



US007685055B2

(12) **United States Patent**
Brumfield et al.

(10) **Patent No.:** **US 7,685,055 B2**
(45) **Date of Patent:** **Mar. 23, 2010**

(54) **SYSTEM AND METHOD FOR AUTOMATIC REPOSITIONING OF MARKET INFORMATION IN A GRAPHICAL USER INTERFACE**

(52) **U.S. Cl.** 705/37; 705/35
(58) **Field of Classification Search** 705/35-45
See application file for complete search history.

(75) Inventors: **Harris Brumfield**, Chicago, IL (US);
Jens-Uwe Schluetter, Evanston, IL (US)

(56) **References Cited**

(73) Assignee: **Trading Technologies International, Inc.**, Chicago, IL (US)

U.S. PATENT DOCUMENTS

(*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 0 days.

4,674,044 A 6/1987 Kalmus
4,750,135 A 6/1988 Boilen
4,903,201 A 2/1990 Wagner
5,038,284 A 8/1991 Kramer

(Continued)

(21) Appl. No.: **11/417,547**

FOREIGN PATENT DOCUMENTS

(22) Filed: **May 3, 2006**

EP 1067471 A1 1/2001

(Continued)

(65) **Prior Publication Data**

US 2006/0265305 A1 Nov. 23, 2006

OTHER PUBLICATIONS

Tokyo Stock Exchange ("TSE"), Publication 1, Sep. 1997.

(Continued)

Related U.S. Application Data

(63) Continuation of application No. 10/403,881, filed on Mar. 31, 2003, which is a continuation of application No. 10/125,894, filed on Apr. 19, 2002, now Pat. No. 7,389,268, which is a continuation-in-part of application No. 09/971,087, filed on Oct. 5, 2001, now Pat. No. 7,127,424, said application No. 10/125,894 is a continuation-in-part of application No. 09/590,692, filed on Jun. 9, 2000, now Pat. No. 6,772,132, and a continuation-in-part of application No. 09/589,751, filed on Jun. 9, 2000, now Pat. No. 6,938,011.

Primary Examiner—Richard C Weisberger

(74) *Attorney, Agent, or Firm*—McDonnell Boehnen Hulbert & Berghoff LLP

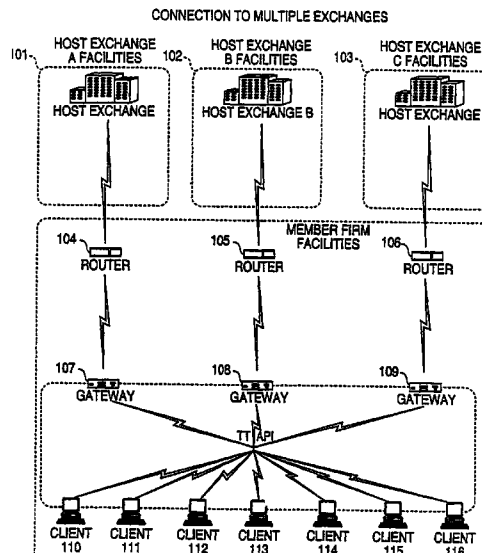
(60) Provisional application No. 60/238,001, filed on Oct. 6, 2000, provisional application No. 60/186,332, filed on Mar. 2, 2000, provisional application No. 60/325,553, filed on Oct. 1, 2001.

(57) **ABSTRACT**

A method for automatically positioning information related to a commodity on a graphical user interface. Market information is displayed on the graphical user interface. The market information may be presented as a number of indicators, corresponding to particular items of interest, that are associated with a static scale. The scale may, for example, represent price. Upon detecting a predetermined condition, the location of the market information is automatically repositioned.

(51) **Int. Cl.**
G06Q 40/00 (2006.01)

19 Claims, 27 Drawing Sheets



U.S. PATENT DOCUMENTS

5,077,665 A 12/1991 Silverman
 5,101,353 A 3/1992 Lupien
 5,136,501 A 8/1992 Silverman
 5,270,922 A 12/1993 Higgins
 5,297,031 A 3/1994 Gutterman
 5,297,032 A 3/1994 Trojan
 5,675,746 A 10/1997 Marshall
 5,689,651 A 11/1997 Lozman
 5,689,652 A 11/1997 Lupien et al.
 5,768,158 A 6/1998 Adler
 5,774,877 A 6/1998 Patterson
 5,774,878 A 6/1998 Marshall
 5,793,301 A 8/1998 Patterson
 5,797,002 A 8/1998 Patterson
 5,845,266 A 12/1998 Lupien
 5,873,071 A 2/1999 Ferstenberg
 5,915,245 A 6/1999 Patterson
 5,924,082 A 7/1999 Silverman
 5,924,083 A 7/1999 Silverman
 5,926,801 A 7/1999 Matsubara
 5,946,667 A 8/1999 Tull
 5,950,177 A 9/1999 Lupien et al.
 5,963,923 A 10/1999 Garber
 6,012,046 A 1/2000 Lupien
 6,014,643 A 1/2000 Minton
 6,035,287 A 3/2000 Stallaert
 6,073,115 A 6/2000 Marshall
 6,098,051 A 8/2000 Lupien
 6,131,087 A 10/2000 Luke
 6,134,535 A 10/2000 Belzberg
 6,161,098 A 12/2000 Wallman
 6,195,647 B1 2/2001 Martyn
 6,272,474 B1 8/2001 Garcia
 6,278,982 B1 8/2001 Korhammer
 6,282,521 B1 8/2001 Howorka
 6,408,282 B1 6/2002 Buist
 6,516,303 B1 2/2003 Wallman
 6,697,099 B2 2/2004 Smith
 6,766,304 B2 7/2004 Kemp et al.
 6,772,132 B1 8/2004 Kemp et al.
 6,826,553 B1 11/2004 DaCosta et al.
 6,839,686 B1 1/2005 Galant
 6,876,981 B1 4/2005 Berckmans
 6,938,011 B1 8/2005 Kemp et al.
 6,993,504 B1 1/2006 Friesen et al.
 7,127,424 B2 10/2006 Kemp, II et al.
 7,155,410 B1 12/2006 Woodmansey
 7,181,424 B1 2/2007 Ketchum et al.
 7,181,425 B1 2/2007 Cha
 7,209,896 B1 4/2007 Serkin et al.
 7,243,083 B2 7/2007 Burns et al.
 2002/0023038 A1 2/2002 Fritsch
 2002/0035534 A1 3/2002 Buist
 2002/0046146 A1 4/2002 Otero et al.
 2002/0046149 A1 4/2002 Otero et al.
 2002/0046151 A1 4/2002 Otero et al.
 2002/0049661 A1 4/2002 Otero et al.
 2002/0055899 A1 5/2002 Williams
 2002/0059129 A1 5/2002 Kemp
 2002/0073017 A1 6/2002 Robertson
 2002/0091611 A1 7/2002 Minton
 2002/0099644 A1 7/2002 Kemp
 2002/0120551 A1 8/2002 Jones
 2002/0138401 A1 9/2002 Allen
 2002/0178096 A1 11/2002 Marshall
 2003/0004852 A1 1/2003 Burns
 2003/0004853 A1 1/2003 Ram
 2003/0009411 A1 1/2003 Ram
 2003/0023536 A1 1/2003 Hollerman et al.

2003/0069834 A1 4/2003 Cutler
 2003/0097325 A1 5/2003 Friesen
 2003/0126065 A1 7/2003 Eng
 2003/0200167 A1 10/2003 Kemp
 2003/0236737 A1 12/2003 Kemp
 2004/0093300 A1 5/2004 Burns
 2004/0103054 A1 5/2004 Singer
 2004/0117292 A1 6/2004 Brumfield
 2005/0262003 A1 11/2005 Brumfield et al.
 2006/0259382 A1 11/2006 Kemp et al.
 2006/0259383 A1 11/2006 Kemp et al.
 2006/0259384 A1 11/2006 Schluetter et al.
 2006/0259404 A1 11/2006 Brumfield
 2006/0259411 A1 11/2006 Burns
 2006/0265303 A1 11/2006 Kemp et al.
 2006/0265304 A1 11/2006 Brumfield et al.
 2006/0271475 A1 11/2006 Brumfield et al.

FOREIGN PATENT DOCUMENTS

WO WO9114231 A1 9/1991
 WO WO95/26005 A1 9/1995
 WO WO9849639 A1 11/1998
 WO WO9919821 A1 4/1999
 WO WO99/30259 A1 6/1999
 WO WO9953424 A1 10/1999
 WO WO00/52619 A1 9/2000
 WO WO00/62187 A2 10/2000
 WO WO00/62187 A3 10/2000
 WO WO 00/64176 10/2000
 WO WO00/65510 A1 11/2000
 WO WO 01/01077 1/2001
 WO WO01/16830 A1 3/2001
 WO WO01/16852 A2 3/2001
 WO WO01/16852 C1 3/2001
 WO WO01/22315 A2 3/2001
 WO WO0122315 A3 3/2001
 WO WO 01/27843 4/2001
 WO WO 01/71557 9/2001
 WO WO0165403 A2 9/2001
 WO WO01/88808 A1 11/2001
 WO WO02/15461 A2 2/2002
 WO WO 02/33621 4/2002
 WO WO 02/33623 4/2002
 WO WO 02/33636 4/2002
 WO WO 02/33637 4/2002
 WO WO0229686 A1 4/2002
 WO WO02/48945 A1 6/2002
 WO WO02/59815 A1 8/2002
 WO WO02/69226 A2 9/2002
 WO WO02/79940 A2 10/2002
 WO WO02/93325 A2 11/2002
 WO WO02103601 A1 12/2002
 WO WO 03/017062 2/2003
 WO WO03090032 A2 10/2003
 WO WO03090032 A3 10/2003

OTHER PUBLICATIONS

Tokyo Stock Exchange, "Publication 2", Aug. 1998.
 Tokyo Stock Exchange, Publication 3, Jul. 31, 2000.
 Tokyo Stock Exchange, Document 1, Jan. 2000.
 English Translation of TSE "Publication 1".
 English Translation of TSE "Publication 2".
 English Translation of TSE "Publication 3".
 English Translation of TSE Document 1.
 REFCO English Translation of TSE "Publication 1".
 REFCO English Translation of TSE "Publication 2".
 REFCO English Translation of TSE "Publication 3".
 USPTO Presentation, NASDAQ, Nov. 8, 2001.
 Kharouf; A Trading Room with a View, Futures, 27, 11—Nov. 1998.
www.tradingtechnologies.com/products/xtrade_full.html (viewed

- Trading Screen, INTEX of Bermuda, circa 1984.
- Weber, Information Technology in the Major International Financial Markets, Apr. 7, 1993.
- Trading Screen, TIFFE Exchange; circa 1989-1990.
- Trading Screen, MEFX Exchange, circa 1990.
- Cavaletti, Order Routing Article, Futures Magazine, Feb. 1997.
- Aurora Article, CBOT, circa 1989.
- One Click Trading Options, Trading Technologies, circa 1998.
- Trading Screen, SWX Exchange, circa 1990.
- Expanding futures and options trading around the world, around the clock, Globex, circa 1989.
- Hansell, The computer that ate Chicago, Institutional Investor, Feb. 1989.
- Globex Report: An update on the CME Global electronic exchange, Feb. 10, 1989.
- NYMEX Access Documents, New York Mercantile Exchange, Feb. 28, 1992.
- CATS Traders' Manual, Toronto Stock Exchange, Sep. 30, 1977.
- Market Watch, Trading Screen, date not available.
- Grummer, Peake, Sellers, Preliminary Feasibility Study, Bermudex Ltd., Nov. 1980.
- Peake, Mendellson, The ABCs of trading on a national market system, Appendix C of Preliminary Feasibility Study, Bermudex Ltd., Sep. 1997.
- Peake, The last 15 meters, Appendix E of Preliminary Feasibility Study, Bermudex Ltd., Jun. 15, 1997.
- Declaration of Brendan Bradley in Case No. 04 C 5312, Nov. 18, 2004.
- Memorandum Opinion Published Feb. 9, 2005, of Judge James B. Moran in Case No. 04 C 5312.
- Search Report issued by the Australian Patent Office for SG 200406082-8.
- NASDAQ Workstation II User Guide, Guide to Enhancements for NASDAQ Workstation II Software Release (Apr. 1998) as viewed on the Internet Achieves <http://web.archive.org/web/20031208041112/nasdaqtrader.com/trader/tradingservices/productservices/userguides/nwliguide.pdf>.
- International Search Report for PCT/US03/12201.
- Office Action issued by the USPTO on Jun. 26, 2007 for U.S. Appl. No. 11/417,871.
- Pending U.S. Appl. No. 10/403,757, filed Mar. 3, 2003.
- Pending U.S. Appl. No. 10/125,894, filed Apr. 19, 2002.
- Pending U.S. Appl. No. 10/403,881, filed Mar. 31, 2003.
- MLT Trade Vizion, <http://www.trade-vizion.com/modules.php?name=Products>—Jul. 29, 2004.
- Office Action issued by the UPSTO on Mar. 23, 2007 for U.S. Appl. No. 10/125,894.

FIG. 1

CONNECTION TO MULTIPLE EXCHANGES

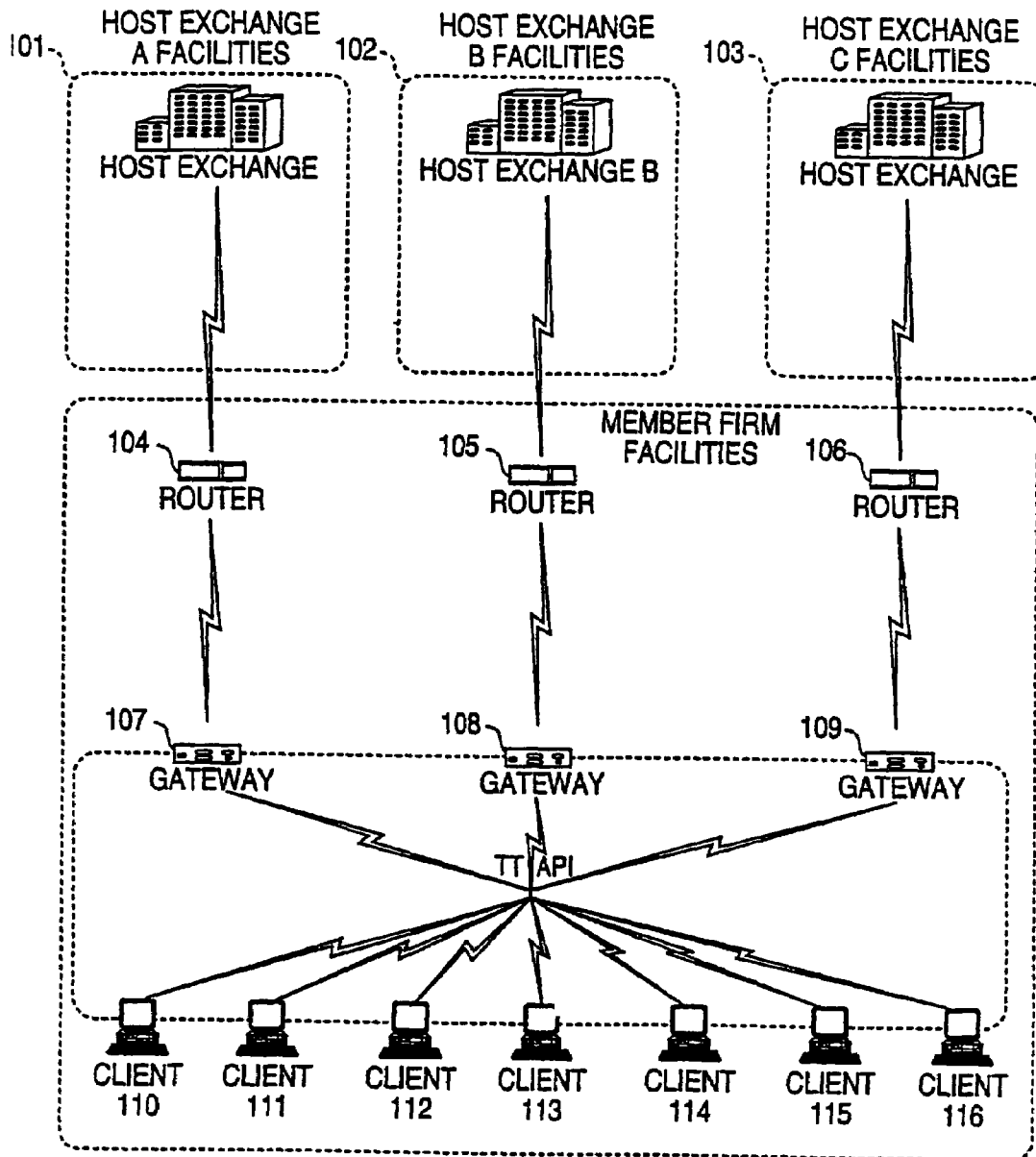


FIG. 2

	201	202	203	204	205	206	207	208	
	Contract	Depth	BidQty	BidPrc	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			

Explore Litigation Insights

Docket Alarm provides insights to develop a more informed litigation strategy and the peace of mind of knowing you're on top of things.

Real-Time Litigation Alerts



Keep your litigation team up-to-date with **real-time alerts** and advanced team management tools built for the enterprise, all while greatly reducing PACER spend.

Our comprehensive service means we can handle Federal, State, and Administrative courts across the country.

Advanced Docket Research



With over 230 million records, Docket Alarm's cloud-native docket research platform finds what other services can't. Coverage includes Federal, State, plus PTAB, TTAB, ITC and NLRB decisions, all in one place.

Identify arguments that have been successful in the past with full text, pinpoint searching. Link to case law cited within any court document via Fastcase.

Analytics At Your Fingertips



Learn what happened the last time a particular judge, opposing counsel or company faced cases similar to yours.

Advanced out-of-the-box PTAB and TTAB analytics are always at your fingertips.

API

Docket Alarm offers a powerful API (application programming interface) to developers that want to integrate case filings into their apps.

LAW FIRMS

Build custom dashboards for your attorneys and clients with live data direct from the court.

Automate many repetitive legal tasks like conflict checks, document management, and marketing.

FINANCIAL INSTITUTIONS

Litigation and bankruptcy checks for companies and debtors.

E-DISCOVERY AND LEGAL VENDORS

Sync your system to PACER to automate legal marketing.