

US006772132B1

(10) Patent No.:

J

(45) Date of Patent:

(12) United States Patent

Kemp, II et al.

(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 245 days.
- (21) Appl. No.: **09/590,692**
- (22) Filed: Jun. 9, 2000

Related U.S. Application Data

- (60) Provisional application No. 60/186,322, filed on Mar. 2, 2000.
- (51) Int. Cl.⁷ G06F 17/60
- (58) Field of Search 705/35, 36, 37, 705/10, 14; 345/814

(56) **References Cited**

DOCKF

RM

U.S. PATENT DOCUMENTS

4,674,044 A	6/1987	Kalmus et al 364/408
4,750,135 A	6/1988	Boilen 364/514
4,903,201 A	2/1990	Wagner
5,038,284 A	8/1991	Kramer 364/408
5,077,665 A	12/1991	Silverman et al.
5,101,353 A	3/1992	Lupien et al.
5,136,501 A	8/1992	Silverman et al.
5,270,922 A	12/1993	Higgins 364/408
5,297,031 A	3/1994	Gutterman et al 364/408
5,297,032 A	3/1994	Trojan et al 364/408
5,689,651 A	11/1997	Lozman 395/237
5,774,877 A	6/1998	Patterson, Jr. et al 705/35
5,793,301 A	8/1998	Patterson, Jr. et al 340/825.26
5,797,002 A	8/1998	Patterson, Jr. et al 395/611

5,845,266 A	12/1998	Lupien et al 705/37
5,915,245 A	6/1999	Patterson, Jr. et al 705/35

5,924,082 A 7/1999 Silverman et al. 705/37

US 6,772,132 B1

Aug. 3, 2004

(List continued on next page.)

FOREIGN PATENT DOCUMENTS

IP	WO 99/30259	* 6/1999
WO	WO 95/26005 A1	9/1995
WO	WO 98/49639	11/1998
WO	WO 99/19821	4/1999
WO	WO 99/30259 A1	6/1999
WO	WO 99/53424	10/1999
WO	WO 00/52619	9/2000
WO	WO 00/62187	10/2000
WO	WO 00/65510	11/2000
WO	WO 01/16830	3/2001
WO	WO 01/16852	3/2001
WO	WO 01/22315	3/2001
WO	WO 01/88808	11/2001

OTHER PUBLICATIONS

www.tradingtechnologies.com/products/xtrade_full.html (viewed May 22, 2001), <Jun. 9, 2000.*

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.

56 Claims, 6 Drawing Sheets



U.S. PATENT DOCUMENTS

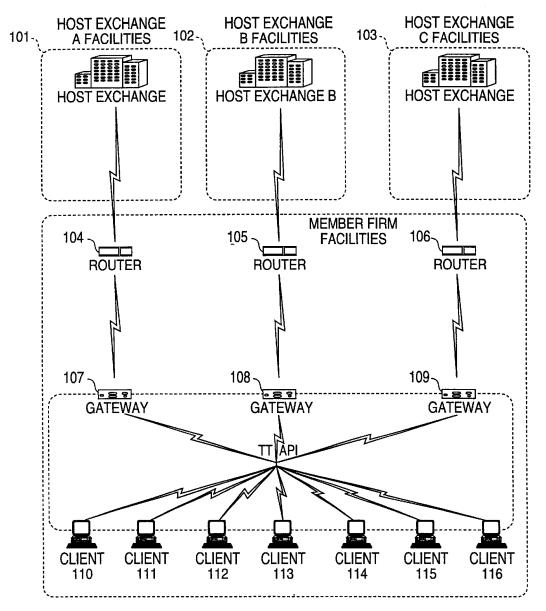
5,924,083 A	7/1999	Silverman et al 705/37
5,946,667 A	8/1999	Tull, Jr. et al.
5,963,923 A	10/1999	Garber 705/37
6,012,046 A	1/2000	Lupien et al 705/37
6,014,643 A	1/2000	Minton 705/37
6,035,287 A	3/2000	Stallaert et al.
6,098,051 A	8/2000	Lupien et al 705/37
6,131,087 A	10/2000	Luke et al 705/26
6,134,535 A	10/2000	Belzberg 705/37

6,195,647	B 1	2/2001	Martyn et al 705/37
6,272,474	B1	8/2001	Garcia 705/37
6,278,982	B1	8/2001	Korhammer et al 705/37
6,282,521	B1	8/2001	Howorka 705/37
6,408,282	B1	6/2002	Buist
2002/0023038	A1	2/2002	Fritsch et al.
2002/0055899	A1	5/2002	Williams
2002/0138401	A1	9/2002	Allen et al.

* cited by examiner

FIG. 1

CONNECTION TO MULTIPLE EXCHANGES



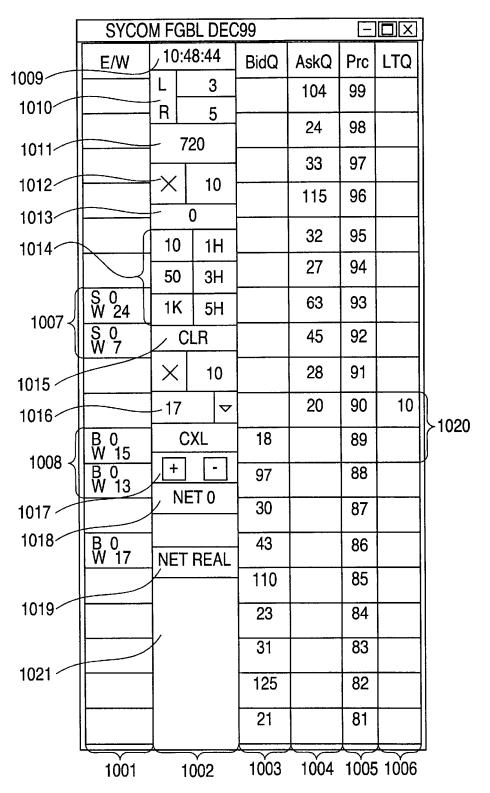
DOCKET A L A R M Find authenticated court documents without watermarks at <u>docketalarm.com</u>.

[7
	Total	8230					
:	LastQty	489					
	AskPrc AskQty LastPrc LastQty	7627					
205)	AskQty	21	815	009	2456	800	
204)	AskPrc	7627	7629	7630	7631	7632	
203)	BidPrc	7626	7625	7624	7623	7622	
202	BidQty	785	626	500	500	200	
201	th	•					
	Contract Dep	Срно					
		(5	(m	4	ى ك	

FIG. 2

Find authenticated court documents without watermarks at <u>docketalarm.com</u>.

FIG. 3



DOCKET A L A R M



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.