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~~ Embodiments of the present invention ~~which~~ may 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, may increases the likelihood that the trader will have orders filled at desirable prices and quantities.

The "Mercury" display and trading method in embodiments of the present invention may 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 may allows the trader to trade quickly and efficiently.

Specifically, embodiments of the present invention ~~is~~ are 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.

According to a first aspect of the present invention, there is provided a method for repositioning market data related to a commodity on a graphical user interface, the method comprising: receiving, by a computing device, an inside market with a highest bid price and a lowest ask price for a commodity based on market information received from an electronic exchange; dynamically displaying, by the computing device, a first indicator in one of a plurality of locations in a window, each location of the plurality of locations corresponding to a price level along a price axis, the first indicator corresponding to the highest bid price, wherein the first indicator is moved to a different location of the first plurality of locations relative to the price axis in response to determining a new highest bid price for the commodity based on new market information from the electronic exchange; dynamically displaying, by the computing device, a second indicator in one of the plurality of locations in the window, the second indicator corresponding to the lowest ask price, wherein the second indicator is moved to a different location of the plurality of locations relative to the price axis in response to determining a new lowest ask price for the commodity based on new market information from the electronic exchange; receiving, by the computing device, new market information from the electronic exchange, wherein the new market information includes at least one of a new highest bid price and a new lowest ask price, such that when the first indicator and the second indicator are updated based on the new market information, the

inside market is not substantially centered in the window; receiving, by the computing device, a manual repositioning command from a user input device; and responsively, repositioning, by the computing device, the price axis such that the inside market is displayed substantially at the center of the window.

According to a second aspect of the present invention, there is provided a computer readable medium having stored therein instructions executable by a processor, wherein the instructions are executable to: receive an inside market with a highest bid price and a lowest ask price for a commodity based on market information received from an electronic exchange; dynamically display a first indicator in one of a plurality of locations in a window, each location of the plurality of locations corresponding to a price level along a price axis, the first indicator corresponding to the highest bid price, wherein the first indicator is moved to a different location of the first plurality of locations relative to the price axis in response to determining a new highest bid price for the commodity based on new market information from the electronic exchange; dynamically display a second indicator in one of the plurality of locations in the window, the second indicator corresponding to the lowest ask price, wherein the second indicator is moved to a different location of the plurality of locations relative to the price axis in response to determining a new lowest ask price for the commodity based on new market information from the electronic exchange; receive new market information from the electronic exchange, wherein the new market information includes at least one of a new highest bid price and a new lowest ask price, such that when the first indicator and the second indicator are updated based on the new market information, the inside market is not substantially centered in the window; receive a manual repositioning command from a user input device; and responsively, reposition the price axis such that the inside market is displayed substantially at the center of the window.

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 values when compared to Figure 3;

CLAIMS:

1. A method for repositioning market data related to a commodity on a graphical user interface, the method comprising:

receiving an inside market with a highest bid price and a lowest ask price for a commodity based on market information received from an electronic exchange;

dynamically displaying a first indicator in one of a plurality of locations in a window, each location of the plurality of locations corresponding to a price level along a price axis, the first indicator corresponding to the highest bid price, wherein the first indicator is moved to a different location of the first plurality of locations relative to the price axis in response to determining a new highest bid price for the commodity based on new market information from the electronic exchange;

dynamically displaying a second indicator in one of the plurality of locations in the window, the second indicator corresponding to the lowest ask price, wherein the second indicator is moved to a different location of the plurality of locations relative to the price axis in response to determining a new lowest ask price for the commodity based on new market information from the electronic exchange;

receiving new market information from the electronic exchange, wherein the new market information includes at least one of a new highest bid price and a new lowest ask price, such that when the first indicator and the second indicator are updated based on the new market information, the inside market is not substantially centered in the window;

receiving a manual repositioning command from a user input device; and responsively,

repositioning the price axis such that the inside market is displayed substantially at the center of the window.

2. The method of claim 1, further comprising:

displaying the first and second indicators substantially at the center of the window responsive to the manual repositioning command.

3. The method of claim 1, further comprising:

displaying the first indicator in a bid display region comprising a first plurality of locations, each location of the first plurality of locations corresponding to a price level along the price axis; and

displaying the second indicator in an ask display region comprising a second plurality of locations, each location of the second plurality of locations corresponding to a price level along the price axis.

4. The method of any one of claims 1 to 3, wherein the first indicator represents a quantity associated with at least one order to buy the commodity at the highest bid price, and wherein the second indicator represents a quantity associated with at least one order to sell the commodity at the lowest ask price.

5. The method of any one of claims 1 to 4, wherein the plurality of locations are displayed in a grid.

6. The method of any one of claims 1 to 5, wherein the manual repositioning command comprises a single action of the user input device.

7. The method of claim 6, wherein the single action consists of a single click of the user input device.

8. The method of any one of claims 1 to 7, further comprising:

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

selecting a plurality of trade order parameters for a trade order and sending the trade order to the electronic exchange in response to receiving commands based on user actions consisting of: (1) placing a cursor associated with the user input device over a particular location of the order entry region and (2) selecting the particular location through a single action of the user input device.

9. The method of claim 8, wherein the single action of the user input device consists of a single click of the user input device.

10. The method of claim 8 or 9, wherein selecting the plurality of trade order parameters comprises selecting a price corresponding to the particular location.

11. The method of claim 8 or 9, wherein selecting the plurality of trade order parameters comprises selecting whether the trade order is a buy or a sell.

12. The method of any one of claims 8 to 11, wherein the order entry region comprises:

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

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

13. The method of any one of claims 1 to 12, further comprising:

displaying a working order indicator in one of the plurality of locations in the window, wherein the working order indicator represents a trade order to buy or sell the commodity pending at the electronic exchange at a price corresponding to the one of the plurality of locations associated with the working order indicator.

14. The method of claim 13, further comprising:

receiving a command to delete the trade order pending at the electronic exchange responsive to selecting the working order indicator through a single action of the user input device with a pointer of the user input device positioned over the working order indicator.

15. The method of claim 14, wherein the single action that selects the working order indicator consists of a single click of the user input device.

16. The method of any one of claims 1 to 15, further comprising:

displaying price levels along the price axis.

17. A computer readable medium having stored therein instructions executable by a processor, wherein the instructions are executable to:

receive an inside market with a highest bid price and a lowest ask price for a commodity based on market information received from an electronic exchange;

dynamically display a first indicator in one of a plurality of locations in a window, each location of the plurality of locations corresponding to a price level along a price axis, the first indicator corresponding to the highest bid price, wherein the first indicator is moved to a different location of the first plurality of locations relative to the price axis in response to determining a new highest bid price for the commodity based on new market information from the electronic exchange;

dynamically display a second indicator in one of the plurality of locations in the window, the second indicator corresponding to the lowest ask price, wherein the second indicator is moved to a different location of the plurality of locations relative to the price axis in response to determining a new lowest ask price for the commodity based on new market information from the electronic exchange;

receive new market information from the electronic exchange, wherein the new market information includes at least one of a new highest bid price and a new lowest ask price, such that when the first indicator and the second indicator are updated based on the new market information, the inside market is not substantially centered in the window;

receive a manual repositioning command from a user input device; and responsively,

reposition the price axis such that the inside market is displayed substantially at the center of the window.

18. The computer readable medium of claim 17, wherein the instructions are further executable to:

display the first and second indicators substantially at the center of the window responsive to the manual repositioning command.

19. The computer readable medium of claim 17, wherein the instructions are further executable to:

display the first indicator in a bid display region comprising a first plurality of locations, each location of the first plurality of locations corresponding to a price level along the price axis; and

display the second indicator in an ask display region comprising a second plurality of locations, each location of the second plurality of locations corresponding to a price level along the price axis.

20. The computer readable medium of any one of claims 17 to 19, wherein the first indicator represents a quantity associated with at least one order to buy the commodity at the highest bid price, and wherein the second indicator represents a quantity associated with at least one order to sell the commodity at the lowest ask price.

21. The computer readable medium of any one of claims 17 to 20, wherein the plurality of locations are displayed in a grid.

22. The computer readable medium of any one of claims 17 to 21, wherein the manual repositioning command comprises a single action of the user input device.

23. The computer readable medium of claim 22, wherein the single action consists of a single click of the user input device.

24. The computer readable medium of any one of claims 17 to 23, wherein the instructions are further executable to:

display an order entry region comprising a plurality of locations for receiving commands to send trade orders, each location in the order entry region corresponding to a price level along the price axis; and

select a plurality of trade order parameters for a trade order and send the trade order to the electronic exchange in response to receiving commands based on user actions consisting of: (1) placing a cursor associated with the user input device over a particular location of the order

entry region and (2) selecting the particular location through a single action of the user input device.

25. The computer readable medium of claim 24, wherein the single action of the user input device consists of a single click of the user input device.

26. The computer readable medium of claim 24 or 25, wherein selecting the plurality of trade order parameters comprises selecting a price corresponding to the particular location.

27. The computer readable medium of claim 24 or 25, wherein selecting the plurality of trade order parameters comprises selecting whether the trade order is a buy or a sell.

28. The computer readable medium of any one of claims 24 to 27, wherein the order entry region comprises:

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

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

29. The computer readable medium of any one of claims 17 to 28, wherein the instructions are further executable to:

display a working order indicator in one of the plurality of locations in the window, wherein the working order indicator represents a trade order to buy or sell the commodity pending at the electronic exchange at a price corresponding to the one of the plurality of locations associated with the working order indicator.

30. The computer readable medium of claim 29, wherein the instructions are further executable to:

receive a command to delete the trade order pending at the electronic exchange responsive to selecting the working order indicator through a single action of the user input device with a pointer of the user input device positioned over the working order indicator.

31. The computer readable medium of claim 30, wherein the single action that selects the working order indicator consists of a single click of the user input device.

32. The computer readable medium of any one of claims 17 to 31, wherein the instructions are further executable to:

display price levels along the price axis.

CLAIMS:

1. A method for repositioning market data related to a commodity on a graphical user interface, the method comprising: receiving, by a computing device, an inside market with a highest bid price and a lowest ask price for a commodity based on market information received from an electronic exchange; dynamically displaying, by the computing device, a first indicator in one of a plurality of locations in a window, each location of the plurality of locations corresponding to a price level along a price axis, the first indicator corresponding to the highest bid price, wherein the first indicator is moved to a different location of the first plurality of locations relative to the price axis in response to determining a new highest bid price for the commodity based on new market information from the electronic exchange; dynamically displaying, by the computing device, a second indicator in one of the plurality of locations in the window, the second indicator corresponding to the lowest ask price, wherein the second indicator is moved to a different location of the plurality of locations relative to the price axis in response to determining a new lowest ask price for the commodity based on new market information from the electronic exchange; receiving, by the computing device, new market information from the electronic exchange, wherein the new market information includes at least one of a new highest bid price and a new lowest ask price, such that when the first indicator and the second indicator are updated based on the new market information, the inside market is not substantially centered in the window; receiving, by the computing device, a manual repositioning command from a user input device; and responsively, repositioning, by the computing device, the price axis such that the inside market is displayed substantially at the center of the window.

2. The method of claim 1, further comprising: displaying the first and second indicators substantially at the center of the window responsive to the manual repositioning command.

3. The method of claim 1, further comprising: displaying the first indicator in a bid display region comprising a first plurality of locations, each location of the first plurality of locations corresponding to a price level along the price axis; and displaying the second indicator in an ask display region comprising a second plurality of locations, each location of the second plurality of locations corresponding to a price level along the price axis.

4. The method of claim 1, wherein the first indicator represents a quantity associated with at least one order to buy the commodity at the highest bid price, and wherein the second indicator represents a quantity associated with at least one order to sell the commodity at the lowest ask price.

5. The method of claim 1, wherein the plurality of locations are displayed in a grid.

6. The method of claim 1, wherein the manual repositioning command comprises a single action of the user input device.

7. The method of claim 6, wherein the single action consists of a single click of the user input device.

8. The method of claim 1, further comprising: displaying an order entry region comprising a plurality of locations for receiving commands to send trade orders, each location in the order entry region corresponding to a price level along the price axis; and selecting a plurality of

trade order parameters for a trade order and sending the trade order to the electronic exchange in response to receiving commands based on user actions consisting of: (1) placing a cursor associated with the user input device over a particular location of the order entry region and (2) selecting the particular location through a single action of the user input device.

9. The method of claim 8, wherein the single action of the user input device consists of a single click of the user input device.

10. The method of claim 8, wherein selecting the plurality of trade order parameters comprises selecting a price corresponding to the particular location.

11. The method of claim 8, wherein selecting the plurality of trade order parameters comprises selecting whether the trade order is a buy or a sell.

12. The method of claim 8, wherein the order entry region comprises: a bid order entry region comprising a plurality of locations for receiving commands to send buy trade orders, each location in the bid order entry region corresponding to a price level along the price axis; and an ask order entry region comprising a plurality of locations for receiving commands to send sell trade orders, each location in the ask order entry region corresponding to a price level along the price axis.

13. The method of claim 1, further comprising: displaying a working order indicator in one of the plurality of locations in the window, wherein the working order indicator represents a trade order to buy or sell the commodity pending at the electronic exchange at a price corresponding to the one of the plurality of locations associated with the working order

indicator.

14. The method of claim 13, further comprising: receiving a command to delete the trade order pending at the electronic exchange responsive to selecting the working order indicator through a single action of the user input device with a pointer of the user input device positioned over the working order indicator.

15. The method of claim 14, wherein the single action that selects the working order indicator consists of a single click of the user input device.

16. The method of claim 1, further comprising: displaying price levels along the price axis.

17. A computer readable medium having stored therein instructions executable by a processor, wherein the instructions are executable to: receive an inside market with a highest bid price and a lowest ask price for a commodity based on market information received from an electronic exchange; dynamically display a first indicator in one of a plurality of locations in a window, each location of the plurality of locations corresponding to a price level along a price axis, the first indicator corresponding to the highest bid price, wherein the first indicator is moved to a different location of the first plurality of locations relative to the price axis in response to determining a new highest bid price for the commodity based on new market information from the electronic exchange; dynamically display a second indicator in one of the plurality of locations in the window, the second indicator corresponding to the lowest ask price, wherein the second indicator is moved to a different location of the plurality of locations relative to the price axis in response to determining a new lowest ask price for the commodity based on new market information from the electronic exchange; receive new

market information from the electronic exchange, wherein the new market information includes at least one of a new highest bid price and a new lowest ask price, such that when the first indicator and the second indicator are updated based on the new market information, the inside market is not substantially centered in the window; receive a manual repositioning command from a user input device; and responsively, reposition the price axis such that the inside market is displayed substantially at the center of the window.

18. The computer readable medium of claim 17, wherein the instructions are further executable to: display the first and second indicators substantially at the center of the window responsive to the manual repositioning command.

19. The computer readable medium of claim 17, wherein the instructions are further executable to: display the first indicator in a bid display region comprising a first plurality of locations, each location of the first plurality of locations corresponding to a price level along the price axis; and display the second indicator in an ask display region comprising a second plurality of locations, each location of the second plurality of locations corresponding to a price level along the price axis.

20. The computer readable medium of claim 17, wherein the first indicator represents a quantity associated with at least one order to buy the commodity at the highest bid price, and wherein the second indicator represents a quantity associated with at least one order to sell the commodity at the lowest ask price.

21. The computer readable medium of claim 17, wherein the plurality of locations are displayed in a grid.

22. The computer readable medium of claim 17, wherein the manual repositioning command comprises a single action of the user input device.

23. The computer readable medium of claim 22, wherein the single action consists of a single click of the user input device.

24. The computer readable medium of claim 17, wherein the instructions are further executable to: display an order entry region comprising a plurality of locations for receiving commands to send trade orders, each location in the order entry region corresponding to a price level along the price axis; and select a plurality of trade order parameters for a trade order and send the trade order to the electronic exchange in response to receiving commands based on user actions consisting of: (1) placing a cursor associated with the user input device over a particular location of the order entry region and (2) selecting the particular location through a single action of the user input device.

25. The computer readable medium of claim 24, wherein the single action of the user input device consists of a single click of the user input device.

26. The computer readable medium of claim 25, wherein selecting the plurality of trade order parameters comprises selecting a price corresponding to the particular location.

27. The computer readable medium of claim 24, wherein selecting the plurality of trade order parameters comprises selecting whether the trade order is a buy or a sell.

28. The computer readable medium of claim 24, wherein the order entry region comprises: a

bid order entry region comprising a plurality of locations for receiving commands to send buy trade orders, each location in the bid order entry region corresponding to a price level along the price axis; and an ask order entry region comprising a plurality of locations for receiving commands to send sell trade orders, each location in the ask order entry region corresponding to a price level along the price axis.

29. The computer readable medium of claim 17, wherein the instructions are further executable to: display a working order indicator in one of the plurality of locations in the window, wherein the working order indicator represents a trade order to buy or sell the commodity pending at the electronic exchange at a price corresponding to the one of the plurality of locations associated with the working order indicator.

30. The computer readable medium of claim 29, wherein the instructions are further executable to: receive a command to delete the trade order pending at the electronic exchange responsive to selecting the working order indicator through a single action of the user input device with a pointer of the user input device positioned over the working order indicator.

31. The computer readable medium of claim 30, wherein the single action that selects the working order indicator consists of a single click of the user input device.

32. The computer readable medium of claim 17, wherein the instructions are further executable to: display price levels along the price axis.