7): G06F 17/60

Other: Online: EPODOC, Full text patent databases, JAPIO, WPI

Documents considered to be relevant:

Category	Identity of document and relevant passage		Relevant to claims
A	WO 01/88808 A1	(NASDAQ) see page 15 line 8 *et seq*	
A	WO 01/22315 A2	(NASDAQ) see abstract	
A	WO 01/16852 A2	(EPIT) see page 27 lines 24-31	
A	WO 01/16830 A1	(BLOOMBERG) see page 39 line 28	
A	WO 00/65510 A1	(TRADING TECHNOLOGIES) see abstract & Fig 19	
A	US 5297032	(MERRILL LYNCH) see column 4 lines 25-42, Table 1 columns 7-8, column 6 line 55 - column 8 line 68	

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X	Document indicating lack of novelty or inventive step	A	Document indicating technological background and/or state of the art.
Y	Document indicating lack of inventive step if combined with one or more other documents of same category.	P	Document published on or after the declared priority date but before the filing date of this invention.
&	Member of the same patent family	E	Patent document published on or after, but with priority date earlier than, the filing date of this application.

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

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Substitute for form 1449B/PTO				Complete if Known	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT				**Application Number**	09/894,637
Date Submitted: February 11, 2003				**Filing Date**	June 27, 2001
				First Named Inventor	Gary Allan Kemp II
(use as many sheets as necessary)				Group Art Unit	3624
				Examiner Name	Weisberger, R.
Sheet	1	of	1	Attorney Docket Number	024051-0155

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FEB 11 2003

U.S. PATENT DOCUMENTS

Examiner Initials*	Cite No.[1]	U.S. Patent Document Number	U.S. Patent Document Kind Code[2] (if known)	Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
	A1	5,297,032		TROJAN et al.	03/22/1994	

FOREIGN PATENT DOCUMENTS

Examiner Initials*	Cite No.[1]	Foreign Patent Document Office[3]	Number[4]	Kind Code[5] (if known)	Name of Patentee or Applicant of Cited Documents	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T[6]
	A2		WO 00/65510		PCT	11/02/2000		
	A3		WO 01/16830		PCT	03/08/2001		
	A4		WO 01/16852		PCT	03/08/2001		
	A5		WO 01/22315		PCT	03/29/2001		
	A6		WO 01/88808		PCT	11/22/2001		

OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS

Examiner Initials*	Cite No.[1]	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, page(s), volume-issue number(s), publisher, city and/or country where published.	T[6]

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Examiner Signature		Date Considered	2/07

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[1] Unique citation designation number. [2]See attached Kinds of U.S. Patent Documents. [3]Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). [4]For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. [5]Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. [6]Applicant is to place a check mark here if English language Translation is attached.

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OIPE JC174
DEC 18 2002
PATENT & TRADEMARK OFFICE

#17

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Attorney Docket No. 024051/0155

Applicant: Gary Allan KEMP II et al.

Title: CLICK BASED TRADING WITH INTUITIVE GRID DISPLAY OF MARKET DEPTH

Serial No.: 09/894,637

Filed: June 27, 2001

Examiner: R. Weisberger

Art Unit: 3624

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DEC 19 2002
GROUP 3600

INFORMATION DISCLOSURE STATEMENT
UNDER 37 CFR §1.56 and 37 CFR §1.97

Commissioner for Patents
Washington, D.C. 20231

Sir:

Submitted herewith on Form PTO-SB/08 is a listing of documents known to Applicants in order to comply with Applicants' duty of disclosure pursuant to 37 CFR 1.56. A copy of each listed document is being submitted to comply with the provisions of 37 CFR 1.97 and 1.98.

The submission of any document herewith, which is not a statutory bar, is not intended as an admission that such document constitutes prior art against the claims of the present application or that such document is considered material to patentability as defined in 37 CFR §1.56(b). Applicants do not waive any rights to take any action which would be appropriate to antedate or otherwise remove as a competent reference any document which is determined to be a prima facie prior art reference against the claims of the present application.

Serial No. 09/894,637 Attorney Docket No. 024051/0155

TIMING OF THE DISCLOSURE

The instant Information Disclosure Statement is believed to be filed in accordance with 37 C.F.R. 1.97(b), prior to the mailing date of a first Office Action on the merits.

Applicant respectfully requests that the listed documents be considered by the Examiner and formally be made of record in the present application and that an initialed copy of Form PTO SB/08 be returned in accordance with MPEP §609.

Respectfully submitted,

DECEMBER 18, 2002
Date

Ankur D. Shah
Registration No. 41,514

FOLEY & LARDNER
Washington Harbour
3000 K Street, N.W., Suite 500
Washington, D.C. 20007-5109
Telephone: (202) 672-5300
Facsimile: (202) 672-5399

Should additional fees be necessary in connection with the filing of this paper, or if a petition for extension of time is required for timely acceptance of same, the Commissioner is hereby authorized to charge Deposit Account No. 19-0741 for any such fees; and applicant(s) hereby petition for any needed extension of time.

PTO/SB/08 (08-00)
Approved for use through 10/31/2002. OMB 0651-0031
U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

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Substitute for form 1449B/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

Date Submitted: December 18, 2002

(use as many sheets as necessary)

Sheet 1 of 1

Complete if Known	
Application Number	09/894,637
Filing Date	June 27, 2001
First Named Inventor	Gary Allan Kemp II
Group Art Unit	3624
Examiner Name	Weisberger, R.
Attorney Docket Number	024051-0155

OIPE JC174 DEC 18 2002 PATENT & TRADEMARK OFFICE

U.S. PATENT DOCUMENTS

Examiner Initials*	Cite No.[1]	U.S. Patent Document Number	U.S. Patent Document Kind Code[2] (*if known*)	Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
	A1	2002/0055899		WILLIAMS	05/09/2002	

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FOREIGN PATENT DOCUMENTS

Examiner Initials*	Cite No.[1]	Foreign Patent Document Office[3]	Number[4]	Kind Code[5] (*if known*)	Name of Patentee or Applicant of Cited Documents	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T[6]

OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS

Examiner Initials*	Cite No.[1]	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, page(s), volume-issue number(s), publisher, city and/or country where published.	T[6]

Examiner Signature		Date Considered	11/07

*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.

[1] Unique citation designation number. [2]See attached Kinds of U.S. Patent Documents. [3]Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). [4]For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. [5]Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. [6]Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, D.C. 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, D.C. 20231.

OIPE JC98
NOV 14 2002
PATENT & TRADEMARK OFFICE

#09

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Attorney Docket No. 024051/0155

Applicant: Gary Allan KEMP II et al.

Title: CLICK BASED TRADING WITH INTUITIVE GRID DISPLAY OF MARKET DEPTH

Serial No.: 09/894,637

Filed: June 27, 2001

Examiner: R. Weisberger

Art Unit: 3624

RECEIVED
NOV 15 2002
GROUP 3600

INFORMATION DISCLOSURE STATEMENT
UNDER 37 CFR §1.56 and 37 CFR §1.97

Commissioner for Patents
Washington, D.C. 20231

Sir:

Submitted herewith on Form PTO-SB/08 is a listing of documents known to Applicants in order to comply with Applicants' duty of disclosure pursuant to 37 CFR 1.56. A copy of each listed document is being submitted to comply with the provisions of 37 CFR 1.97 and 1.98.

The submission of any document herewith, which is not a statutory bar, is not intended as an admission that such document constitutes prior art against the claims of the present application or that such document is considered material to patentability as defined in 37 CFR §1.56(b). Applicants do not waive any rights to take any action which would be appropriate to antedate or otherwise remove as a competent reference any document which is determined to be a prima facie prior art reference against the claims of the present application.

TIMING OF THE DISCLOSURE

The instant Information Disclosure Statement is believed to be filed in accordance with 37 C.F.R. 1.97(b), prior to the mailing date of a first Office Action on the merits.

Applicant respectfully requests that the listed documents be considered by the Examiner and formally be made of record in the present application and that an initialed copy of Form PTO SB/08 be returned in accordance with MPEP §609.

Respectfully submitted,

NOVEMBER 14, 2002
Date

Ankur D. Shah
Registration No. 41,514

FOLEY & LARDNER
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3000 K Street, N.W., Suite 500
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Telephone: (202) 672-5300
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Substitute for form 1449B/PTO				*Complete if Known*	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT				**Application Number**	09/894,637
				Filing Date	June 27, 2001
Date Submitted: November 14, 2002				**First Named Inventor**	Gary Allan Kemp II
				Group Art Unit	3624
(use as many sheets as necessary)				Examiner Name	Weisberger, R.
Sheet	1	of	1	Attorney Docket Number	024051-0155

U.S. PATENT DOCUMENTS

Examiner Initials*	Cite No.[1]	U.S. Patent Document Number	U.S. Patent Document Kind Code[2] (*if known*)	Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
	A1	2002/0023038		FRITSCH et al.	02/21/2002	
	A2	6,408,282		BUIST	06/18/2002	

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GROUP 3600

FOREIGN PATENT DOCUMENTS

Examiner Initials*	Cite No.[1]	Foreign Patent Document Office[3]	Number[4]	Kind Code[5] (*if known*)	Name of Patentee or Applicant of Cited Documents	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T[6]
	A3		WO 00/52619		PCT	09/08/2000		
	A4		WO 00/62187		PCT	10/19/2000		
	A5		WO 01/16852		PCT	03/08/2001		

OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS

Examiner Initials*	Cite No.[1]	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, page(s), volume-issue number(s), publisher, city and/or country where published.	T[6]

Examiner Signature		Date Considered	11/10

*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.

[1] Unique citation designation number. [2]See attached Kinds of U.S. Patent Documents. [3]Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). [4]For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. [5]Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. [6]Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, D.C. 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, D.C. 20231.

Atty. Dkt. No. 024051-0155

#15

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Gary Alan KEMP II et al.

Title: CLICK BASED TRADING WITH INTUITIVE GRID DISPLAY OF MARKET DEPTH

Appl. No.: 09/894,637

Filing Date: 06/27/2001

Examiner: R. Weisberger

Art Unit: 3624

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INFORMATION DISCLOSURE STATEMENT
UNDER 37 CFR §1.56

Commissioner for Patents
PO Box 1450
Alexandria, Virginia 22313-1450

Sir:

Submitted herewith on Form PTO/SB/08 is a listing of documents known to Applicants in order to comply with Applicants' duty of disclosure pursuant to 37 CFR §1.56. A copy of each listed document is being submitted to comply with the provisions of 37 CFR §1.97 and §1.98.

The submission of any document herewith, which is not a statutory bar, is not intended as an admission that such document constitutes prior art against the claims of the present application or that such document is considered material to patentability as defined in 37 CFR §1.56(b). Applicants do not waive any rights to take any action which would be appropriate to antedate or otherwise remove as a competent reference any document which is determined to be a *prima facie* art reference against the claims of the present application.

TIMING OF THE DISCLOSURE

The listed documents are being submitted in compliance with 37 CFR §1.97(b).

RELEVANCE OF EACH DOCUMENT

The listed documents were cited by a patent examiner during the prosecution of a corresponding foreign patent application.

Applicants respectfully request that any listed document be considered by the Examiner and be made of record in the present application and that an initialed copy of Form PTO/SB/08 be returned in accordance with MPEP §609.

The Commissioner is hereby authorized to charge any additional fees which may be required regarding this application under 37 CFR §§ 1.16-1.17, or credit any overpayment, to Deposit Account No. 19-0741. Should no proper payment be enclosed herewith, as by a check being in the wrong amount, unsigned, post-dated, otherwise improper or informal or even entirely missing, the Commissioner is authorized to charge the unpaid amount to Deposit Account No. 19-0741.

Respectfully submitted,

Date: November 12, 2003

By Reg No 41514

FOLEY & LARDNER
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3000 K Street, N.W., Suite 500
Washington, D.C. 20007-5143
Telephone: (202) 672-5485
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William T. Ellis
Attorney for Applicant
Registration No. 26,874

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INFORMATION DISCLOSURE STATEMENT BY APPLICANT

Date Submitted: November 12, 2003

(use as many sheets as necessary)

Sheet 1 of 1

Complete if Known	
Application Number	09/894,637
Filing Date	June 27, 2001
First Named Inventor	Gary Allan Kemp II
Group Art Unit	3624
Examiner Name	Weisberger, R.
Attorney Docket Number	024051-0155

U.S. PATENT DOCUMENTS

Examiner Initials*	Cite No.[1]	U.S. Patent Document Number	U.S. Patent Document Kind Code[2] (if known)	Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear

FOREIGN PATENT DOCUMENTS

Examiner Initials*	Cite No.[1]	Foreign Patent Document Office[3]	Number[4]	Kind Code[5] (if known)	Name of Patentee or Applicant of Cited Documents	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T[6]
	A1	PCT	WO 98/49639			11/05/1998		
	A2	PCT	WO 99/19821			04/22/1999		
	A3	PCT	WO 99/53424			10/21/1999		

OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS

Examiner Initials*	Cite No.[1]	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, page(s), volume-issue number(s), publisher, city and/or country where published.	T[6]

Examiner Signature		Date Considered	1/04

*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.

[1] Unique citation designation number. [2]See attached Kinds of U.S. Patent Documents. [3]Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). [4]For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. [5]Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. [6]Applicant is to place a check mark here if English language Translation is attached.

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PATENT & TRADEMARK OFFICE

#15-1/2

Atty. Dkt. No. 024051-0155

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant:	Gary Alan KEMP II et al.
Title:	CLICK BASED TRADING WITH INTUITIVE GRID DISPLAY OF MARKET DEPTH
Appl. No.:	09/894,637
Filing Date:	06/27/2000
Examiner:	R. Weisberger
Art Unit:	3624
Confirmation No.:	1527

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APPLICANT'S STATEMENT ON SUBSTANCE OF INTERVIEW

Commissioner for Patents
PO Box 1450
Alexandria, Virginia 22313-1450

Sir:

Having reviewed the Interview Summary mailed on February 10, 2004 in the above-captioned application file, based on the telephonic Interview conducted on September 1, 2003, Applicant makes the following clarifying remarks. Applicant agrees with the substance of the Interview Summary as described by the Examiner. Applicant further points out for clarification that the product identified by Applicant that was referenced in the petition to make special in 09/590,692 was the "DOME" screen of the J-Trader product.

Respectfully submitted,

Date: March 5, 2004

By _____ Reg No 41514

FOLEY & LARDNER
Customer Number: 22428
Telephone: (202) 672-5485
Facsimile: (202) 672-5399

William T. Ellis
Attorney for Applicant
Registration No. 26,874

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PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), to: Mail Mail Stop ISSUE FEE
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CURRENT CORRESPONDENCE ADDRESS (Note: Legibly mark-up with any corrections or use Block 1)

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~~Jackson Walker L.L.P.~~
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~~2435 North Central Expressway~~ 3000 K St. NW
~~Richardson, TX 75080~~ WASHINGTON, DC 20007

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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, on the date indicated below.

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(Signature)
(Date)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/894,437	06/27/2001	Gary Allen Kang II	024051-0155	1537

TITLE OF INVENTION: CLICK BASED TRADING WITH INTUITIVE GRID DISPLAY OF MARKET DEPTH

APPLN. TYPE	SMALL ENTITY	ISSUE FEE	PUBLICATION FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	~~NO~~ YES	$1330 665	$300	$1630 965	05/10/2004

EXAMINER	ART UNIT	CLASS-SUBCLASS
WEISBERGER, RICHARD C	3624	705-037000

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.

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3. ASSIGNEE NAME AND RESIDENCE DATA TO BE PRINTED ON THE PATENT (print or type)

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(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
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☒ A check in the amount of the fee(s) is enclosed.
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Director for Patents 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.

(Authorized Signature) 41514 (Date) 3/8/04
William T. Ellis, Reg. #26,874 3/8/04

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.

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, Alexandria, Virginia 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, Alexandria, Virginia 22313-1450.

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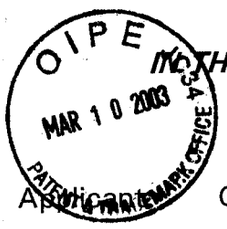

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Attorney Docket No. 024051/0155

Applicant: Gary Allan KEMP II et al.

Title: CLICK BASED TRADING WITH INTUITIVE GRID DISPLAY OF MARKET DEPTH

Serial No.: 09/894,637

Filed: June 27, 2001

Examiner: R. Weisberger

Art Unit: 3624

REMARKS ACCOMPANYING REQUEST FOR CONTINUED EXAMINATION

Commissioner for Patents
Washington, D.C. 20231

Sir:

Applicant has filed concurrently herewith a Request for Continued Examination (RCE) in the subject application. Examiner Weisberger has recently indicated via telephone that prosecution in the application has been closed and that a notice of allowability has been entered. Applicant's review of data from the USPTO PAIR on-line database confirms that a notice of allowability was entered on September 30, 2002.

Believing prosecution in the present case to be closed, Applicant now submits the present RCE, per the Examiner's request, in order to ensure full consideration of the references cited in the Information Disclosure Statements previously filed on November 14, 2002, December 18, 2002 and February 11, 2003.

Respectfully submitted,

MARCH 10, 2003

Date

Ankur D. Shah
Registration No. 41,514

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Washington, D.C. 20007-5143
Telephone: (202) 672-5300
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QUERY CONTROL FORM				RTIS USE ONLY	
Application No.	09/894 637	Prepared by	NPB	Tracking Number	05909954
Examiner-GAU	Weisberger - 3624	Date	3/29/04	Week Date	2/23/04
		No. of queries	3		

JACKET

a. Serial No.	f. Foreign Priority	k. Print Claim(s)	p. PTO-1449
b. Applicant(s)	g. Disclaimer	l. Print Fig.	q. PTOL-85b
c. Continuing Data	h. Microfiche Appendix	m. Searched Column	r. Abstract
d. PCT	i. Title	n. PTO-270/328	s. Sheets/Figs
e. Domestic Priority	j. Claims Allowed	o. PTO-892	t. Other

SPECIFICATION

a. Page Missing
b. Text Continuity
c. Holes through Data
d. Other Missing Text
e. Illegible Text
f. Duplicate Text
g. Brief Description
h. Sequence Listing
i. Appendix
j. Amendments
k. Other

CLAIMS

a. Claim(s) Missing
b. Improper Dependency
c. Duplicate Numbers
d. Incorrect Numbering
e. Index Disagrees
f. Punctuation
g. Amendments
h. Bracketing
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j. Duplicate Text
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(2) Continuing data is listed on the palm/bib sheet, but not in specification/text.

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Atty. Dkt. No. 024051-0155

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Gary Alan KEMP II et al.

Title: CLICK BASED TRADING WITH INTUITIVE GRID DISPLAY OF MARKET DEPTH

Appl. No.: 09/894,637

Filing Date: 06/27/2001

Examiner: R. Weisberger

Art Unit: 3624

CERTIFICATE OF FACSIMILE TRANSMISSION
I hereby certify that this paper is being facsimile transmitted to the United States Patent and Trademark Office, Washington, D.C. on the date below.

Cymanthia Irving
(Printed Name)

Cymanthia Irving
(Signature)

March 21, 2003
(Date of Deposit)

AMENDMENT

Commissioner for Patents
Washington, D.C. 20231

Sir:

Please amend the application as follows:

In the Claims:

In accordance with 37 CFR § 1.121, please substitute for claims 41-44, 48-50, 52-54, 56, 61, 62, and 68, the following rewritten versions of the same claims, as amended. The changes are shown explicitly in the attached "Marked Up Version Showing Changes Made."

Further, please cancel claim 55 without prejudice or disclaimer, and add new claims 69-81 as set forth below.

D'

41. (Amended) A method for displaying market information relating to and facilitating trading of a commodity being traded in an electronic exchange having an inside market with a highest bid price and a lowest ask price on a graphical user interface, the method comprising:

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 price level along a common static price axis, the first indicator representing quantity associated

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D

with at least one order to buy the commodity at the highest bid price currently available in the market;

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 price level along the common static price 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;

displaying the bid and ask display regions in relation to fixed price levels positioned along the common static price axis such that when the inside market changes, the price levels along the common static price 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 common static price axis;

displaying an order entry region comprising a plurality of locations for receiving commands to send trade orders, each location corresponding to a price level along the common static price 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 commodity and sending the trade order to the electronic exchange.

42. (Amended) The method of claim 41 wherein the bid and ask display regions and the order entry region comprise columns with a plurality of cells that are displayed as a grid such that the cells of each column are aligned.

43. (Amended) The method of claim 41 wherein the bid and ask display regions and the order entry region are oriented vertically.

44. (Amended) The method of claim 41 wherein the bid and ask display regions and the order entry region are oriented horizontally.

46. (Amended) The method of claim 47 wherein the bid display region, the ask display region, the order entry region and the price display region comprise columns with a plurality of cells that are displayed as a grid such that the cells of each column are aligned.

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Atty. Dkt. No. 024051-0155

48. (Amended) The method of claim 47 wherein the bid display region, the ask display region, the order entry region and the price display region are oriented vertically.

50. (Amended) The method of claim 47 wherein the bid display region, the ask display region, the order entry region and the price display region are oriented horizontally.

52. (Amended) The method of claim 51 wherein a location of the plurality of locations of the bid display region comprises a blank region in which there is no first or third indicator displayed.

53. (Amended) The method of claim 41 wherein a location of the plurality of locations of the ask display region comprises a blank region in which there is no second or fourth indicator displayed.

54. (Amended) The method of claim 41 wherein the order entry region comprises:

a bid order entry region comprising a plurality of locations for receiving commands to send buy orders, each location corresponding to a price level along the common static price axis; and

an ask order entry region comprising a plurality of locations for receiving commands to send sell orders, each location corresponding to a price level along the common static price axis.

55. (Canceled)

56. (Amended) The method of claim 54 wherein the bid order entry region overlaps with the bid display region and the ask order entry region overlaps with the ask display region.

61. (Amended) The method of claim 41 further comprising the steps of:

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displaying the first indicator at a first location associated with a first price level on the common static price axis at a first time; and

displaying the first indicator at a second location associated with a different price level on the common static price axis at a second time subsequent to the first time.

62. (Amended) The method of claim 41 further comprising the steps of:

displaying the second indicator at a first location associated with a first price level on the common static price axis at a first time; and

displaying the second indicator at a second location associated with a different price level on the common static price axis at a second time subsequent to the first time.

68. (Amended) A computer readable medium having program code recorded thereon for execution on a computer for displaying market information relating to and facilitating trading of a commodity being traded in an electronic exchange having an inside market with a highest bid price and a lowest ask price on a graphical user interface, the program code causing a machine to perform the following method steps:

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 price level along a common static price axis, the first indicator representing quantity associated with at least one order to buy the commodity at the highest bid price currently available in the market;

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 the price level along the common static price 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;

displaying the bid and ask display regions in relation to fixed price levels positioned along the common static price axis such that when the inside market changes, the price levels along the common static price 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 common static price axis;

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displaying an order entry region comprising a plurality of locations for receiving commands to send trade orders, each location corresponding to a price level along the common static price 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 commodity and sending the trade order to the electronic exchange.

69. (New) The method of claim 51 wherein the first and third indicators are displayed in locations of the bid display region that are arranged along an axis which is parallel to the common static price axis.

70. (New) The method of claim 51 wherein the second and fourth indicators are displayed in locations of the ask display region that are arranged along an axis which is parallel to the common static price axis.

71. (New) The method of claim 51 further comprising the steps of:

displaying the first indicator at a first location associated with a first price level on the common static price axis at a first time; and

displaying the first indicator at a second location associated with a different price level on the common static price axis at a second time subsequent to the first time.

72. (New) The method of claim 71 wherein the third and fourth indicators remain in the same location in the bid and ask display regions, respectively, before and after the first indicator is displayed at the second location.

73. (New) The method of claim 72 wherein each location of the bid display region corresponds to a different price level along the common static price axis and each location of the ask display region corresponds to a different price level along the common static price.

74. (New) The method of claim 51 further comprising the steps of:

displaying the second indicator at a first location associated with a first price level on the common static price axis at a first time; and

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displaying the second indicator at a second location associated with a different price level on the common static price axis at a second time subsequent to the first time.

34 75. (New) The method of claim 33 wherein the third and fourth indicators remain in the same location in the bid and ask display regions, respectively, before and after the second indicator is displayed at the second location.

35 76. (New) The method of claim 34 wherein each location of the bid display region corresponds to a different price level along the common static price axis and each location of the ask display region corresponds to a different price level along the common static price.

36 77. (New) The method of claim 1 wherein the bid and ask display regions are displayed separately.

37 78. (New) The method of claim 1 wherein the first and second indicators are based on an exchange order book and wherein the price levels along the common static price axis do not move in response to the addition of a price to the exchange order book, the additional price comprising a price for which there is a corresponding displayed location in at least one of the bid and ask display regions.

38 79. (New) The method of claim 37 wherein the price levels along the common static price axis do not move in response to the removal of a price from the exchange order book, the removed price comprising a price for which there is a corresponding displayed location in at least one of the bid and ask display regions.

39 80. (New) The method of claim 1 wherein the first and second indicators are based on an exchange order book and the price levels along the common static price axis never move in response to a price change in the exchange order book relating to a price which corresponds to a displayed location in at least one of the bid and ask display regions.

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Atty. Dkt. No. 024051-0155

40 ~~81.~~ (New) The method of claim 1 ~~41~~ wherein the plurality of parameters comprises a price and type of order.

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Atty. Dkt. No. 024051-0155

REMARKS

Claims 41-68 were pending in the application. Claims 41-44, 48-50, 52-54, 56, 61, 62, and 68 have been amended. Claim 55 has been canceled without prejudice or disclaimer. Claims 69-81 have been added. No new matter has been introduced. Thus, claims 41-54, and 56-81 are pending for consideration at this time.

Applicants thank the Examiner for the telephone interview of March 21, 2003. The pending claims have been amended as discussed. The discussion resulted in agreement that the claims as amended are allowable and that a Notice of Allowance would be issued promptly.

Applicants note that the amendments are being made without prejudice and solely in order advance prosecution of this application more rapidly to issuance.

Respectfully submitted,

Date March 21, 2003

By _____

Ankur D. Shah
Attorney for Applicant
Registration No. 41,514

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Telephone: (202) 672-5300
Facsimile: (202) 672-5399

Should additional fees be necessary in connection with the filing of this paper, or if a petition for extension of time is required for timely acceptance of same, the Commissioner is hereby authorized to charge deposit account No. 19-0741 for any such fees; and applicant hereby petitions for any needed extension of time.

002.987476.1

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Atty. Dkt. No. 024051-0155

MARKED UP VERSION SHOWING CHANGES MADE

41. (Amended) A method for displaying market information relating to and facilitating trading of a commodity being traded in an electronic exchange [market] having an inside market with a highest bid price and a lowest ask price on a graphical user interface, the method comprising:

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 [in association with] price [levels] level along a common static price axis, the first indicator representing quantity associated with at least one order to buy the commodity at the highest bid price currently available in the market;

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 [in association with the] price [levels] level along the common static price 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; [and]

displaying the bid and ask display regions in relation to fixed price levels positioned along the common static price axis such that when the inside market changes, the price levels along the common static price axis do not move and at least one of the first and second indicators [can] moves in the bid [and] or ask display regions relative to the common static price axis [when the inside market changes];

displaying an order entry region comprising a plurality of locations for receiving commands to send trade orders, each location corresponding to a price level along the common static price 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 commodity and sending the trade order to the electronic exchange.

42. (Amended) The method of claim 41 wherein the bid and ask display regions and the order entry region comprise columns with a plurality of cells that are displayed as a grid such that the cells of each column are aligned.

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43. (Amended) The method of claim 41 wherein the bid and ask display regions and the order entry region are oriented vertically.

44. (Amended) The method of claim 41 wherein the bid and ask display regions and the order entry region are oriented horizontally.

48. (Amended) The method of claim 47 wherein the bid display region, the ask display region, the order entry region and the price display region comprise columns with a plurality of cells that are displayed as a grid such that the cells of each column are aligned.

49. (Amended) The method of claim 47 wherein the bid display region, the ask display region, the order entry region and the price display region are oriented vertically.

50. (Amended) The method of claim 47 wherein the bid display region, the ask display region, the order entry region and the price display region are oriented horizontally.

52. (Amended) The method of claim 51 wherein [one] a location of the plurality of locations of the bid display region comprises a blank region in which there is no first or third indicator displayed.

53. (Amended) The method of claim 41 wherein [one] a location of the plurality of locations of the ask display region comprises a blank region in which there is no second or fourth indicator displayed.

54. (Amended) The method of claim 41 [further comprising the steps of] wherein the order entry region comprises:

[displaying] a bid order entry region comprising a plurality of locations for receiving commands to send buy orders, each location corresponding to a price level along the common static price axis; and

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[displaying] an ask order entry region comprising a plurality of locations for receiving commands to send sell orders, each location corresponding to a price level along the common static price axis.

55. (Canceled)

56. (Amended) The method of claim 54 wherein the bid order entry region [comprises] overlaps with the bid display region and the ask order entry region [comprises] overlaps with the ask display region.

61. (Amended) The method of claim 41 further comprising the steps of:

displaying the first indicator at a first location associated with a first price level on the common static price axis at a first time; and

[updating the display to] displaying the first indicator at a second location associated with a different price level on the common static price axis at a second time subsequent to the first time.

62. (Amended) The method of claim 41 further comprising the steps of:

displaying the second indicator at a first location associated with a first price level on the common static price axis at a first time; and

[updating the display to] displaying the second indicator at a second location associated with a different price level on the common static price axis at a second time subsequent to the first time.

68. (Amended) A computer readable medium having program code recorded thereon for execution on a computer for displaying market information relating to and facilitating trading of a commodity being traded in an electronic exchange [market] having an inside market with a highest bid price and a lowest ask price on a graphical user interface, the program code causing a machine to perform the following method steps:

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 [in association with] price [levels] level along a common static price axis, the first indicator

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representing quantity associated with at least one order to buy the commodity at the highest bid price currently available in the market;

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 [in association with] the price [levels] level along the common static price 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;

displaying the bid and ask display regions in relation to fixed price levels positioned along the common static price axis such that when the inside market changes, the price levels along the common static price axis do not move and at least one of the first and second indicators [can] moves in the bid [and] or ask display regions relative to the common static price axis [when the inside market changes];

displaying an order entry region comprising a plurality of locations for receiving commands to send trade orders, each location corresponding to a price level along the common static price 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 commodity and sending the trade order to the electronic exchange.

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#17

FOLEY : LARDNER
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WASHINGTON, D.C. 20007-5143
TELEPHONE: 202.672.5300
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Total # of Pages 17 (including this page)

TO:	PHONE #:	FAX #:
Examiner Weisberger – Art Unit 3624 United States Patent and Trademark Office		703-872-9025

From : William T. Ellis/Daniel L. Girdwood
Date : March 21, 2003
Client/Matter No : 024051-0155
User ID No : 0251

MESSAGE:

Re: Serial No.: 09/894,637
Inventor(s): Gary Alan KEMP II et al.
Filing Date: June 27, 2001
Title: **CLICK BASED TRADING WITH INTUITIVE GRID DISPLAY OF MARKET DEPTH**

I hereby certify that the following paper(s) and or fee along with any attachments referred to or identified as being attached or enclosed are being transmitted via facsimile to the U.S. Patent and Trademark Office under on the date as shown below.

March 21, 2003

Ankur D. Shah

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Atty. Dkt. No. 024051-0155

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Gary Alan KEMP II et al.

Title: CLICK BASED TRADING WITH INTUITIVE GRID DISPLAY OF MARKET DEPTH

Appl. No.: 09/894,637

Filing Date: 06/27/2001

Examiner: R. Weisberger

Art Unit: 3624

CERTIFICATE OF FACSIMILE TRANSMISSION
I hereby certify that this paper is being facsimile transmitted to the United States Patent and Trademark Office, Washington, D.C. on the date below.

Cymanthia Irving
(Printed Name)

Cymanthia Irving
(Signature)

March 21, 2003
(Date of Deposit)

AMENDMENT TRANSMITTAL

Commissioner for Patents
Washington, D.C. 20231

Sir:

Transmitted herewith is an amendment in the above-identified application.

[X] Small Entity status under 37 C.F.R. § 1.9 and § 1.27 has been established by a Small Entity statement previously submitted.

[ ] Small Entity statement is enclosed.

[X] The fee required for additional claims is calculated below:

	Claims as Amended		Previously Paid For		Extra Claims Present		Rate		Additional Claims Fee
Total Claims:	40	–	28	=	12	x	$18.00	=	$216.00
Independents:	2	–	3	=	0	x	$84.00	=	$0.00
First presentation of any Multiple Dependent Claims:						+	$280.00	=	$0.00
							CLAIMS FEE TOTAL:	=	$216.00

[ ] Applicant hereby petitions for an extension of time under 37 C.F.R. §1.136(a) for the total number of months checked below:

05/26/2004 SWILLIAM 00000001 190741 09894637
01 FC:1202 216.00 DA

002.988041.1

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Atty. Dkt. No. 024051-0155

[ ]	Extension for response filed within the first month:	$110.00	$0.00
[ ]	Extension for response filed within the second month:	$410.00	$0.00
[ ]	Extension for response filed within the third month:	$930.00	$0.00
[ ]	Extension for response filed within the fourth month:	$1,450.00	$0.00
[ ]	Extension for response filed within the fifth month:	$1,970.00	$0.00
	EXTENSION FEE TOTAL:		$0.00
	CLAIMS AND EXTENSION FEE TOTAL:		$216.00
[X]	Small Entity Fees Apply (subtract ½ of above):		$108.00
	TOTAL FEE:		$108.00

[X] Please charge Deposit Account No. 19-0741 in the amount of $108.00. A duplicate copy of this transmittal is enclosed.

[ ] A check in the amount of $108.00 is enclosed.

[X] The Commissioner is hereby authorized to charge any additional fees which may be required regarding this application under 37 C.F.R. §§ 1.16-1.17, or credit any overpayment, to Deposit Account No. 19-0741. Should no proper payment be enclosed herewith, as by a check being in the wrong amount, unsigned, post-dated, otherwise improper or informal or even entirely missing, the Commissioner is authorized to charge the unpaid amount to Deposit Account No. 19-0741. If any extensions of time are needed for timely acceptance of papers submitted herewith, applicant hereby petitions for such extension under 37 C.F.R. §1.136 and authorizes payment of any such extensions fees to Deposit Account No. 19-0741.

Please direct all correspondence to the undersigned attorney or agent at the address indicated below.

Respectfully submitted,

Date March 21, 2003

By _____

Ankur D. Shah
Attorney for Applicant
Registration No. 41,514

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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/894,637	06/27/2001	Gary Allan Kemp II	024051-0155	1527

7590 06/17/2004

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EXAMINER	
WEISBERGER, RICHARD C	

ART UNIT	PAPER NUMBER
3624	

DATE MAILED: 06/17/2004

#18

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

PTO 90C (Rev 10/03)

Fee Ltr

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WASHINGTON, DC 20231
www.uspto.gov

Robert C. Klinger
Jackson Walker L.L.P.
Suite 600
2435 North Central Expressway
Richardson, TX 75080

Paper No. 18

In re application of : **DECISION ON PETITION**
Gary Allen Kemp II et al. : **TO MAKE SPECIAL**
Application No. 09/894,637 : **(INFRINGEMENT)**
Filed: June 27, 2001
For: CLICK BASED TRADING WITH INTUITIVE GRID DISPLAY OF MARKET DEPTH

This is a decision on the petition under 37 C.F.R § 1.102(d) filed September 7, 2001 to make the above-identified application special. The delay in treating this petition is sincerely regretted.

The petition requests that the above-identified application be made special under the procedure set forth in M.P.E.P. § 708.02, item II: Infringement.

MPEP 708.02 states that a Petition to Make Special based on Infringement must have the following: (1) the appropriate petition fee under 37 CFR 1.17(i); (2) a statement by the assignee, applicant, or attorney alleging: (A) that there is an infringing device or product actually on the market; (B) that a rigid comparison of the alleged infringing device or product with the claims of the application has been made, and that, in his or her opinion, some of the claims are unquestionably infringed; and (C) that he or she has made a careful and thorough search of the prior art, or has good knowledge of the prior art, and has sent a copy of the references deemed most closely related to the subject matter encompassed by the claims.

The petition filed September 7, 2001 includes all of the requirements above and, therefore, the petition is **GRANTED**. The $130. petition fee has been charged to applicant's deposit account No. 19-0741 as per applicant's authorization to do so in the documents filed September 7, 2001.

The examiner is directed (1) to make an interference search for possible interfering applications; (2) to promptly examine this application out of turn; and (3) if any interfering application is discovered, to examine such application simultaneously and

state in the first official letter of such application that it is being taken out of turn because of a possible interference.

Petitioner is advised that this application will continue to be special, throughout its entire prosecution and pendency, including interference and appeal, if any, only if petitioner makes a prompt *bona fide* effort, in response to each Office action, to place the application in condition for allowance, even if it is necessary to conduct an interview with the examiner to accomplish this purpose.

Steven N. Meyers
Special Programs Examiner
Technology Center 3600
(703) 308-3868

snm : 6/14/04

06/17/2004 SWILLIAM 00000003 190741 09894637
01 FC:1460 130.00 DA

OIPE
OCT 04 2004
PATENT & TRADEMARK OFFICE

Atty. Dkt. No. 024051-0155

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Gary Alan KEMP, II et al.

Title: CLICK BASED TRADING WITH INTUITIVE GRID DISPLAY OF MARKET DEPTH

Patent. No.: 6,766,304 B2

Issue Date: 07/20/2004

Examiner: R. Weisberger

Art Unit: 3624

Certificate
OCT 06 2004
of Correction

REQUEST FOR CERTIFICATE OF CORRECTION FOR PTO MISTAKE PURSUANT TO 37 C.F.R. § 1.322(a)

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

Sir:

Enclosed, in duplicate, is a Certificate of Correction, Form PTO/SB/44, for United States Patent Number 6,766,304 issued July 20, 2004. The following Patent Office printing errors appear in the issued patent:

ON THE TITLE PAGE

Item (56) Please add the following in the References Cited:

U.S. PATENT DOCUMENTS

4,903,201	A	2/1990	Wagner
5,101,353	A	3/1992	Lupien et al.
5,946,667	A	8/1999	Tull, Jr., et al.
6,035,287	A	3/2000	Stallaert et al.
2002/0138401	A1	9/2002	Allen et al.

FOREIGN PATENT DOCUMENTS

WO	WO 95/35005	9/1995	

OCT 08 2004

Submitted herewith is a copy of Form PTO/SB/08 dated October 20, 2003, signed and dated by the Examiner, listing the references that were inadvertently omitted from the front of the patent.

IN THE CLAIMS:

The errors in the issued patent are listed below and the corrections are supported by the Amendment filed on March 21, 2003. The errors in the patent are shown by column and line number as follows.

Col. 14, line 64, the word "Static" should be --static--. (See Amendment filed March 21, 2003, pages 4-5, claim 68 now claim 27.)

Col. 15, line 26, after "claim 11" add the word --further--. (See Amendment filed March 21, 2003, page 5, claim 71 now claim 30.)

Col. 16, line 1, after "claim 11" add the word --further--. (See Amendment filed March 21, 2003, page 5, claim 74 now claim 33.)

Col. 16, line 10, the word "an" should be --and--. (See Amendment filed March 21, 2003, page 5, claim 75 now claim 34.)

Col. 16, line 40, after "claim 1" add --wherein--. (See Amendment filed March 21, 2003, page 7, claim 81 now claim 40.)

Attached for your review is a copy of the as-filed Transmittal and Amendment filed March 21, 2003. The instant corrections conform the claims in the patent with the Amendment filed on March 21, 2003.

Applicant submits that the above changes would not constitute new matter, and correction thereof would not require reexamination.

Pursuant to 37 C.F.R. §1.322, Applicant requests that the enclosed Certificate of Correction be approved.

OCT 0 8 2004

Although Applicant believes that no fee is required for this Request, the Commissioner is hereby authorized to charge any additional fees which may be required for this Request to Deposit Account No. 19-0741.

Respectfully submitted,

Date OCTOBER 4, 2004 By Reg No. 41514

FOLEY & LARDNER LLP
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William T. Ellis
Attorney for Applicant
Registration No. 26,874

OCT 08 2004

MODIFIED PTO/SB/44 (02-01)
Approved for use through 01/31/2004. OMB 0651-0033
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

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(Also Form PTO-1050)

UNITED STATES PATENT AND TRADEMARK OFFICE
CERTIFICATE OF CORRECTION

PATENT NO : 6,766,304 B2

DATED : 07/20/2004

INVENTOR(S) : Gary Allan Kemp II; Jens-Uwe Schluetter; Harris Brumfield

It is certified that errors appear in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

ON THE TITLE PAGE

Item (56) References Cited - adding

U.S. PATENT DOCUMENTS

4,903,201	A	2/1990	Wagner
5,101,353	A	3/1992	Lupien et al.
5,946,667	A	8/1999	Tull, Jr., et al.
6,035,287	A	03/2000	Stallaert et al.
2002/0138401	A1	9/2002	Allen et al.

FOREIGN PATENT DOCUMENTS

WO	WO 95/35005	9/1995

MAILING ADDRESS OF SENDER:

William T. Ellis
Foley & Lardner LLP
Washington Harbour
3000 K Street, N.W., Suite 500
Washington, D.C. 20007-5143

PATENT NO. 6,766,304 B2

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MODIFIED PTO/SB/44 (02-01)
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UNITED STATES PATENT AND TRADEMARK OFFICE
CERTIFICATE OF CORRECTION

PATENT NO : 6,766,304 B2

DATED : 07/20/2004

INVENTOR(S) : Gary Allan Kemp II; Jens-Uwe Schluetter; Harris Brumfield

It is certified that errors appear in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

IN THE CLAIMS:

Col. 14, line 64, the word "Static" should be --static--.

Col. 15, line 26, after "claim 11" add the word --further--.

Col. 16, line 1, after "claim 11" add the word --further--.

Col. 16, line 10, the word "an" should be --and--.

Col. 16, line 40, after "claim 1" add --wherein--.

MAILING ADDRESS OF SENDER: William T. Ellis
Foley & Lardner LLP
Washington Harbour
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PATENT NO. 6,766,304 B2

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OCT 0 8 2004

UNITED STATES PATENT AND TRADEMARK OFFICE

CERTIFICATE OF CORRECTION

PATENT NO. : 6,766,304 B2
DATED : July 20, 2004
INVENTOR(S) : Gary Allan Kemp II, Jens-Uwe Schluetter and Harris Brumfield

It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

Title page,
Item [56], **References Cited**, U.S. PATENT DOCUMENTS, add the following:

-- 4,903,201	A	2/1990	Wagner
5,101,353	A	3/1992	Lupien et al.
5,946,667	A	8/1999	Tull, Jr., et al.
6,035,287	A	3/2000	Stallaert et al.
2002/0138401	A1	9/2002	Allen et al. --

FOREIGN PATENT DOCUMENTS, add the following:

-- WO	WO 95/35005	9/1995 --

Column 14,
Line 64, the word "Static" should be -- static --.

Column 15,
Line 26, after "claim 11" add the word -- further --.

Column 16,
Line 1, after "claim 11" add the word -- further --.
Line 10, the word "an" should be -- and --.
Line 40, after "claim 1" add -- wherein --.

Signed and Sealed this

Sixteenth Day of November, 2004

JON W. DUDAS
Director of the United States Patent and Trademark Office

OIPE JC174 OCT 04 2004 PATENT & TRADEMARK OFFICE

MODIFIED PTO/SB/08a (08-03)
Approved for use through 10/31/2002. OMB 0651-0031
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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.

Substitute for form 1449/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

Date Submitted: October 20, 2003

(use as many sheets as necessary)

Sheet 1 of 1

Complete if Known	
Application Number	09/894,537
Filing Date	06/27/2001
First Named Inventor	Gary Allan Kemp II
Group Art Unit	3624
Examiner Name	R. Weisberger
Attorney Docket Number	024051-0168

U.S. PATENT DOCUMENTS

Examiner Initials*	Cite No.[1]	U.S. Patent Document Number	Kind Code[2] (if known)	Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
	A1	4,903,201		WAGNER	02-20-1990	
	A2	5,101,353		LUPIEN et al.	03-31-1992	
	A3	5,375,055		TULL, JR. et al.	08-31-1995	
	A4	6,058,417		STALLAERT et al.	03-07-2000	
	A5	2002/0138401	A1	ALLEN et al.	09-26-2002	

FOREIGN PATENT DOCUMENTS

Examiner Initials*	Cite No.[1]	Foreign Patent Document Office[3]	Number[4]	Kind Code[5] (if known)	Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T[6]
	A6	WO	96/26508	A1	BELZBERG, Sydney H.	08-29-1996		

NON PATENT LITERATURE DOCUMENTS

Examiner Initials*	Cite No.[1]	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, page(s), volume-issue number(s), publisher, city and/or country where published.	T[6]

Examiner Signature		Date Considered	

*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.

[1] Unique citation designation number. [2] See attached Kinds of U.S. Patent Documents. [3] Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). [4] For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. [5] Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. [6] Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, PO Box 1450, Alexandria, Virginia 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, PO Box 1450 Alexandria, Virginia 22313-1450.

Received from < > at 10/20/03 4:27:11 PM [Eastern Daylight Time]

OIPE JG17
OCT 04 2004
PATENT & TRADEMARK OFFICE

Atty. Dkt. No. 024051-0155

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Gary Alan KEMP II et al.

Title: CLICK BASED TRADING WITH INTUITIVE GRID DISPLAY OF MARKET DEPTH

Appl. No.: 09/894,637

Filing Date: 06/27/2001

Examiner: R. Weisberger

Art Unit: 3624

CERTIFICATE OF FACSIMILE TRANSMISSION
I hereby certify that this paper is being facsimile transmitted to the United States Patent and Trademark Office, Washington, D.C. on the date below.

Cymanthia Irving
(Printed Name)

Cymanthia Irving
(Signature)

March 21, 2003
(Date of Deposit)

AMENDMENT TRANSMITTAL

Commissioner for Patents
Washington, D.C. 20231

Sir:

Transmitted herewith is an amendment in the above-identified application.

[X] Small Entity status under 37 C.F.R. § 1.9 and § 1.27 has been established by a Small Entity statement previously submitted.

[ ] Small Entity statement is enclosed.

[X] The fee required for additional claims is calculated below:

	Claims as Amended		Previously Paid For		Extra Claims Present		Rate		Additional Claims Fee
Total Claims:	40	–	28	=	12	x	$18.00	=	$216.00
Independents:	2	–	3	=	0	x	$84.00	=	$0.00
First presentation of any Multiple Dependent Claims:						+	$280.00	=	$0.00
							CLAIMS FEE TOTAL:	=	$216.00

[ ] Applicant hereby petitions for an extension of time under 37 C.F.R. §1.136(a) for the total number of months checked below:

002.988041.1

[ ]	Extension for response filed within the first month:	$110.00	$0.00
[ ]	Extension for response filed within the second month:	$410.00	$0.00
[ ]	Extension for response filed within the third month:	$930.00	$0.00
[ ]	Extension for response filed within the fourth month:	$1,450.00	$0.00
[ ]	Extension for response filed within the fifth month:	$1,970.00	$0.00
		EXTENSION FEE TOTAL:	$0.00
		CLAIMS AND EXTENSION FEE TOTAL:	$216.00
[X]		Small Entity Fees Apply (subtract ½ of above):	$108.00
		TOTAL FEE:	$108.00

[**X**] Please charge Deposit Account No. 19-0741 in the amount of $108.00. A duplicate copy of this transmittal is enclosed.

[ ] A check in the amount of $108.00 is enclosed.

[**X**] The Commissioner is hereby authorized to charge any additional fees which may be required regarding this application under 37 C.F.R. §§ 1.16-1.17, or credit any overpayment, to Deposit Account No. 19-0741. Should no proper payment be enclosed herewith, as by a check being in the wrong amount, unsigned, post-dated, otherwise improper or informal or even entirely missing, the Commissioner is authorized to charge the unpaid amount to Deposit Account No. 19-0741. If any extensions of time are needed for timely acceptance of papers submitted herewith, applicant hereby petitions for such extension under 37 C.F.R. §1.136 and authorizes payment of any such extensions fees to Deposit Account No. 19-0741.

Please direct all correspondence to the undersigned attorney or agent at the address indicated below.

Respectfully submitted,

Date March 21, 2003

By _____

FOLEY & LARDNER
Washington Harbour
3000 K Street, N.W., Suite 500
Washington, D.C. 20007-5143
Telephone: (202) 672-5300
Facsimile: (202) 672-5399

Ankur D. Shah
Attorney for Applicant
Registration No. 41,514

OIPE JC17
OCT 04 2004
PATENT & TRADEMARK OFFICE

Atty. Dkt. No. 024051-0155

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Gary Alan KEMP II et al.

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Appl. No.: 09/894,637

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Examiner: R. Weisberger

Art Unit: 3624

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Cymanthia Irving
(Printed Name)

Cymanthia Irving
(Signature)

March 21, 2003
(Date of Deposit)

AMENDMENT

Commissioner for Patents
Washington, D.C. 20231

Sir:

Please amend the application as follows:

In the Claims:

In accordance with 37 CFR § 1.121, please substitute for claims 41-44, 48-50, 52-54, 56, 61, 62, and 68, the following rewritten versions of the same claims, as amended. The changes are shown explicitly in the attached "Marked Up Version Showing Changes Made."

Further, please cancel claim 55 without prejudice or disclaimer, and add new claims 69-81 as set forth below.

41. (Amended) A method for displaying market information relating to and facilitating trading of a commodity being traded in an electronic exchange having an inside market with a highest bid price and a lowest ask price on a graphical user interface, the method comprising:

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 price level along a common static price axis, the first indicator representing quantity associated

with at least one order to buy the commodity at the highest bid price currently available in the market;

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 price level along the common static price 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;

displaying the bid and ask display regions in relation to fixed price levels positioned along the common static price axis such that when the inside market changes, the price levels along the common static price 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 common static price axis;

displaying an order entry region comprising a plurality of locations for receiving commands to send trade orders, each location corresponding to a price level along the common static price 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 commodity and sending the trade order to the electronic exchange.

42. (Amended) The method of claim 41 wherein the bid and ask display regions and the order entry region comprise columns with a plurality of cells that are displayed as a grid such that the cells of each column are aligned.

43. (Amended) The method of claim 41 wherein the bid and ask display regions and the order entry region are oriented vertically.

44. (Amended) The method of claim 41 wherein the bid and ask display regions and the order entry region are oriented horizontally.

48. (Amended) The method of claim 47 wherein the bid display region, the ask display region, the order entry region and the price display region comprise columns with a plurality of cells that are displayed as a grid such that the cells of each column are aligned.

49. (Amended) The method of claim 47 wherein the bid display region, the ask display region, the order entry region and the price display region are oriented vertically.

50. (Amended) The method of claim 47 wherein the bid display region, the ask display region, the order entry region and the price display region are oriented horizontally.

52. (Amended) The method of claim 51 wherein a location of the plurality of locations of the bid display region comprises a blank region in which there is no first or third indicator displayed.

53. (Amended) The method of claim 41 wherein a location of the plurality of locations of the ask display region comprises a blank region in which there is no second or fourth indicator displayed.

54. (Amended) The method of claim 41 wherein the order entry region comprises:

a bid order entry region comprising a plurality of locations for receiving commands to send buy orders, each location corresponding to a price level along the common static price axis; and

an ask order entry region comprising a plurality of locations for receiving commands to send sell orders, each location corresponding to a price level along the common static price axis.

55. (Canceled)

56. (Amended) The method of claim 54 wherein the bid order entry region overlaps with the bid display region and the ask order entry region overlaps with the ask display region.

61. (Amended) The method of claim 41 further comprising the steps of:

displaying the first indicator at a first location associated with a first price level on the common static price axis at a first time; and

displaying the first indicator at a second location associated with a different price level on the common static price axis at a second time subsequent to the first time.

62. (Amended) The method of claim 41 further comprising the steps of:

displaying the second indicator at a first location associated with a first price level on the common static price axis at a first time; and

displaying the second indicator at a second location associated with a different price level on the common static price axis at a second time subsequent to the first time.

68. (Amended) A computer readable medium having program code recorded thereon for execution on a computer for displaying market information relating to and facilitating trading of a commodity being traded in an electronic exchange having an inside market with a highest bid price and a lowest ask price on a graphical user interface, the program code causing a machine to perform the following method steps:

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 price level along a common static price axis, the first indicator representing quantity associated with at least one order to buy the commodity at the highest bid price currently available in the market;

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 the price level along the common static price 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;

displaying the bid and ask display regions in relation to fixed price levels positioned along the common static price axis such that when the inside market changes, the price levels along the common static price 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 common static price axis;

displaying an order entry region comprising a plurality of locations for receiving commands to send trade orders, each location corresponding to a price level along the common static price 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 commodity and sending the trade order to the electronic exchange.

69. (New) The method of claim 51 wherein the first and third indicators are displayed in locations of the bid display region that are arranged along an axis which is parallel to the common static price axis.

70. (New) The method of claim 51 wherein the second and fourth indicators are displayed in locations of the ask display region that are arranged along an axis which is parallel to the common static price axis.

71. (New) The method of claim 51 further comprising the steps of:

displaying the first indicator at a first location associated with a first price level on the common static price axis at a first time; and

displaying the first indicator at a second location associated with a different price level on the common static price axis at a second time subsequent to the first time.

72. (New) The method of claim 71 wherein the third and fourth indicators remain in the same location in the bid and ask display regions, respectively, before and after the first indicator is displayed at the second location.

73. (New) The method of claim 72 wherein each location of the bid display region corresponds to a different price level along the common static price axis and each location of the ask display region corresponds to a different price level along the common static price.

74. (New) The method of claim 51 further comprising the steps of:

displaying the second indicator at a first location associated with a first price level on the common static price axis at a first time; and

displaying the second indicator at a second location associated with a different price level on the common static price axis at a second time subsequent to the first time.

75. (New) The method of claim 74 wherein the third and fourth indicators remain in the same location in the bid and ask display regions, respectively, before and after the second indicator is displayed at the second location.

76. (New) The method of claim 75 wherein each location of the bid display region corresponds to a different price level along the common static price axis and each location of the ask display region corresponds to a different price level along the common static price.

77. (New) The method of claim 41 wherein the bid and ask display regions are displayed separately.

78. (New) The method of claim 41 wherein the first and second indicators are based on an exchange order book and wherein the price levels along the common static price axis do not move in response to the addition of a price to the exchange order book, the additional price comprising a price for which there is a corresponding displayed location in at least one of the bid and ask display regions.

79. (New) The method of claim 78 wherein the price levels along the common static price axis do not move in response to the removal of a price from the exchange order book, the removed price comprising a price for which there is a corresponding displayed location in at least one of the bid and ask display regions.

80. (New) The method of claim 41 wherein the first and second indicators are based on an exchange order book and the price levels along the common static price axis never move in response to a price change in the exchange order book relating to a price which corresponds to a displayed location in at least one of the bid and ask display regions.

81. (New) The method of claim 41 wherein the plurality of parameters comprises a price and type of order.

REMARKS

Claims 41-68 were pending in the application. Claims 41-44, 48-50, 52-54, 56, 61, 62, and 68 have been amended. Claim 55 has been canceled without prejudice or disclaimer. Claims 69-81 have been added. No new matter has been introduced. Thus, claims 41-54, and 56-81 are pending for consideration at this time.

Applicants thank the Examiner for the telephone interview of March 21, 2003. The pending claims have been amended as discussed. The discussion resulted in agreement that the claims as amended are allowable and that a Notice of Allowance would be issued promptly.

Applicants note that the amendments are being made without prejudice and solely in order advance prosecution of this application more rapidly to issuance.

Respectfully submitted,

Date March 21, 2003

By _____

Ankur D. Shah
Attorney for Applicant
Registration No. 41,514

FOLEY & LARDNER
Washington Harbour
3000 K Street, N.W., Suite 500
Washington, D.C. 20007-5143
Telephone: (202) 672-5300
Facsimile: (202) 672-5399

Should additional fees be necessary in connection with the filing of this paper, or if a petition for extension of time is required for timely acceptance of same, the Commissioner is hereby authorized to charge deposit account No. 19-0741 for any such fees; and applicant hereby petitions for any needed extension of time.

MARKED UP VERSION SHOWING CHANGES MADE

41. (Amended) A method for displaying market information relating to and facilitating trading of a commodity being traded in an electronic exchange [market] having an inside market with a highest bid price and a lowest ask price on a graphical user interface, the method comprising:

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 [in association with] price [levels] level along a common static price axis, the first indicator representing quantity associated with at least one order to buy the commodity at the highest bid price currently available in the market;

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 [in association with the] price [levels] level along the common static price 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; [and]

displaying the bid and ask display regions in relation to fixed price levels positioned along the common static price axis such that when the inside market changes, the price levels along the common static price axis do not move and at least one of the first and second indicators [can] moves in the bid [and] or ask display regions relative to the common static price axis [when the inside market changes];

displaying an order entry region comprising a plurality of locations for receiving commands to send trade orders, each location corresponding to a price level along the common static price 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 commodity and sending the trade order to the electronic exchange.

42. (Amended) The method of claim 41 wherein the bid and ask display regions and the order entry region comprise columns with a plurality of cells that are displayed as a grid such that the cells of each column are aligned.

43. (Amended) The method of claim 41 wherein the bid and ask display regions and the order entry region are oriented vertically.

44. (Amended) The method of claim 41 wherein the bid and ask display regions and the order entry region are oriented horizontally.

48. (Amended) The method of claim 47 wherein the bid display region, the ask display region, the order entry region and the price display region comprise columns with a plurality of cells that are displayed as a grid such that the cells of each column are aligned.

49. (Amended) The method of claim 47 wherein the bid display region, the ask display region, the order entry region and the price display region are oriented vertically.

50. (Amended) The method of claim 47 wherein the bid display region, the ask display region, the order entry region and the price display region are oriented horizontally.

52. (Amended) The method of claim 51 wherein [one] a location of the plurality of locations of the bid display region comprises a blank region in which there is no first or third indicator displayed.

53. (Amended) The method of claim 41 wherein [one] a location of the plurality of locations of the ask display region comprises a blank region in which there is no second or fourth indicator displayed.

54. (Amended) The method of claim 41 [further comprising the steps of] wherein the order entry region comprises:

[displaying] a bid order entry region comprising a plurality of locations for receiving commands to send buy orders, each location corresponding to a price level along the common static price axis; and

[displaying] an ask order entry region comprising a plurality of locations for receiving commands to send sell orders, each location corresponding to a price level along the common static price axis.

55. (Canceled)

56. (Amended) The method of claim 54 wherein the bid order entry region [comprises] overlaps with the bid display region and the ask order entry region [comprises] overlaps with the ask display region.

61. (Amended) The method of claim 41 further comprising the steps of:

displaying the first indicator at a first location associated with a first price level on the common static price axis at a first time; and

[updating the display to] displaying the first indicator at a second location associated with a different price level on the common static price axis at a second time subsequent to the first time.

62. (Amended) The method of claim 41 further comprising the steps of:

displaying the second indicator at a first location associated with a first price level on the common static price axis at a first time; and

[updating the display to] displaying the second indicator at a second location associated with a different price level on the common static price axis at a second time subsequent to the first time.

68. (Amended) A computer readable medium having program code recorded thereon for execution on a computer for displaying market information relating to and facilitating trading of a commodity being traded in an electronic exchange [market] having an inside market with a highest bid price and a lowest ask price on a graphical user interface, the program code causing a machine to perform the following method steps:

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 [in association with] price [levels] level along a common static price axis, the first indicator

representing quantity associated with at least one order to buy the commodity at the highest bid price currently available in the market;

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 [in association with] the price [levels] level along the common static price 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;

displaying the bid and ask display regions in relation to fixed price levels positioned along the common static price axis such that when the inside market changes, the price levels along the common static price axis do not move and at least one of the first and second indicators [can] moves in the bid [and] or ask display regions relative to the common static price axis [when the inside market changes];

displaying an order entry region comprising a plurality of locations for receiving commands to send trade orders, each location corresponding to a price level along the common static price 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 commodity and sending the trade order to the electronic exchange.

Minute Order Form (06/97)

United States District Court, Northern District of Illinois

Name of Assigned Judge or Magistrate Judge	James B. Moran	Sitting Judge if Other than Assigned Judge	
CASE NUMBER	04 C 5312	DATE	9/17/2004
CASE TITLE	TRADING TECHNOLOGIES INTERNATIONAL vs. Espeed, INC.		

MOTION: [In the following box (a) indicate the party filing the motion, e.g., plaintiff, defendant, 3rd party plaintiff, and (b) state briefly the nature of the motion being presented.]

DOCKET ENTRY:

(1) ☐ Filed motion of [use listing in "Motion" box above.]

(2) ☐ Brief in support of motion due _____.

(3) ☐ Answer brief to motion due_____. Reply to answer brief due_____.

(4) ☐ Ruling/Hearing on _____ set for _____ at _____.

(5) ☐ Status hearing[held/continued to] [set for/re-set for] on _____ set for _____ at _____.

(6) ☐ Pretrial conference[held/continued to] [set for/re-set for] on _____ set for _____ at _____.

(7) ☐ Trial[set for/re-set for] on _____ at _____.

(8) ☐ [Bench/Jury trial] [Hearing] held/continued to _____ at _____.

(9) ☐ This case is dismissed [with/without] prejudice and without costs[by/agreement/pursuant to]
☐ FRCP4(m) ☐ Local Rule 41.1 ☐ FRCP41(a)(1) ☐ FRCP41(a)(2).

(10) ■ [Other docket entry] Enter Preliminary Injunction Discovery Order.

(11) ■ [For further detail see order attached to the original minute order.]

	No notices required, advised in open court.		number of notices	Document Number
	No notices required.			
	Notices mailed by judge's staff.			
	Notified counsel by telephone.		SEP 20 2004 date docketed	19
✓	Docketing to mail notices.		GMA docketing deputy initials	
	Mail AO 450 form.			
	Copy to judge/magistrate judge.	U.S. DISTRICT COURT CLERK 2004 SEP 17 PM 4:17		
LG	courtroom deputy's initials	Date/time received in central Clerk's Office	date mailed notice	
			mailing deputy initials	

UNITED STATES DISTRICT COURT
NORTHERN DISTRICT OF ILLINOIS
EASTERN DIVISION

Trading Technologies International, Inc., Plaintiff, v. eSpeed, Inc. Defendant.	Civil Action No. 04 C 5312 Judge: James B. Moran Magistrate: Sidney I. Schenkier

DOCKETED
SEP 2 0 2004

PRELIMINARY INJUNCTION DISCOVERY ORDER

In view of Trading Technologies International, Inc.'s pending motion for a preliminary injunction, this Court hereby enters the following preliminary injunction discovery schedule and guidelines:

1) Both parties are permitted to begin taking written and oral discovery immediately.

2) All responses to written discovery requests are due within ten days of service of the discovery requests. In addition, Saturdays, Sundays and legal holidays count when computing this ten day period, contrary to the portion of Fed. R. Civ. Pro. 6(a) that states that "[w]hen the period of time prescribed or allowed is less than 11 days, intermediate Saturdays, Sundays, and legal holidays shall be excluded in the computation." However, the other provisions of Fed. R. Civ. Pro. 6(a) shall apply, including that when a due date falls on a Saturday, Sunday or legal holiday, the filing or service is due the next business day: "The last day of the period so computed shall be included, unless it is a Saturday, a Sunday, or a legal

holiday, or, when the act to be done is the filing of a paper in court, a day on which weather or other conditions have made the office of the clerk of the district court inaccessible, in which event the period runs until the end of the next day which is not one of the aforementioned days." All discovery requests and responses to discovery requests shall be served by both facsimile and overnight or hand delivery, and they shall be considered served upon the successful transmission of the facsimile copy. The Additional Time After Service provisions of Fed. R. Civ. Pro 6(e) shall not apply when service is by facsimile.

3) All document requests and interrogatories shall be tailored to request only documents and ask only interrogatories relevant to the issues regarding the pending motion for preliminary injunction.

4) The parties shall provide the Court with an informal tutorial regarding the technology and prior art at issue. The informal tutorial will not involve testimony of witnesses and therefore there will be no cross examination of the presenters.

5) The Court sets the following preliminary injunction schedule:

Activity	Due Date
Defendant must identify all prior art it is aware of and provide a statement of the prior art's relevance to the patents-in-suit	September 21, 2004 (updated weekly thereafter, i.e. 9/28, 10/5, 10/12, 10/19, 10/26, etc.)
Defendant's Response to Plaintiff's Motion for a Preliminary Injunction (may be supplemented if necessary)	October 15, 2004
Plaintiff's Reply in Support of Its Motion for a Preliminary Injunction (may be supplemented if necessary); Plaintiff provides its preliminary witness list for the Preliminary Injunction Hearing.	October 29, 2004
Defendant provides its preliminary witness list for the Preliminary Injunction Hearing	November 1, 2004
Status Hearing; Informal Tutorial for the Court	November 2, 2004
Hearing On Plaintiff's Motion for a Preliminary Injunction	December 2, 2004

It is so ordered:

Date: 9/16/04

James B. Moran
United States District Court Judge

PATENT APPLICATION FEE DETERMINATION RECORD
Effective October 1, 2000

Application or Docket Number: 120046-00003

CLAIMS AS FILED - PART I

	(Column 1)	(Column 2)
TOTAL CLAIMS 21		
FOR	NUMBER FILED	NUMBER EXTRA
TOTAL CHARGEABLE CLAIMS	21 minus 20=	* 1
INDEPENDENT CLAIMS	3 minus 3 =	* 0
MULTIPLE DEPENDENT CLAIM PRESENT		☐

* 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		RATE	FEE
BASIC FEE	355.00	OR	BASIC FEE	710.00
X$ 9=	9	OR	X$18=	
X40=	0	OR	X80=	
+135=	0	OR	+270=	
TOTAL	364	OR	TOTAL	

CLAIMS AS AMENDED - PART II

AMENDMENT A

	(Column 1) CLAIMS REMAINING AFTER AMENDMENT		(Column 2) HIGHEST NUMBER PREVIOUSLY PAID FOR	(Column 3) PRESENT EXTRA
Total	*	Minus	**	=
Independent	*	Minus	***	=
FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM				☐

SMALL ENTITY		OR	OTHER THAN SMALL ENTITY	
RATE	ADDITIONAL FEE		RATE	ADDITIONAL FEE
X$ 9=		OR	X$18=	
X40=		OR	X80=	
+135=		OR	+270=	
TOTAL ADDIT. FEE		OR	TOTAL ADDIT. FEE	

AMENDMENT B

	(Column 1) CLAIMS REMAINING AFTER AMENDMENT		(Column 2) HIGHEST NUMBER PREVIOUSLY PAID FOR	(Column 3) PRESENT EXTRA
Total	* 27	Minus	** 21	= 6
Independent	* 2	Minus	*** 3	= 0
FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM				☐

RATE	ADDITIONAL FEE		RATE	ADDITIONAL FEE
X$ 9=		OR	X$18=	
X40=		OR	X80=	
+135=		OR	+270=	
TOTAL ADDIT. FEE		OR	TOTAL ADDIT. FEE	

AMENDMENT C

	(Column 1) CLAIMS REMAINING AFTER AMENDMENT		(Column 2) HIGHEST NUMBER PREVIOUSLY PAID FOR	(Column 3) PRESENT EXTRA
Total	*	Minus	**	=
Independent	*	Minus	***	=
FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM				☐

RATE	ADDITIONAL FEE		RATE	ADDITIONAL FEE
X$ 9=		OR	X$18=	
X40=		OR	X80=	
+135=		OR	+270=	
TOTAL ADDIT. FEE		OR	TOTAL ADDIT. FEE	

D 4/2 2/3 = 1 2/3 = 1 1

* 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.

FORM PTO-875
(Rev. 8/00)

Patent and Trademark Office, U.S. DEPARTMENT OF COMMERCE
*U.S. GPO: 2000-480-706/30103

CLAIMS ONLY

SERIAL NO. 09894637 | FILING DATE 07.05-01

APPLICANT(S)

CLAIMS

	AS FILED		AFTER 1st AMENDMENT		AFTER 2nd AMENDMENT	
	IND.	DEP.	IND.	DEP.	IND.	DEP.
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*MAY BE USED FOR ADDITIONAL CLAIMS OR ADMENDMENTS

*U.S. GPO: 1998-443-593/89152

ISSUE SLIP STAPLE AREA (for additional cross references)

POSITION	INITIALS	ID NO.	DATE
FEE DETERMINATION	Bauerkay		07-25-01
O.I.P.E. CLASSIFIER			
FORMALITY REVIEW	TA	T.C Hill	07/25/01
RESPONSE FORMALITY REVIEW	Tequest	925	10-15-01

INDEX OF CLAIMS

✔ ..... Rejected
= ..... Allowed
— (Through numeral)... Canceled
÷ ..... Restricted

N ..... Non-elected
I ..... Interference
A ..... Appeal
O ..... Objected

Claim Final	Claim Original	Date
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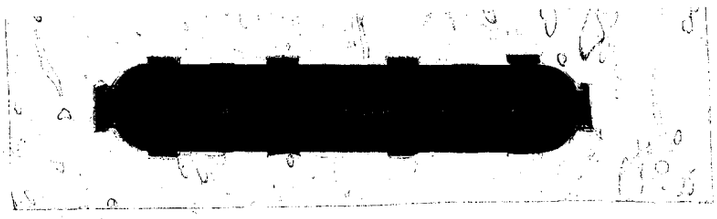
If more than 150 claims or 10 actions staple additional sheet here



SEARCHED

Class	Sub.	Date	Exmr.
705	35 36 37	9/01	JL
345	814	3/03	JL

INTERFERENCE SEARCHED

Class	Sub.	Date	Exmr.
MNC	-	9-1	JL

SEARCH NOTES
(INCLUDING SEARCH STRATEGY)

	Date	Exmr.
Dialog TradingTechnologies.com Eurex Exchange.com	9/01	JL
Dialog	3/03	JL
West Foreign Pat	7/04	JL
PATSYSTEMS.COM	1/04	JL

(RIGHT OUTSIDE)

US006766304B2

(12) **United States Patent**
Kemp, II et al.

(10) **Patent No.: US 6,766,304 B2**
(45) **Date of Patent: Jul. 20, 2004**

(54) **CLICK BASED TRADING WITH INTUITIVE GRID DISPLAY OF MARKET DEPTH**

(75) Inventors: **Gary Allan Kemp, II**, Winnetka, IL (US); **Jens-Uwe Schluetter**, Evanston, IL (US); **Harris Brumfield**, Chicago, IL (US)

(73) Assignee: **Trading Technologies International, Inc.**, Chicago, IL (US)

(*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 544 days.

(21) Appl. No.: **09/894,637**

(22) Filed: **Jun. 27, 2001**

(65) **Prior Publication Data**

US 2002/0059129 A1 May 16, 2002

Related U.S. Application Data

(62) Division of application No. 09/590,692, filed on Jun. 9, 2000.
(60) Provisional application No. 60/186,322, filed on Mar. 2, 2000.

(51) **Int. Cl.**[7] **G06F 17/60**
(52) **U.S. Cl.** **705/37**; 705/36; 705/35
(58) **Field of Search** 705/35, 36, 37; 345/814

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Kharouf, A trading room with a view, Fututes, 27, 11—Nov. 1998.
USPTO Presentation, NASDAQ, Nov. 8, 2001, enclosed pp. 1–13.

Primary Examiner—Richard Weisberger
(74) *Attorney, Agent, or Firm*—Foley & Lardner

(57) **ABSTRACT**

A method and system for reducing the time it takes for a trader to place a trade when electronically trading on an exchange, thus increasing the likelihood that the trader will have orders filled at desirable prices and quantities. The "Mercury" display and trading method of the present invention ensure fast and accurate execution of trades by displaying market depth on a vertical or horizontal plane, which fluctuates logically up or down, left or right across the plane as the market prices fluctuates. This allows the trader to trade quickly and efficiently.

40 Claims, 6 Drawing Sheets

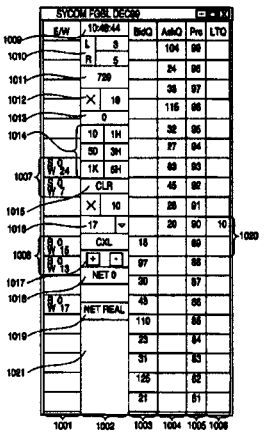

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FIG. 1

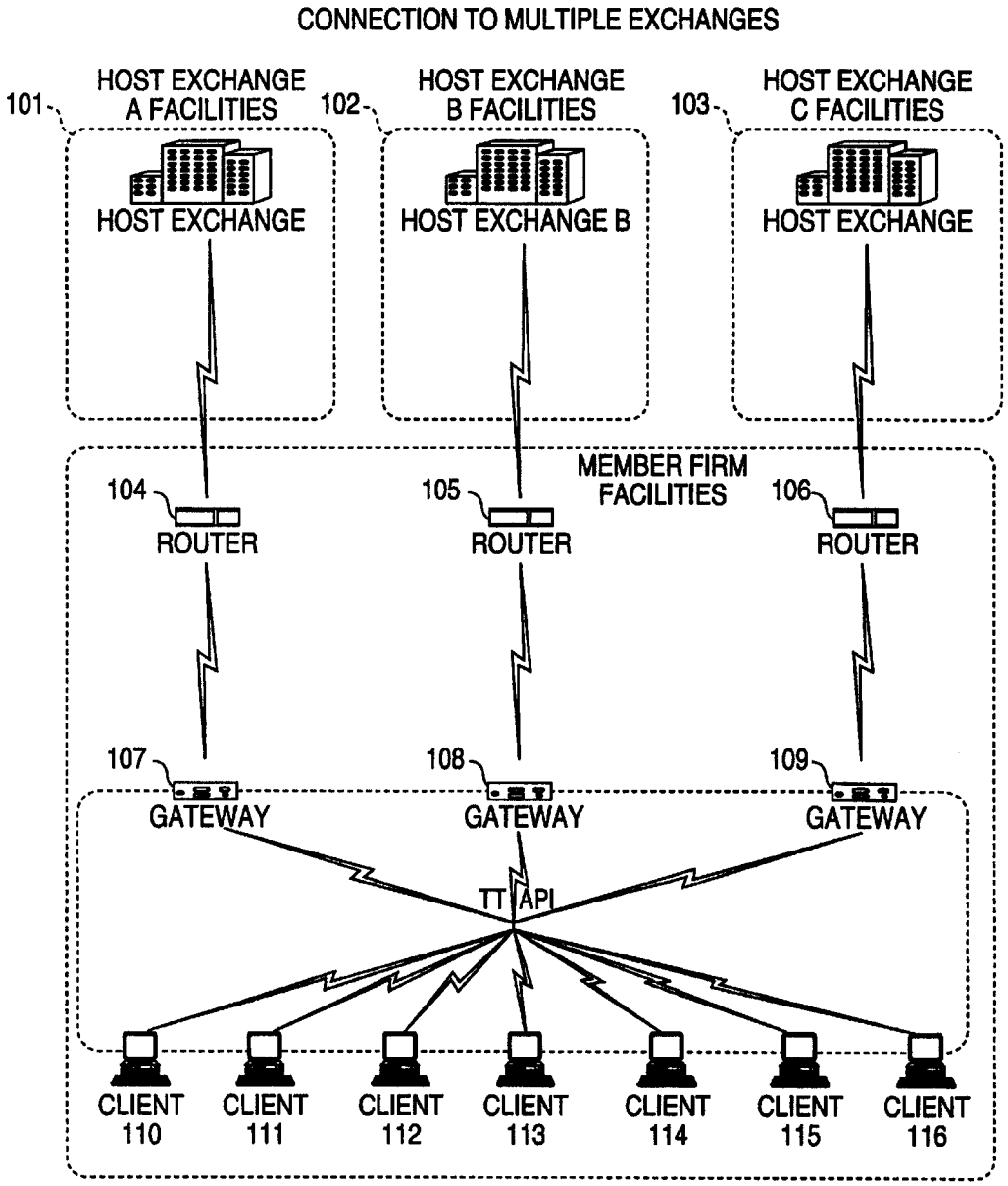
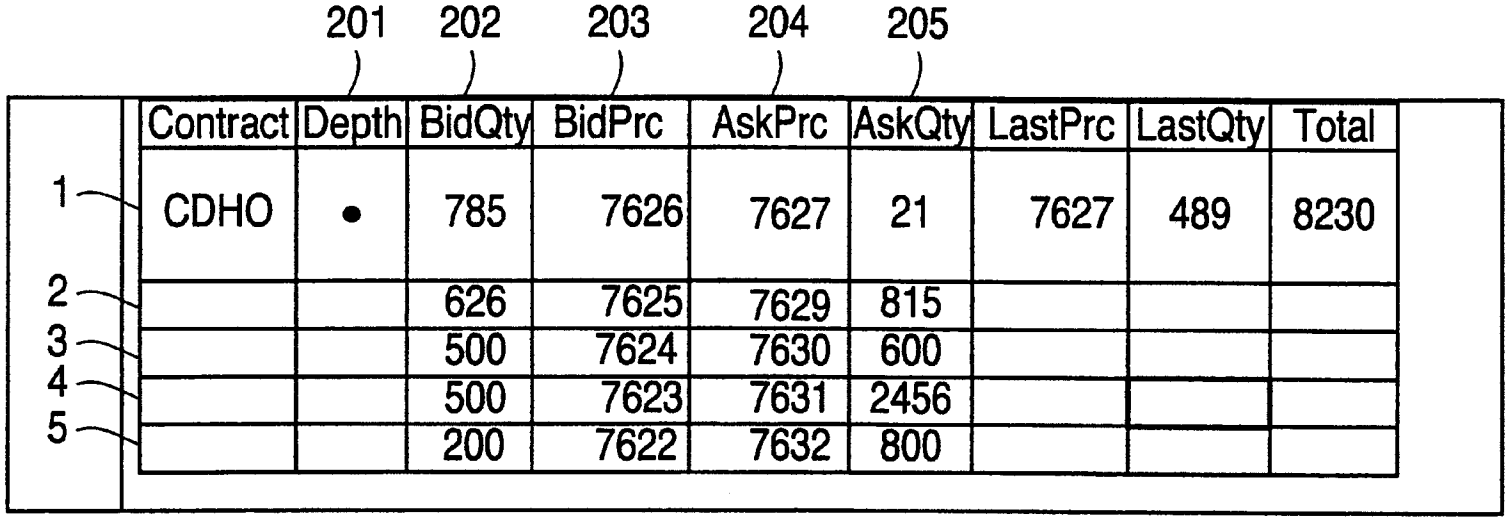

CONNECTION TO MULTIPLE EXCHANGES
101
HOST EXCHANGE A FACILITIES
102
HOST EXCHANGE B FACILITIES
103
HOST EXCHANGE C FACILITIES
HOST EXCHANGE
HOST EXCHANGE B
HOST EXCHANGE
MEMBER FIRM FACILITIES
104
ROUTER
105
ROUTER
106
ROUTER
107
GATEWAY
108
GATEWAY
109
GATEWAY
TT API
CLIENT 110
CLIENT 111
CLIENT 112
CLIENT 113
CLIENT 114
CLIENT 115
CLIENT 116

FIG. 2



Contract	Depth	BidQty	BidPrc	AskPrc	AskQty	LastPrc	LastQty	Total
CDHO	•	785	7626	7627	21	7627	489	8230
		626	7625	7629	815			
		500	7624	7630	600			
		500	7623	7631	2456			
		200	7622	7632	800			

FIG. 3

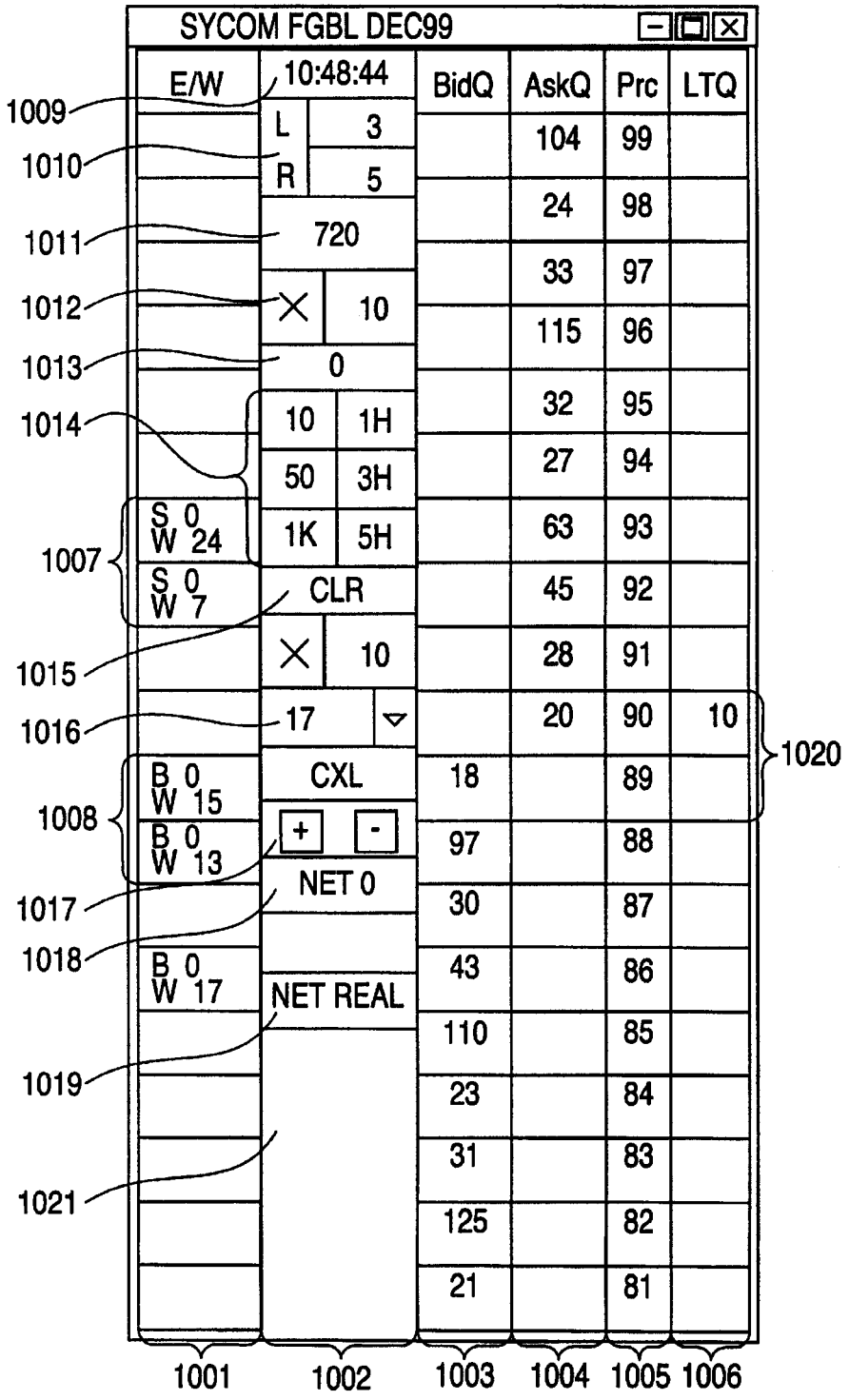

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FIG. 4

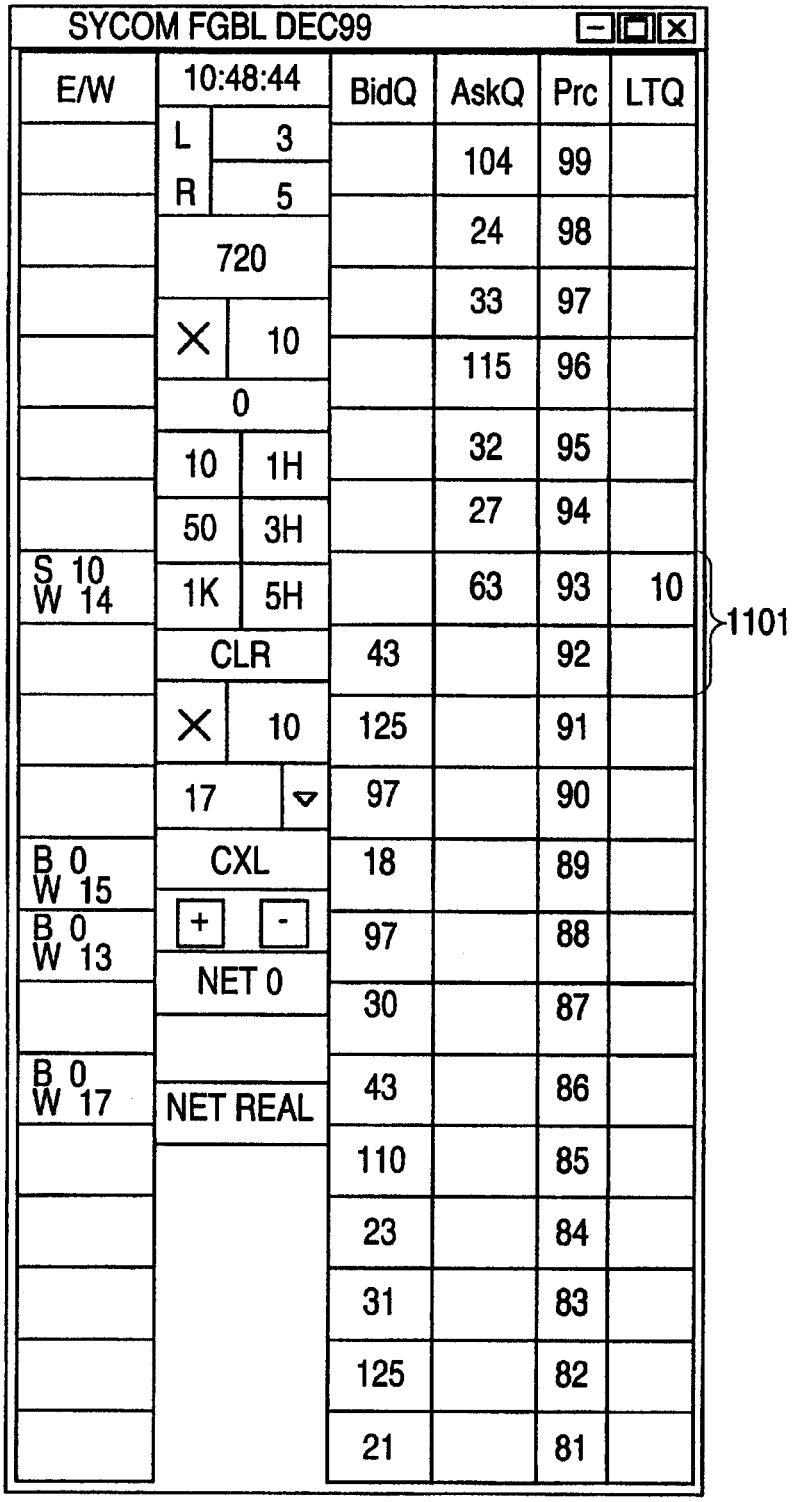
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FIG. 5

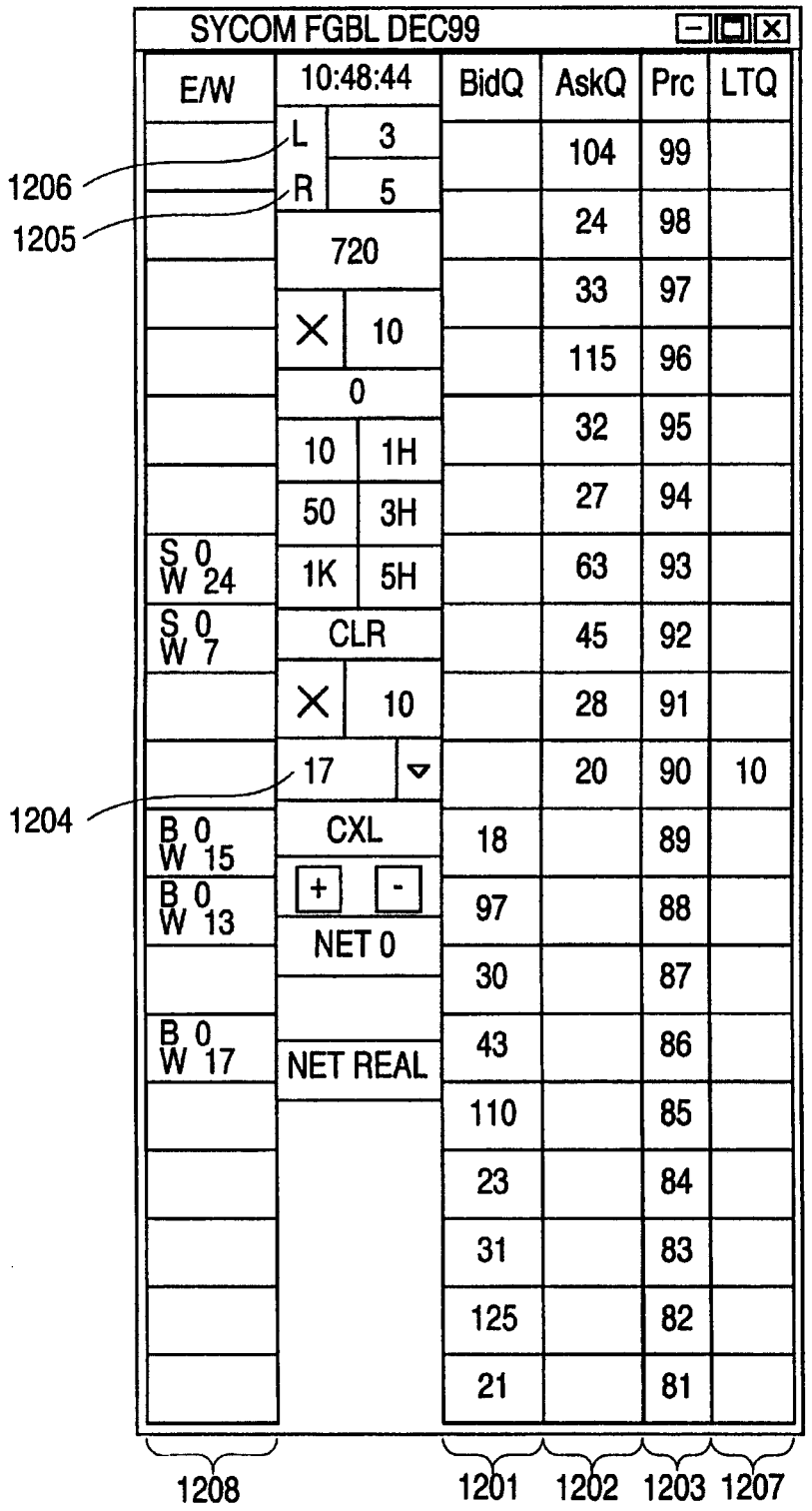
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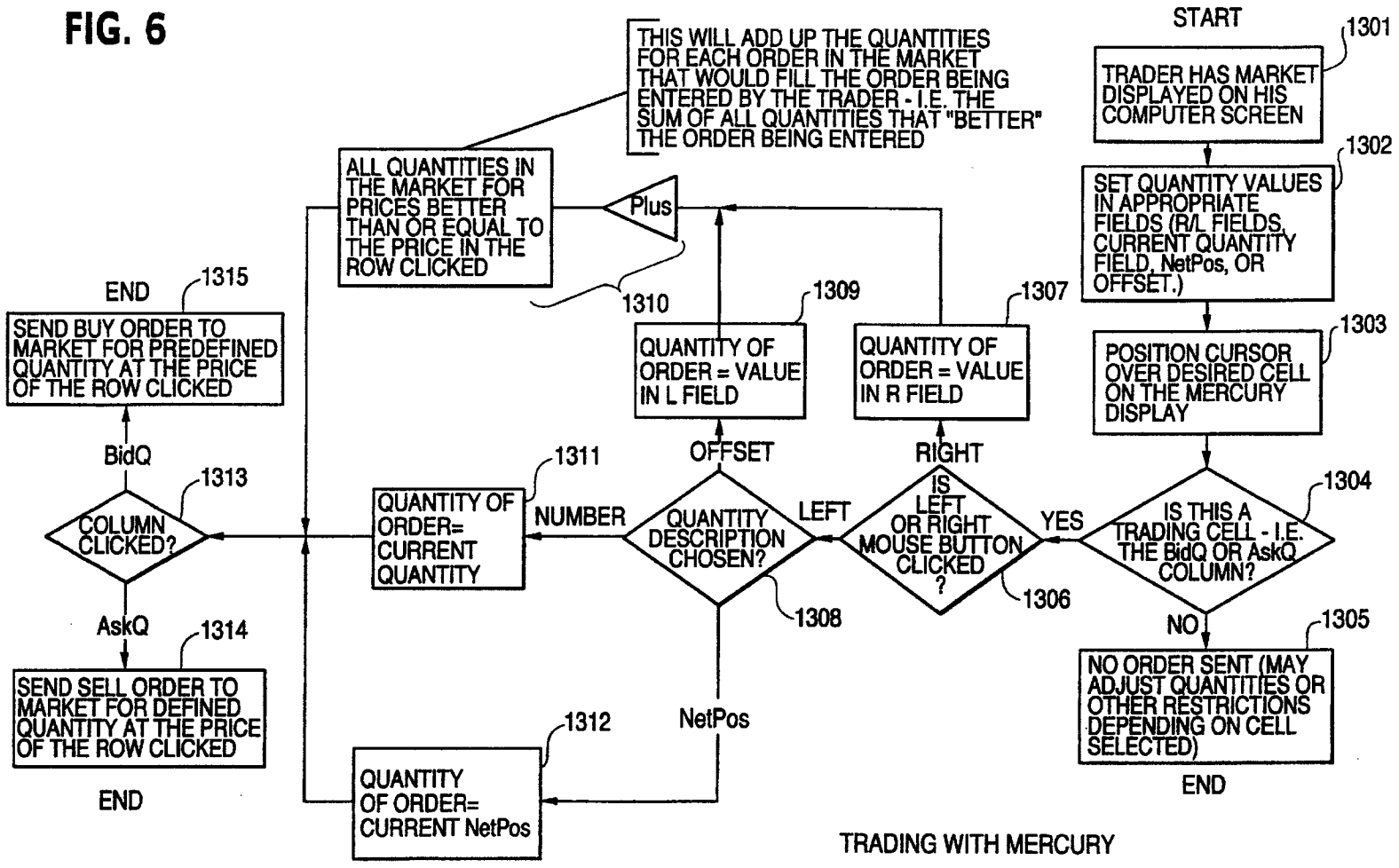
FIG. 6



TRADING WITH MERCURY

CLICK BASED TRADING WITH INTUITIVE GRID DISPLAY OF MARKET DEPTH

This application is a divisional application of Ser. No. 09/590,692 filed Jun. 09, 2000 which claims benefit of 60/186,322, filed Mar. 2, 2000.

PRIORITY

The present application claims priority to a U.S. Provisional Patent Application entitled "Market Depth Display Click Based Trading and Mercury Display" filed Mar. 2, 2000, the contents of which are incorporated herein by reference.

FIELD OF INVENTION

The present invention is directed to the electronic trading of commodities. Specifically, the invention provides a trader with a versatile and efficient tool for executing trades. It facilitates the display of and the rapid placement of trade orders within the market trading depth of a commodity, where a commodity includes anything that can be traded with quantities and/or prices.

BACKGROUND OF THE INVENTION

At least 60 exchanges throughout the world utilize electronic trading in varying degrees to trade stocks, bonds, futures, options and other products. These electronic exchanges are based on three components: mainframe computers (host), communications servers, and the exchange participants' computers (client). The host forms the electronic heart of the fully computerized electronic trading system. The system's operations cover order-matching, maintaining order books and positions, price information, and managing and updating the database for the online trading day as well as nightly batch runs. The host is also equipped with external interfaces that maintain uninterrupted online contact to quote vendors and other price information systems.

Traders can link to the host through three types of structures: high speed data lines, high speed communications servers and the Internet. High speed data lines establish direct connections between the client and the host. Another connection can be established by configuring high speed networks or communications servers at strategic access points worldwide in locations where traders physically are located. Data is transmitted in both directions between traders and exchanges via dedicated high speed communication lines. Most exchange participants install two lines between the exchange and the client site or between the communication server and the client site as a safety measure against potential failures. An exchange's internal computer system is Also often installed with backups as a redundant measure to secure system availability. The third connection utilizes the Internet. Here, the exchange and the traders communicate back and forth through high speed data lines, which are connected to the Internet. This allows traders to be located anywhere they can establish a connection to the Internet.

Irrespective of the way in which a connection is established, the exchange participants' computers allow traders to participate in the market. They use software that creates specialized interactive trading screens on the traders' desktops. The trading screens enable traders to enter and execute orders, obtain market quotes, and monitor positions. The range and quality of features available to traders on their screens varies according to the specific software application being run. The installation of open interfaces in the development of an exchange's electronic strategy means users can choose, depending on their trading style and internal requirements, the means by which they will access the exchange.

The world's stock, bond, futures and options exchanges have volatile products with prices that move rapidly. To profit in these markets, traders must be able to react quickly. A skilled trader with the quickest software, the fastest communications, and the most sophisticated analytics can significantly improve his own or his firm's bottom line. The slightest speed advantage can generate significant returns in a fast moving market. In today's securities markets, a trader lacking a technologically advanced interface is at 4 severe competitive disadvantage.

Irrespective of what interface a trader uses to enter orders in the market, each market supplies and requires the same information to and from every trader. The bids and asks in the market make up the market data and everyone logged on to trade can receive this information if the exchange provides it. Similarly, every exchange requires that certain information be included in each order. For example, traders must supply information like the name of the commodity, quantity, restrictions, price and multiple other variables. Without all of this information, the market will not accept the order. This input and output of information the same for every trader.

With these variables being constant, a competitive speed advantage must come from other aspects of the trading cycle. When analyzing the time it takes to place a trade order for a given commodity, various steps contribute in different amounts to the total time required. Approximately 8% of the total time it takes to enter an order elapses between the moment the host generates the price for the commodity and the moment the client receives the price. The time it takes for the client application to display the price to the trader amounts to approximately 4%. The time it takes for a trade order to be transmitted to the host amounts to approximately 8%. The remainder of the total time it takes to place an order, approximately 80%, is attributable to the time required for the trader to read the prices displayed and to enter a trade order. The present invention provides a significant advantage during the slowest portion of the trading cycle—while the trader manually enters his order. Traders recognize that the value of time savings in this portion may amount to millions of dollars annually.

In existing systems, multiple elements of an order must be entered prior to an order being sent to market, which is time consuming for the trader. Such elements include the commodity symbol, the desired price, the quantity and whether a buy or a sell order is desired. The more time a trader takes entering an order, the more likely the price on which he wanted to bid or offer will change or not be available in the market. The market is fluid as many traders are sending orders to the market simultaneously. It fact, successful markets strive to have such a high volume of trading that any trader who wishes to enter an order will find a match and have the order filled quickly, if not immediately. In such liquid markets, the prices of the commodities fluctuate rapidly. On a trading screen, this results in rapid changes in the price and quantity fields within the market grid. If a trader intends to enter an order at a particular price, but misses the price because the market prices moved before he could enter the order, he may lose hundreds, thousands, even millions of dollars. The faster a trader can trade, the less likely it will be that he will miss his price and the more likely he will make money.

SUMMARY OF THE INVENTION

The inventors have developed the present invention which overcomes the drawbacks of the existing trading systems and dramatically reduces the time it takes for a trader to place a trade when electronically trading on an exchange. This, in turn, increases the likelihood that the trader will have orders filled at desirable prices and quantities.

The "Mercury" display and trading method of the present invention ensure fast and accurate execution of trades by displaying market depth on a vertical or horizontal plane, which fluctuates logically up or down, left or right across the plane as the market prices fluctuates. This allows the trader to trade quickly and efficiently.

Specifically, the present invention is directed to a graphical user interface for displaying the market depth of a commodity traded in a market, including a dynamic display for a plurality of bids and for a plurality of asks in the market for the commodity and a static display of prices corresponding to the plurality of bids and asks. In this embodiment the pluralities of bids and asks are dynamically displayed in alignment with the prices corresponding thereto. Also described herein is a method and system for placing trade orders using such displays.

These embodiments, and others described in greater detail herein, provide the trader with improved efficiency and versatility in placing, and thus executing, trade orders for commodities in an electronic exchange. Other features and advantages of the present invention will become apparent to those skilled in the art from the following detailed description. It should be understood, however, that the detailed description and specific examples, while indicating preferred embodiments of the present invention, are given by way of illustration and not limitation. Many changes and modifications within the scope of the present invention may be made without departing from the spirit thereof, and the invention includes all such modifications.

BRIEF DESCRIPTION OF THE DRAWINGS

FIG. 1 illustrates the network connections between multiple exchanges and client sites;

FIG. 2 illustrates screen display showing the inside market and the market depth of a given commodity being traded;

FIG. 3 illustrates the Mercury display of the present invention;

FIG. 4 illustrates the Mercury display at a later time showing the movement of values when compared to FIG. 3;

FIG. 5 illustrates a Mercury display with parameters set in order to exemplify the Mercury trading method; and

FIG. 6 is a flowchart illustrating the process for Mercury display and trading.

DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENTS

As described with reference to the accompanying figures, the present invention provides a display and trading method to ensure fast and accurate execution of trades by displaying market depth on a vertical or horizontal plane, which fluctuates logically up or down, left or right across the plane as the market prices fluctuates. This allows the trader to place trade orders quickly and efficiently. A commodity's market depth is the current bid and ask prices and quantities in the market. The display and trading method of the invention increase the likelihood that the trader will be able to execute orders at desirable prices and quantities.

In the preferred embodiment, the present invention is implemented on a computer or electronic terminal. The computer is able to communicate either directly or indirectly (using intermediate devices) with the exchange to receive and transmit market, commodity, and trading order information. It is able to interact with the trader and to generate contents and characteristics of a trade order to be sent to the exchange. It is envisioned that the system of the present invention can be implemented on any existing or future terminal or device with the processing capability to perform the functions described herein. The scope of the present invention is not limited by the type of terminal or device used. Further, the specification refers to a single click of a mouse as a means for user input and interaction with the terminal display as an example of a single action of the user. 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 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.

The system can be configured to allow for trading in a single or in multiple exchanges simultaneously. Connection of the system of the present invention with multiple exchanges is illustrated in FIG. 1. This figure shows multiple host exchanges **101–103** connected through routers **104–106** to gateways **107–109**. Multiple client terminals **110–116** for use as trading stations can then trade in the multiple exchanges through their connection to the gateways **107–109**. When the system is configured to receive data from multiple exchanges, then the preferred implementation is to translate the data from various exchanges into a simple format. This. "translation" function is described below with reference to FIG. 1. An applications program interface ("TT API" as depicted in the figure) translates the incoming data formats from the different exchanges to a simple preferred data format. This translation function may be disposed anywhere in the network, for example, at the gateway server, at the individual workstations or at both. In addition, the storage at gateway servers and at the client workstations, and/or other external storage cache historical data such as order books which list the client's active orders in the market; that is, those orders that have neither been filled nor cancelled. Information from different exchanges can be displayed at one or in multiple windows at the client workstation. Accordingly, 'while reference is made through the remainder of the specification to a single exchange to which a trading terminal is connected, the scope of the invention includes the ability to trade, in accordance with the trading methods described herein, in multiple exchanges using a single trading terminal.

The preferred embodiments of the present invention include the display of "Market Depth" and allow trader to view the market depth of a commodity and to execute trades within the market depth with a single click of a computer mouse button. Market Depth represents the order book with the current bid and ask prices and quantities in the market. In other words, Market Depth is each bid and ask that was entered into the market, subject to the limits noted below, in addition to the inside market. For a commodity being traded, the "inside market" is the highest bid price and the lowest ask price.

The exchange sends the price, order and fill information to each trader on the exchange. The present invention processes this information and maps it through simple

algorithms and mapping tables to positions in a theoretical grid program or any other comparable mapping technique for mapping data to a screen. The physical mapping of such information to a screen grid can be done by any technique known to those skilled in the art. The present invention is not limited by the method used to map the data to the screen display.

How far into the market depth the present invention can display depends on how much of the market depth the exchange provides. Some exchanges supply an infinite market depth, while others provide no market depth or only a few orders away from the inside market. The user of the present invention can also chose how far into the market depth to display on his screen. FIG. **2** illustrates a screen display of an invention described in a commonly owned co-pending application entitled "Click Based Trading with Market Depth Display" Ser. No. 09/589,751, filed on Jun. 9, 2000, the contents of which are incorporated herein by reference. This display shows the inside market and the market depth of a given commodity being traded. Row **1** represents the "inside market" for the commodity being traded which is the best (highest) bid price and quantity and the best (lowest) ask price and quantity. Rows **2–5** represent the "market depth" for the commodity being traded. In the preferred embodiment of the present invention, the display of market depth (rows **2–5**) lists the available next-best bids, in column **203**, and asks, in column **204**. The working bid and ask quantity for each price level is also displayed in columns **202** and **205** respectively (inside market–row **1**). Prices and quantities for the inside market and market depth update dynamically on a real time basis as such information is relayed from the market.

In the screen display shown in FIG. **2**, the commodity (contract) being traded is represented in row **1** by the character string "CDHO". The Depth column **208** will inform the trader of a status by displaying different colors. Yellow indicates that the program application is waiting for data. Red indicates that the Market Depth has failed to receive the data from the server and has "timed out." Green indicates that the data has just been updated. The other column headings in this and all of the other figures, are defined as follows. BidQty (Bid Quantity): the quantity for each working bid, BidPrc (Bid Price): the price for each working bid, AskPrc (Ask Price): the price for each working ask, AskQty (Ask Quantity): the quantity for each working ask, LastPrc (Last Price): the price for the last bid and ask that were matched in the market and LastQty (Last Quantity): the quantity added at the last price. Total represents the total quantity traded of the given commodity.

The configuration of the screen display itself informs the user in a more convenient and efficient manner than existing systems. Traders gain a significant advantage by seeing the market depth because they can see trends in the orders in the market. The market depth display shows the trader the interest the market has in a given commodity at different price levels. If a large amount of bids or asks are in the market near the trader's position, he may feel he should sell or buy before the inside market reaches the morass of orders. A lack of orders above or below the inside market might prompt a trader to enter orders near the inside market. Without seeing the market depth, no such strategies could be utilized. Having the dynamic market depth, including the bid and ask quantities and prices of a traded commodity aligned with and displayed below the current inside market of the commodity conveys the information to the user in a more intuitive and easily understandable manner. Trends in the trading of, the commodity and other relevant characteristics are more easily identifiable by the user through the use of the present invention.

Various abbreviations are used in the screen displays, and specifically, in the column headings of the screen displays reproduced herein. Some abbreviations have been discussed above. A list of common abbreviations and their meanings is provided in Table 1.

TABLE I

Abbreviations.

COLUMN	DESCRIPTION	COLUMN	DESCRIPTION
Month	Expiration Month/Year	TheoBid	Theoretical Bid Price
Bid Mbr(1)	Bid Member ID	TheoAsk	Theoretical Ask Price
WrkBuys(2)	Working Buys for entire Group ID	Qact	Quote Action (Sends individual quotes)
BidQty	Bid Quantity	BQQ	Test Bid Quote Quantity
ThrshBid(6)	Threshold Bid Price	BQP	Test Bid Quote Price
BidPrc	Bid Price	Mkt BQQ	Market Bid Quote Quantity
Bid Qty Accurn	Accumulated Bid Quantity	Mkt BQP	Market Bid Quote Price
BidPrc Avg	Bid Price Average	Quote	Checkbox activates/ deactivates contract for quoting
AskPrc Avg	Ask Price Average	Mkt AQQ	Market Ask Quote Quantity
AskQty Accurn	Accumulated Ask Quantity	Mkt AQP	Market Ask Quote Price
AskPrc	Ask Price	AQP	Ask Quote Price
ThrshAsk(6)	Threshold Ask Price	AQQ	Ask Quote Quantity
AskQty	Ask Quantity	Imp BidQty(5)	Implied Bid Quantity
WrkSells(2)	Working Sells for entire Group ID	Imp BidPrc(5)	Implied Bid Price
Ask Mbr(1)	Ask Member ID	Imp AskQty(5)	Implied Ask Quantity
NetPos	Net Position	Imp AskPrc(5)	Implied Ask Price
FFNetPos	Fast Fill Net Position	Gamma(3)	Change in Delta given 1 pt change in underlying
LastPrc	Last Price	Delta (3)	Change in price given 1 pt change in underlying
LastQty	Last Quantity	Vola (3)	Percent volatility
Total	Total Traded Quantity	Vega (3)	Price change given I% change in Vola
High	High Price	Rhop (3)	Price change given I% change in interest rate

TABLE I-continued

Abbreviations.

COLUMN	DESCRIPTION	COLUMN	DESCRIPTION
Low	Low Price	Theta(3)	Price change for every day that elapses
Open	Opening Price	Click Trd	Activate/deactivate click trading by contract
Close	Closing Price	S (Status)	Auction, Closed, FastMkt, Not Tradable, Pre-trading, Tradable, S = post-trading
Chng	Last Price-Last Close	Expiry	Expiration Month/Year
TheoPrc	Theoretical Price		

As described herein, the display and trading method of the present invention provide the user with certain advantages over systems in which a display of market depth, as shown in FIG. **2**, is used. The Mercury display and trading method of the present invention ensure fast and accurate execution of trades by displaying market depth on a vertical or horizontal plane, which fluctuates logically up or down, left or right across the plane as the market prices fluctuates. This allows the trader to trade quickly and efficiently. An example of such a Mercury display is illustrated in the screen display of FIG. **3**.

The display of market depth and the manner in which traders trade within the market depth can be effected in different manners, which many traders will find materially better, faster and more accurate. In addition, some traders may find the display of market depth to be difficult to follow. In the display shown in FIG. **2**, the market depth is displayed vertically so that both Bid and Ask prices descend the grid. The Bid prices descend the market grid as the prices decrease. Ask prices also descend the market grid as these prices actually increase. This combination may be considered counterintuitive and difficult to follow by some traders.

The Mercury display overcomes this problem in an innovative and logical manner. Mercury also provides an order entry system, market grid, fill window and summary of market orders in one simple window. Such a condensed display materially simplifies the trading system by entering and tracking trades in an extremely efficient manner. Mercury displays market depth in a logical, vertical fashion or horizontally or at some other convenient angle or configuration. A vertical field is shown in the figures and described for convenience, but the field could be horizontal or at an angle. In turn, Mercury further increases the speed of trading and the likelihood of entering orders at desired prices with desired quantities. In the preferred embodiment of the invention, the Mercury display is a static vertical column of prices with the bid and ask quantities displayed in vertical columns to the side of the price column and aligned with the corresponding bid and ask prices. An example of this display is shown in FIG. **3**.

Bid quantities are in the column **1003** labeled BidQ and ask quantities are in column **1004** labeled AskQ. The representative ticks from prices for the given commodity are shown in column **1005**. The column, does not list the whole prices (e.g. 95.89), but rather, just the last two digits (e.g. 89). In the example shown, the inside market, cells **1020**, is 18 (best bid quantity) at 89 (best bid price) and 20 (best ask quantity) at 90 (best ask price). In the preferred embodiment of the invention, these three columns are shown in different colors so that the trader can quickly distinguish between them.

The values in the price column are static; that is, they do not normally change positions unless a re-centering command is received (discussed in detail later). The values in the Bid and Ask columns however, are dynamic; that is, they move up and down (in the vertical example) to reflect the market depth for the given commodity. The LTQ column **1006** shows the last traded quantity of the commodity. The relative position of the quantity value with respect to the Price values reflects the price at which that quantity was traded. Column **1001** labeled E/W (entered/working) displays the current status of the trader's orders. The status of each order is displayed in the price row where it was entered. For example, in cells **1007**, the number next to S indicates the number of the trader's ordered lots that have been sold at the price in the specific row. The number next to W indicates the number of the trader's ordered lots that are in the market, but have not been filled–i.e. the system is working on filling the order. Blanks in this column indicate that no orders are entered or working at that price. In cells **1008**, the number next to B indicates the number of the trader's ordered lots that have been bought at the price in the specific row. The number next to W indicates the number of the trader's ordered lots that are in the market, but have not been filled–i.e. the system is working on filling the order.

Various parameters are set and information is provided in column **1002**. For example, "10:48:44" in cell **1009** shows the actual time of day. The L and R fields in cell **1010** indicate a quantity value, which may be added to the order quantity entered. This process is explained below with respect to trading under Mercury. Below the L and R fields, in cell **1011**, a number appears which represents the current market volume. This is the number of lots that have been traded for the chosen contract. Cell **1012**, "X 10", displays the Net Quantity, the current position of the trader on the chosen contract. The number "10" represents the trader's buys minus sells. Cell **1013** is the "Current Quantity"; this field represents the quantity for the next order that the trader will send to market. This can be adjusted with right and left clicks (up and down) or by clicking the buttons which appear below the Current Quantity in cells **1014**. These buttons increase the current quantity by the indicated amount; for example, "10" will increase it by 10; "1H" will increase it by 100; "1K" will increase it by 1000. Cell **1015** is the Clear button; clicking this button will clear the Current Quantity field. Cell **1016** is the Quantity Description; this is a pull down menu allowing the trader to chose from three Quantity Descriptions. The pull down menu is displayed when the arrow button in the window is clicked. The window includes NetPos, Offset and a field allowing the trader to enter numbers.. Placing a number in this field will set a default buy or sell quantity. Choosing "Offset" in this field will enable the L/R buttons of cell **1010**. Choosing "NetPos" in this field will set the current Net Quantity (trader's net position) as the trader's quantity for his next trade. Cell **1017** are +/– buttons; these buttons will alter the size of the screen-either larger (+) or smaller (–). Cell **1018** is used to invoke Net **0**; clicking this button will reset the Net Quantity

(cell **1011**) to zero. Cell **1019** is used to invoke Net Real; clicking this button will reset the Net Quantity (cell **10 11**) to its actual position.

The inside market and market depth ascend and descend as prices in the market increase and decrease. For example, FIG. **4** shows a screen displaying the same market as that of FIG. **3** but at a later interval where the inside market, cells **1101**, has risen three ticks. Here, the inside market for the commodity is 43 (best bid quantity) at 92 (best bid price) and 63 (best ask quantity) at 93 (best ask price). In comparing FIGS. **3** and **4**, it can be seen that the price column remained static, but the corresponding bids and asks rose up the price column. Market Depth similarly ascends, and descends the price column, leaving a vertical history of the market.

As the market ascends or descends the price column, the inside market, might go above or below the price column displayed on a trader's screen. Usually a trader will want to be able to see the inside market to assess future trades. The system of the present invention addresses this problem with a one click centering feature. With a single click at any point within the gray area, **1021**, below the "Net Real" button, the system will re-center the inside market on the trader's screen. Also, when using a three-button mouse, a click of the middle mouse button, irrespective of the location of the mouse pointer, will re-center the inside market on the trader's screen.

The same information and features can be displayed and enabled in a horizontal fashion. Just as -the market ascends and descends the vertical Mercury display shown in FIGS. **3** and **4**, the market will move left and right in the horizontal Mercury display. The same data and the same information gleaned from the dynamical display of the data is provided. It is envisioned that other orientations can be used to dynamically display the data and such orientations are intended to come within the scope of the present invention.

Next, trading commodities, and specifically, the placement of trade orders using the Mercury display is described. Using the Mercury display and trading method, a trader would first designate the desired commodity and, if applicable, the default quantities. Then he can trade with single clicks of the right or left mouse button. The following equations are used by the system to generate trade orders and to determine the quantity and price to be associated with the trade order. The following abbreviations are used in these formulas: P=Price value of row clicked, R=Value in R field, L=Value in L field, Q=Current Quantity, Q_a=Total of all quantities in AskQ column at an equal or better price than P, Q_b=Total of all quantities in BidQ column at an equal or better price than P, N=Current Net Position, Bo=Buy order sent to market and So=Sell order—sent to market.

Apy order entered using right mouse button

$$Bo=(Q_a+R)P \quad \text{(Eq. 1)}$$

If BidQ field clicked.

$$So=(Q_b+R)P \quad \text{(Eq. 2)}$$

If AskQ field clicked.

Orders entered using the left mouse button

If "Offset" mode chosen in Quantity Description field then:

$$Bo=(Q_a+L)P \quad \text{(Eq. 3)}$$

If BidQ field clicked.

$$SO=(Q_b+L)P \quad \text{(Eq. 4)}$$

If AskQ field clicked.

If "number" mode chosen in Quantity Description field then:

$$Bo=QP \quad \text{(Eq. 5)}$$

$$So=QP \quad \text{(Eq. 6)}$$

If "NetPos" mode chosen in Quantity Description field then:

$$Bo=NP \quad \text{(Eq. 7)}$$

$$So=NP \quad \text{(Eq. 8)}$$

Orders can also be sent to market for quantities that vary according to the quantities available in the market; quantities preset by the trader; and which mouse button the trader clicks. Using this feature, a trader can buy or sell all of the bids or asks in the market at or better than a chosen price with one click. The trader could also add or subtract a preset quantity from the quantities outstanding in the market. If the trader clicks in a trading cell—i.e. in the BidQ or AskQ column, he will enter an order in the market. The parameters of the order depend on which mouse button he clicks and what preset values he set.

Using the screen display and values from FIG. **5**, the placement of trade orders using the Mercury display and trading method is now described using examples. A left click on the 18 in the BidQ column **1201** will send an order to market to buy **17** lots (quantity #chosen on the Quantity Description pull down menu cell **1204**) of the commodity at a price of 89 (the corresponding price in the Prc column **1203**). Similarly, a left click on the 20 in the AskQ column **1202** will send an order to market to sell **17** lots at a price of 90.

Using the right mouse button, an order would be sent to market at the price that corresponds to the row clicked for the total quantity of orders in the market that equal or better the price in that row plus the quantity in the R field **1205**. Thus, a right click in the AskQ column **1202** in the 87 price row will send a sell order to market at a price of 87 and a quantity of 150. 150 is the sum of all the quantities 30, 97, 18 and 5. 30, 97 and 18 are all of the quantities in the market that would meet or better the trader's sell order price of 87. These quantities are displayed in the BidQ column **1201** because this column represents the orders outstanding in the market to purchase the commodity at each corresponding price. The quantity 5 is the quantity pre-set in the R field **1205**.

Similarly, a right click in the BidQ column **1201** at the same price level of 87 would send a buy limit order to market for a quantity of 5 at a price of 87. The quantity is determined in the game manner as above. In this example, though, there are no orders in the market that equal or better the chosen price—there are no quantities in the AskQ column **1202** that equal or better this price. Therefore, the sum of the equal or better quantities is zero ("0"). The total order entered by the trader will be the value in the R field, which is 5.

An order entered with the left mouse button and the "Offset" option chosen in the quantity description field **1204**

will be calculated in the same way as above, but the quantity in the L field **1206** will be added instead of the quantity in the R field **1205**. Thus, a left click in the BidQ column **1201** in the 92 price row will send a buy order to market at a price of 92 and a quantity of 96. 96 is the sum of all the quantities 45, 28, 20 and 3. 45, 28 and 20 are all quantities in the market that would meet or better the trader's buy order price of 92. These quantities are displayed in the AskQ column **1202** because this column represents the orders outstanding in the market to sell the commodity at each corresponding price. The quantity 3 is the quantity pre-set in the L field **1206**.

The values in the L or R fields may be negative numbers. This would effectively decrease the total quantity sent to market. In other words, in the example of a right click in the AskQ column **1202** in the 87 price row, if the R field was −5, the total quantity sent to market would be 140 (30+97+18+(−5)).

If a trader chose the "NetPos" option in the quantity description field **1204**, a right click would still work as explained above. A left click would enter an order with a price corresponding to the price row clicked and a quantity equal to the current Net position of the trader. The Net position of the trader is the trader's current position on the chosen contract. In other words, if the trader has bought 10 more contracts than he has sold, this value would be 10. NetPos would not affect the quantity of an order sent with a right click.

If the trader chose a number value in the quantity description, a left click would send an order to market for the current quantity chosen by the trader. The default value of the current quantity will be the number entered in the quantity description field, but it could be changed by adjusting the figure in the current quantity field **1204**.

This embodiment of the invention also allows a trader to delete all of his working trades with a single click of either the right or left mouse button anywhere in the last traded quantity (LTQ) column **1207**. This allows a trader to exit the market immediately. Traders will use this feature when they are losing money and want to stop the losses from pilling up. Traders may also use this feature to quickly exit the market upon making a desired profit. The invention also allows a trader to delete all of his. orders from the market at a particular price level. A click with either mouse button in the Entered/Working (E/W) column **1208** will delete all working orders in the cell that was clicked. Thus, if a trader believes that previously sent orders at a particular price that have not been filled would be poor trades, he can delete these orders with a single click.

The process for placing trade orders using the Mercury display and trading method of the present invention as described above is shown in the flowchart of FIG. **6**. First, in step **1301**, the trader has the Mercury display on the trading terminal screen showing the market for a given commodity. In step **1302**, the parameters are set in the appropriate fields, such as the L and R fields and the Current Quantity, NetPos or Offset fields from the pull down menu. In step **1303**, the mouse pointer is positioned and clicked over a cell in the Mercury display by the trader. In step **1304**, the system determines whether the cell clicked is a tradable cell (i.e. in the AskQ column or BidQ column). If not, then in step **1305**, no trade order is created or sent and, rather, other quantities are adjusted or functions are performed based upon the cell selected. Otherwise, in step **1306**, the system determines whether it was the left or the right button of the mouse that was clicked. If it was the right, then in step **1307**, the system will use the quantity in the R field when it determines the total quantity of the order in step **1310**. If the left button was clicked, then in step **1308**, the system determines which quantity description was chosen: Offset, NetPos or an actual number.

If Offset was chosen, then the system, in step **1309**, will use the quantity in the L field when it determines the total quantity of the. order in step **1310**. If NetPos was chosen, then the system, in step **1312**, will determine that the total quantity for the trade order will be current NetPos value, i.e. the net position of the trader in the given commodity. If an actual number was used as the quantity description, then, in step **1311**, the system will determine that the total quantity for the trade order will be the current quantity entered. In step **1310**, the system will determine that the total quantity for the trade order will be the value of the R field (if step **1307** was taken) or the value of the L field (if step **1309** was taken) plus all quantities in the market for prices better than or equal to the price in the row clicked. This will add up the quantities for each order in, the market that will fill the order being entered by the trader (plus the L or R value).

After either steps **1310**, **1311** or **1312**, the system, in step **1313**, determines which column was clicked, BidQ or AskQ. If AskQ was clicked, then, in step **1314**, the system sends a sell limit order to the market at the price corresponding to the row for the total quantity as already determined. If BidQ was clicked, then, in-step **1315**, the system sends a buy limit order to the market at the price corresponding to the row for the total quantity as already determined.

It should be understood that the above description of the invention and specific examples, while indicating preferred embodiments of the present invention, are given by way of illustration and not limitation. Many changes and modifications within the scope of the present invention may be made without departing from the spirit thereof, and the present invention includes all such changes and modifications.

We claim:

1. A method for displaying market information relating to and facilitating trading of a commodity being traded in an electronic exchange having an inside market with a highest bid price and a lowest ask price on a graphical user interface, the method comprising:

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 price level along a common static price axis, the first indicator representing quantity associated with at least one order to buy the commodity at the highest bid price currently available in the market;

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 price level along the common static price 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;

displaying the bid and ask display regions in relation to fixed price levels positioned along the common static price axis such that when the inside market changes, the price levels along the common static price 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 common static price axis;

displaying an order entry region comprising a plurality of locations for receiving commands to send trade orders, each location corresponding to a price level along the common static price 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 commodity and sending the trade order to the electronic exchange.

2. The method of claim 1 wherein the bid and ask display regions and the order entry region comprise columns with a plurality of cells that are displayed as a grid such that the cells of each column are aligned.

3. The method of claim 1 wherein the bid and ask display regions and the order entry region are oriented vertically.

4. The method of claim 1 wherein the bid and ask display regions and the order entry region are oriented horizontally.

5. The method of claim 1 wherein one of the plurality of locations of bid display region comprises a blank region in which there is no first indicator displayed.

6. The method of claim 1 wherein one of the plurality of locations of the ask display region comprises a blank region in which there is no first indicator displayed.

7. The method of claim 1 comprising the step of displaying at least a portion of the common static price axis in a price display region.

8. The method of claim 7 wherein the bid display region, the ask display region, the order entry region and the price display region comprise columns with a plurality of cells that are displayed as a grid such that the cells of each column are aligned.

9. The method of claim 7 wherein the bid display region, the ask display region, the order entry region and the price display region are oriented vertically.

10. The method of claim 7 wherein the bid display region, the ask display region, the order entry region and the price display region are oriented horizontally.

11. The method of claim 1 further comprising the steps of:

dynamically displaying a third indicator at one of the plurality of locations in the bid display region, the third indicator representing quantity associated with at least one order to buy the commodity at a price different than the highest bid price currently available in the market; and

dynamically displaying a fourth indicator at one of the plurality of locations in the ask display region, the fourth indicator representing quantity associated with at least one order to sell the commodity at a price different than the lowest ask price currently available in the market.

12. The method of claim 11 wherein a location of the plurality of locations of the bid display region comprises a blank region in which there is no first or third indicator displayed.

13. The method of claim 1 wherein a location of the plurality of locations of the ask display region comprises a blank region in which there is no second or fourth indicator displayed.

14. The method of claim 1 wherein the order entry region comprises:

a bid order entry region comprising a plurality of locations for receiving commands to send buy orders, each location corresponding to a price level along the common static price axis; and

an ask order entry region comprising a plurality of locations for receiving commands to send sell orders, each location corresponding to a price level along the common static price axis.

15. The method of claim 14 wherein the bid order entry region overlaps with the bid display region and the ask order entry region overlaps with the ask display region.

16. The method of claim 1 further comprising dynamically displaying an entered order indicator in association with the price levels arranged along the common static price axis.

17. The method of claim 16 wherein the entered order indicator is displayed in an entered order region.

18. The method of claim 1 further comprising dynamically displaying a last trade indicator in association with the common static price axis.

19. The method of claim 18 wherein the last trade indicator is displayed in a last trade region.

20. The method of claim 1 further comprising the steps of:

displaying the first indicator at a first location associated with a first price level on the common static price axis at a first time; and

displaying the first indicator at a second location associated with a different price level on the common static price axis at a second time subsequent to the first time.

21. The method of claim 1 further comprising the steps of:

displaying the second indicator at a first location associated with a first price level on the common static price axis at a first time; and

displaying the second indicator at a second location associated with a different price level on the common static price axis at a second time subsequent to the first time.

22. The method of claim 1 further comprising the steps of:

displaying the first indicator at a first location associated with a particular price level on the common static price axis; and

repositioning the common static price axis such that the first indicator is displayed at a second location associated with the particular price level on the common static price axis.

23. The method of claim 1 further comprising the steps of:

displaying the second indicator at a first location associated with a particular price level on the common static price axis; and

repositioning the common static price axis such that the second indicator is displayed at a second location associated with the particular price level on the common static price axis.

24. The method of claim 1 wherein the bid and ask display regions are displayed in different colors.

25. The method of claim 1 wherein the first and second indicators are displayed in different colors.

26. The method of claim 1 wherein the bid and ask display regions are displayed in a window further comprising centering the display of the first and second indicators in the window upon receipt of a centering instruction.

27. A computer readable medium having program code recorded thereon for execution on a computer for displaying market information relating to and facilitating trading of a commodity being traded in an electronic exchange having an inside market with a highest bid price and a lowest ask price on a graphical user interface, the program code causing a machine to perform the following method steps:

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 price level along a common static price axis, the first indicator representing quantity associated with at least one order to buy the commodity at the highest bid price currently available in the market;

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 the price level along the common Static price 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;

displaying the bid and ask display regions in relation to fixed price levels positioned along the common static price axis such that when the inside market changes, the price levels along the common static price 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 common static price axis;

displaying an order entry region comprising a plurality of locations for receiving commands to send trade orders, each location corresponding to a price level along the common static price 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 commodity and sending the trade order to the electronic exchange.

28. The method of claim **11** wherein the first and third indicators are displayed in locations of the bid display region that are arranged along an axis which is parallel to the common static price axis.

29. The method of claim **11** wherein the second and fourth indicators are displayed in locations of the ask display region that are arranged along an axis which is parallel to the common static price axis.

30. The method of claim **11** comprising the steps of:

displaying the first indicator at a first location associated with a first price level on the common static price axis at a first time; and

displaying the first indicator at a second location associated with a different price level on the common static price axis at a second time subsequent to the first time.

31. The method of claim **30** wherein the third and fourth indicators remain in the same location in the bid and ask display regions, respectively, before and after the first indicator is displayed at the second location.

32. The method of claim **31** wherein each location of the bid display region corresponds to a different price level along the common static price axis and each location of the ask display region corresponds to a different price level along the common static price.

33. The method of claim **11** comprising the steps of:

displaying the second indicator at a first location associated with a first price level on the common static price axis at a first time; and

displaying the second indicator at a second location associated with a different price level on the common static price axis at a second time subsequent to the first time.

34. The method of claim **33** wherein the third and fourth indicators remain in the same location in the bid an ask display regions, respectively, before and after the second indicator is displayed at the second location.

35. The method of claim **34** wherein each location of the bid display region corresponds to a different price level along the common static price axis and each location of the ask display region corresponds to a different price level along the common static price.

36. The method of claim **1** wherein the bid and ask display regions are displayed separately.

37. The method of claim **1** wherein the first and second indicators are based on an exchange order book and wherein the price levels along the common static price axis do not move in response to the addition of a price to the exchange order book, the additional price comprising a price for which there is a corresponding displayed location in at least one of the bid and ask display regions.

38. The method of claim **37** wherein the price levels along the common static price axis do not move in response to the removal of a price from the exchange order book, the removed price comprising a price for which there is a corresponding displayed location in at least one of the bid and ask display regions.

39. The method of claim **1** wherein the first and second indicators are based on an exchange order book and the price levels along the common static price axis never move in response to a price change in the exchange order book relating to a price which corresponds to a displayed location in at least one of the bid and ask display regions.

40. The method of claim **1** the plurality of parameters comprises a price and type of order.

* * * * *

UNITED STATES PATENT AND TRADEMARK OFFICE

CERTIFICATE OF CORRECTION

PATENT NO. : 6,766,304 B2 Page 1 of 1
DATED : July 20, 2004
INVENTOR(S) : Gary Allan Kemp II, Jens-Uwe Schluetter and Harris Brumfield

It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

Title page,
Item [56], **References Cited,** U.S. PATENT DOCUMENTS, add the following:

-- 4,903,201	A	2/1990	Wagner
5,101,353	A	3/1992	Lupien et al.
5,946,667	A	8/1999	Tull, Jr., et al.
6,035,287	A	3/2000	Stallaert et al.
2002/0138401	A1	9/2002	Allen et al. --

FOREIGN PATENT DOCUMENTS, add the following:

-- WO	WO 95/35005	9/1995 --

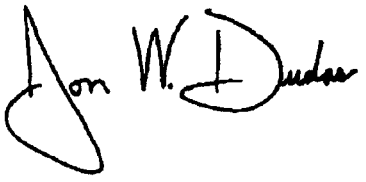
Column 14,
Line 64, the word "Static" should be -- static --.

Column 15,
Line 26, after "claim 11" add the word -- further --.

Column 16,
Line 1, after "claim 11" add the word -- further --.
Line 10, the word "an" should be -- and --.
Line 40, after "claim 1" add -- wherein --.

Signed and Sealed this

Sixteenth Day of November, 2004



JON W. DUDAS
Director of the United States Patent and Trademark Office