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# (19) United States (12) **Patent Application Publication** Kalt

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#### (54)TRADING SYSTEM AND METHODS

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- (21)Appl. No.: 14/097,539
- (22)Filed: Dec. 5, 2013

# **Related U.S. Application Data**

- (63)Continuation of application No. 12/074,265, filed on Feb. 28, 2008, now Pat. No. 8,628,150.
- (60) Provisional application No. 60/904,028, filed on Feb. 28, 2007.

#### **Publication Classification**

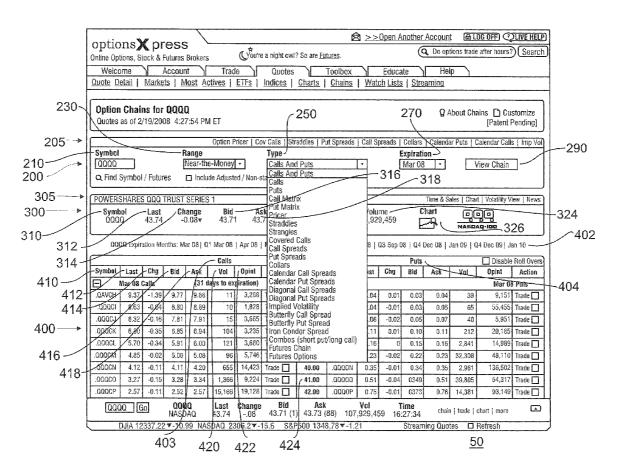
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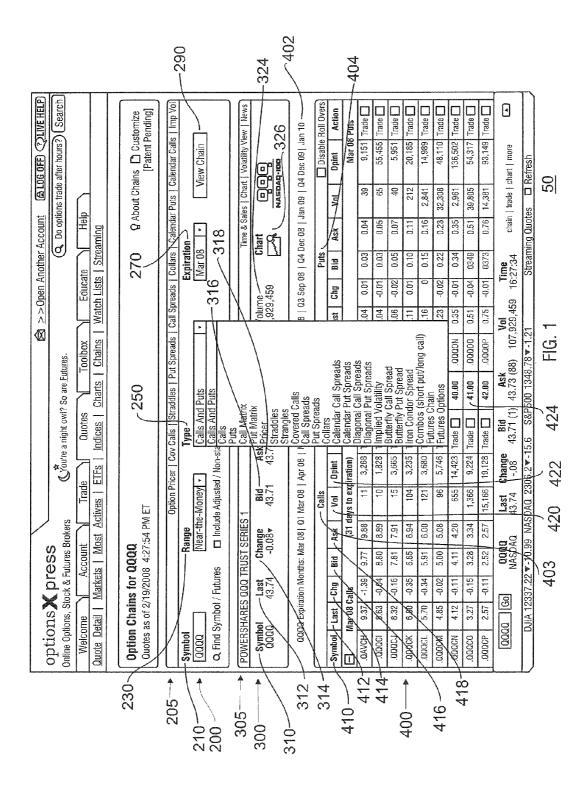
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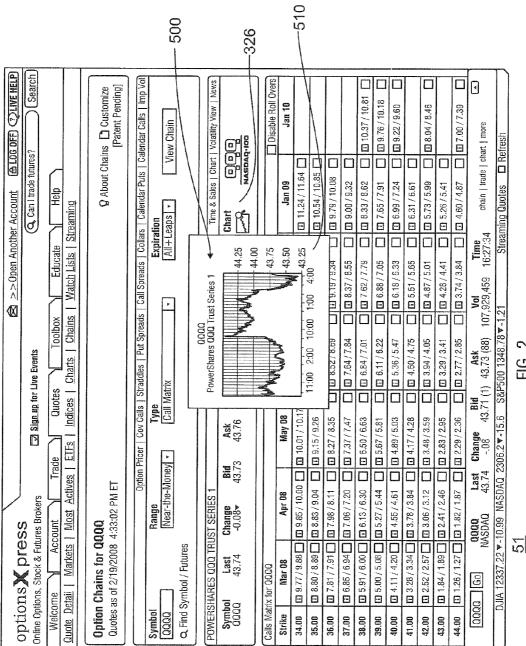
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#### (57)ABSTRACT

The present invention is directed to a system and method that facilitates the more fully informed and efficient trading of items of value, including securities. According to the present invention, certain embodiments permit a customer to determine the merits of and to execute a trade from a single screen. One embodiment of the present invention provides a single option chain trading screen enabling a customer to view a matrix of all available options for a given security, including the various strike prices, expiration dates, and whether they are calls or puts. Another embodiment provides a customer with a single option chain trading screen allowing a customer to "hover" at or near various icons to obtain supplemental information without leaving the trading screen, and use a triple-action selection component to ultimately execute a trade.







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Symbol Last 0000 43.74	Change -0.08*	<b>Bid</b> 43.71	<b>Ask</b> 43.74	<b>High</b> 44.50	Low 43.27	Volume 110,165,606	206	C Chart	
QQQQ Expiration Months: Mar 08   Q1 Mar 08   Apr 08   May 08   Jun 08   Q2 Jun 08   Sep 08   Q3 Sep 08   Q4 Dec 08   Jan 09   Q4 Dec 09   Jan 10	s: Mar 08   Q1	Mar 08   Ap	or 08   May (	80 nut   80	02 Jun 08   S	ep 08   03	Sep 08   Q	4 Dec 08   Jan 09	Q4 Dec 09  Jan 10
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📃 🛛 Call Spread Chain (Jan 09)	n (Jan 09)						(35)	(332 days to expiration)	ation)
[+] Jan 34 / 35 C		0000	0.39	1.10	35.10	(\$10.00)	\$110.00	%60.6-	Trade   Watch   Calc
H Jan 35/36 C		مممم	0.46	1.06	36.06	(\$6.00)	\$106.00	-5.66%	Trade   Watch   Calc
H Jan 36/37 C		aaaa	0.47	1.08	37.08	(\$8.00)	\$108.00	-7.41%	Trade   Watch   Calc
+ Jan 37/38 C		aaaa	0.38	0.39	37,99	\$1.00	\$99.00	1.01%	Trade   Watch   Calc
[H] Jan 38/39 C		aaaa	0.42	9.97	38.97	\$3.00	\$97.00	3.09%	Trade   Watch   Calc
H Jan 39/40 C		aaaa	0.41	0.92	39.92	\$8.00	\$92.00	8.70%	Trade   Watch   Calc
王 Jan 40/41 C		aaaa	0.38	0.93	40.93	\$7.00	\$93.00	7.53%	Trade   Watch   Calc
E Jan 41 / 42 C		aaaa	0.32	0.88	41.88	\$12.00	\$38.00	13.64%	Trade   Watch   Calc
	<b>QQQQ</b> NASDAQ	Last Ch 43.74 -	<b>Change</b> 08 43.	Bid 43.71 (1) 43.7	Ask 43.73 (88) 10	Vol 107,929,459	<b>Time</b> 16:27:34		chain   trade   chart   more
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FIG. 6A

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1		aaaa		0.47	1.08	37.08	(\$8.00)	\$108.00	-7.	-7.41%	Trade   Watch	Vatch   (	Calc
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+ Jan 39 / 40 C		0000		0.41	0.92	39.92	\$8.00	\$92.00	8.	8.70%	Trade   Watch   Calc	Vatch   (	Calc
+ Jan 40 / 41 C		0000		0.38	0.93	40.93	\$7.00	\$93.00	7.	7.53%	Trade   Watch	Vatch   (	Calc
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	43.00	0 1.84 / 1.89 0 2.41 / 2.46	0 0 27	_		🗖 🔟 2.83 / 2.95	0 0 3.2	🔟 3.29/3.41		<b>1</b> 4.28 / 4.41		<b>E</b> 5.26/5.41			
	44.00	<b>D</b> 1.26 / 1.27 <b>D</b> 1.82 / 1.87		_		🔟 2.29 / 2.36	0 0 2.7	🔟 2.77/2.85		<b>E</b> 3.74/3.84		E 4.60 / 4.87		0.7.00/7.39	
	45.00	0.80/0.81		32/1.36 [	Б	1.75 / 1.83		2.20/2.27		🔟 3.22 / 3.32		<b>E</b> 4.11/4.35		0.51/6.83	
	46.00	0.45/0.47	_	🖸 0.91 / 0.95 🛛	ē	1.33 /1.40	0 1.7	ED 1.75/1.85		2.69/2.84					Γ
	47.00	0.23/0.24		0.59/0.60	ê	0.95/1.00	0 01.5	🖽 1.33 / 1.46		🖸 2.26 / 2.41		<b>3</b> 3.20/3.41			Γ
	48.00	0.10/0.11		0.35/0.40		0.52/0.74	0 1.0	🖬 1.02/1.10		D 1.88/2.01		E 2.82 / 3.01		<b>E</b> 5.22/5.51	
	49.00	🔟 0.04 / 0.05 🔲 🔟 0.19 / 0.23		19/0.23 [	Î	0.39/0.51		🖬 0.73/0.81		E 1.56 / 1.65					Γ
	50.00	0.02 / 0.03		09/0.13 [		0.23 / 0.29	0.5	<b>D</b> 0.54/0.60		G 1.23 / 1.35		E 2.12/2.29		<u>1</u> 4.57 / 4.70	
	51.00	0.01 / 0.02				0.14/0.19	0.5	🔟 0.37 / 0.42 🛛		🖬 0.98 / 1.09					Ī
	52.00	0/0.01	0.03 / 0.04	03/0.04 [	ê	回 0.07 / 0.12	0.2	0.24/0.30		0.81/0.87		G 1.53/1.68		<b>1</b> 3.71/3.97	
	53.00	0/0.01		0.01/0.02		0.04/0.07	0.1	0.16/0.20		0.58/0.68					Γ
	54.00	10.0/0	0/0.03			🖂 0.01 / 0.04	0.09/0.13			0.44/0.53	₹				
	Action	Trade	Trade	Trade Calculator		Add to Watch List	ch List	Reset	<b></b>		K				
	Commen	Comments on our Chains?		Let us know						450					]
	00	0000 60	QQQQ NASDAQ	0 Last	st <b>Ch</b>	Change Bi 08 43.71	<b>Bid</b> 43.71 (1) 43.7	Ask 43.73 (88) 1(	Vol 07,929	,459	Time 16:27:34	chain   trade   chart   more	chart		0
		DJIA 12337.25	2 v10.9	.22 *-10.99 NASDAQ 2306.2 *-15.6	2306.		S&P500 1	S&P500 1348.78 -1.21	1.21		Stream	Streaming Quotes 🛛	🗖 Refresh	sh	Π
		<u>62</u>						FIG. 9							

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																							/		<b>\450</b>					
ew   News			<b>Disable Roll Overs</b>	Action	Puts	Trade 🗌	Trade 🗌	Trade 🔲	Trade 🔲	Trade	Trade 🔲	Trade 🗌	Trade	93,149 Trade 🔲	134,383 Trade 🔲	189,514 Trade	188,397 Trade	42,295 Trade 🔲	286,856 Trade 🔲	Trade	Trade	Trade	Trade 🗆	Trade 🗌	Trade	Trade		0	$\square$	
Time & Sales   Chart   Volatility View   News	٩	09 Jan 10	Disable	Opint	Mar 08 Puts	9,151	55,455	5,951	20,185	14,989	48,110	136,502	54,317	93,149	134,383	189,514	188,397	42,295	286,856	97,181	168,059	105,971	11,156	36,381	225	1,515		ut   more	fresh	70
ales   Chart	0000 NASPAR-182	9   Q4 Dec		Vol	×	39	65	40	212	2,841	32,308	2,961	39,805	14,381	51,239	57,661	19,443	18,076	2,943	932	296	494	04	16	16	01		chain   trade   chart   more	s 🗆 Refresh	
Time & Sa	the Cart	08   Jan 0		Ask		0.04	0.05	0.07	0.11	0.16	0.23	0.35	0.51	0.76	1.08	1.50	2.03	2.69	3.47	4.37	5.33	6.30	7.30	8.30	9.30	10.32		chain	Streaming Quotes	
		Q4 Dec (	Puts	Bid		0.03	0.03	0.05	0.10	0.15	0.22	0.34	0.49	0.73	1.05	1.47	1.98	2.65	3.41	4.32	5.22	6.21	7.20	8.20	9.21	10.20		<b>Time</b> 16:27:34	Streamir	~705
	<b>me</b> 4,818	Sep 08		Chg		0.01	-0.01	-0.02	0.01		-0.02	-0.01	-0.04	-0.01	0	0	0.06	0.19	0.32	0.42	0.48	0.50	0.23	0.34	-0.16	-0.86	Reset	1	$\left  \right $	
	Volume 110,214,818	08   03		Last		0.04	0.04	0.06	0.11	0.16	0.23	0.35	0.51	0.75	1.05	1.48	2.06	2.79	3.73	4.70	5.70	6.70	7.70	8.53	9.20	9.60		Vol 107,929,459		710
	<b>Low</b> 43.27	lun 08   Sej		Strike Symbol Last	3.74	HOVOD.	.0000	(,0000).	,aaaoK	.0000L	,0000M	.00000	.00000	.0000P	.00000	.0000R	,0000S	.0000	.00000	00000	MODOD.	.αααοχ	,аааоү	.0000Z	, QQQQA	.0000B	Add to Watch List		.78 * 11.2	
		n 08   Q2 J		Strike	0000 @ 43.74	34.00	35.00	35,00	37.00	38.00	39.00	40.00	41.00	42.00	43.00	44.00	45.00	46.00	47.00	48.00	49.00	50.00	51.00	52.00	53.00	54.00	Add to	Ask 43.73 (8	S&P500 1348.78 • \1.21	FIG. 10A
	<b>High</b> 44.50	2000 Expiration Months: Mar 08   Apr 08   Apr 08   Jun 08   Q2 Jun 08   Sep 08   Q3 Sep 08   Q4 Dec 08   Jan 09   Q4 Dec 09] Jan 10		Action	0	ade 🗌	Trade	Trade	Trade	Trade 🗌	Trade	Trade 🗖	Trade	Trade	Trade B	Trade B	ade 🗖	ade 🔲	Trade 🗖	ade 🗖	Trade	Trade	Trade	Trade	Trade	ade 🗆	Mini Pricer	/ Bid Ask 43.71 (1) 43.73 (88)		Ē
	<b>Ask</b> 43.71	Apr 06   1		Opint	tion)	3,268 Trade 🗖	1,828 Tr	3,665 Tr	3,235 Tr	3,680 Tr	5,746 Tr	14,423 Tr	9,224 Tr	19,128 Tr	31,551 Tr	37,153 Tr	93,800 Trade 🗖	71,215 Trade 🗖	99,603 Tr	40,532 Trade 🗲	72,496 Tr	118,995 Tr	39,965 Tr	43,336 Tr	23,650 Tr	54,779 Trade	Mini	Change 08	21/15.	715
	<b>Bid</b> 43.69	11 Mar 08	Calls	Vol 0	(31 days to expiration)	11	10	15	104	121	96	655 1	1,366	15,166 1:	12,812 3	37,754 3	70,717 9:	19,431 7	27,455 9	16,819 4	1,834 7	3,095 11	922 3	433 4:	30 2	162 5-	ilator	Last Ch 43.74	DJIA 12367.22 *-10.99 /NASDAQ 2306.2 * /15.6	
RIES 1	ange	lar 08) C		Ask	(31 day:	9.83	8.89	7.91	6.94	6.00	5.08	4.20	3.34	2.57 1	1.89 1	1.27 3	0.81 7	0.47 1	0.24 2	0.11 1	0.05	0.03	0.02	0.01	0.01	0.01	Trade Calculator	-	/NASD	720
UST SE	Change -0.08 ▼	Vionths: A		Bid A		9.77	8.80	7.81	6.85	5.91	5.00	4.11	3.28	2.52	1.84	1.26	0.80	0.45	0.23	0.10	0.04	0.02	0.01	0	0	0	51 	0000 NASDAQ	-10.99	
000 TR	Last 43.74	xpiration 1		Chg   1	IIIs	-1.39	-0.04	-0.16	-0.35	-0.34	-0.02	-0.11	-0.15	-0.11	-0.16	-0.10	-0.09	-0.07	-0.05	-0.04	-0.02	-0.0-	0	0	-0.01	0	Trade		87.22	`725
HARES (		0000 E		Last	Mar 08 Calls	9.37	8.63	8.32	6.80	5.70	4.85	4.12	3.27	2.57	1.82	1.27	0.81	0.45	0.23	0.10	0.05	0.02	0.02	0.01	0.01	0.01	비	00	<b>UIA 123</b>	
POWERSHARES QQQ TRUST SERIES	Symbol 0000			Symbol	M	.0AVCH	aaaci	.0000.1	agack	.000CL	.aqacm	.000CN	.00000	.000CP	.aaaca	.aaacR	.aaacs	.aaacT	.aaacu	.aaacv	.aaacw	.000CX	.aaacy	.aaacz	.aaacA	.000CB	Action			(200

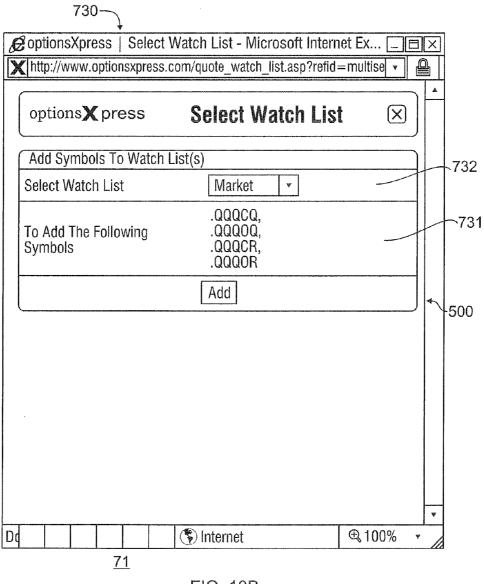


FIG. 10B

POWERSHARES QQQ TRUST SERIES	ARES	<u>000 T</u>	RUST	SERIES	-								Time & S	ales   Chart	Time & Sales   Chart   Volatility View   News	iew   News
Symbol 0000		Last 43.74	<b>9</b> 7	<b>Change</b> -0.08 •	<b>Bid</b> 43.69	-	<b>Ask</b> 43.71	<b>High</b> 44.50	Low 43.27	Volume 110,214,818	<b>me</b> 4,818	517	T Grat	NASDAQ-100	10	
	0000 [	Expiration	n Months	s: Mar 08	01 Mar 0	18   Apr 06	3   May 08	3000 Expiration Months: Mar 06   01 Mar 08   Apr 08   May 06   Jun 08   02 Jun 08   08   03 Sep 08   04 Dec 08   Jan 09   04 Dec 09   Jan 10	5 Jun 08   Si	ep 08   03	Sep 08	04 Dec 0	8 Jan C	19   Q4 Dec	09 Jan 10	
					Calls							Puts			Disable	Disable Roll Overs
Symbol L	Last	Chg	Bid	Ask	Vol	Opint	Action	Strike	Symbol	l Last	Chg	Bid	Ask	Voi	Opint	Action
Ma	Mar 08 Calls	alls		(31 d	(31 days to expiration)	oiration)		0000 @ 43.74	43.74						Mar 08 Puts	3 Puts
.QAVCH	9.37	-1,39	9.77	9.88	Ŧ	3,268	Trade C	34.00	.0AV0H	0.04	0.01	0.03	0.04	39	9,151	Trade
aaaci	8.63	-0.04	8.80	8.89	10	1,828	Trade [	] 35.00	.0000	0.04	-0.01	0.03	0.05	65	55,455	55,455 Trade 🔲
.0000.	8.32	-0.16	7.81	7.91	15	3,665	3,665 Trade [	] 36.00	00000.	0.06	-0.02	0.05	0.07	40	5,951	5,951 Trade 🔲
.aaack	6.80	-0.35	6.85	6.94	104	3,235	3,235 Trade [	] 37.00	,aaaoK	0.11	0.01	0.10	0.11	212	20,185	20,185 Trade 🗖
GOOCL	5.70	-0.34	5.91	6.00	121	3,680	Trade	] 38.00	aqaol	0.16	0	0.15	0.16	2,841	14,989	Trade
aaacM	4.85	-0.02	5.00	5.08	96	5,746	Trade 🗌	] 39.00	M00000.	0.23	-0.02	0.22	0.23	32,308	48,110	Trade
.agacn	4,12	-0.11	4.11	4.20	655	14,423	Trade 🗆	] 40.00	.0000	0.35	-0.01	0.34	0.35	2,961	136,502	136,502 Trade 🔲
.00000	3.27	-0.15	3.28	3.34	1,366	1	9,224 Trade 🗌	] 41.00	.00000	0.51	-0.04	0.49	0.51	39,805	54,317	54,317 Trade 🗖
.000CP	2.57	1 F F	2.52	2.57	15,166	19,128	Trade	] 42.00	.0000P	0.75	-0.01	0.73	0.76	14,381	93,149	Trade
.aaaca	1.82	-0.16	1.84	1.89	12,812	31,551	Trade B	] 43.00	.00000	1.05	0	1.05	1.08	51,239	134,383	134,383 Trade
.000CR	1.27	-0.10	1.26	1.27	37,754	37,153	37,153 Trade 🗖	] 44.00	.aaaar	1.48	0	1.47	1.50	57,661	189,514	189,514 Trade
.000CS	0.81	-0.09	0.80	0.81	70,717		93,800 Trade 🗖	] 45.00	.0000	2.06	0.06	1.98	2.03	19,443	188,397 Trade	Trade
.000CT	0.45	-0.07	0.45	0.47	19,431	71,215	Trade [	46.00	.00007	2.79	0.19	2.65	2.69	18,076	42,295	Trade 🔲
	0.23	-0.05	0.23	0.24	27,455	99,603	Trade	] 47.00	.00000	3.73	0.32	3.41	3.47	2,943	286,856	286,856 Trade 🗌
.000cV	0.10	-0.04	0.10	0.11	16,819		40,532 Trade	] 48.00	.0000	4.70	0.42	4.32	4.37	932	97,181	97,181 Trade 🔲
	0.05	-0.02	0.04	0.05	1,834		72,496 Trade 🗖	] 49.00	.aaoow	/ 5.70	0.48	5.22	5.33	5962	168,059	Trade 🗖
.aaacX	0.02	-0.01	0.02	0.03	3,095	118,995	Trade	] 50.00	.αααοχ	6.70	0.50	6.21	6.30	494	105,971	Trade 🗖
.agacy	0.02	0	0.01	0.02	922	39,965	Trade	] 51.00	.00007	/ 7.70	0.23	7.20	7.30	04	11,156	11,156 Trade 🗖
.00002	0.01	0	0	0.01	433	43,336	43,336 Trade 🗖	] 52.00	.aaaaz	8.53	0.34	8.20	8.30	16	36,381	36,381 Trade 🔲
.DQQCA	0.01	-0.01	0	0.01	30	23,650	Trade C	] 53.00	.0000A	9.20	-0.16	9.21	9.30	16	225	225 Trade
.000CB	0.01	0	0	0.01	162	54,779	Trade 🗌	54.00	.00008	9.60	-0.86	10.20	10.32	01	1,515	Trade 🗖
Action		Trade	Ľ	Trade Calculator	Iculator		Mini Pricer	Add	Add to Watch List	ist _	Reset	ГÍ				
←		Ĭ	-725	-720	, L	715-		FIG. 11A	11A						72	
. /700	~	1	1		•	2				710		•	705	5		

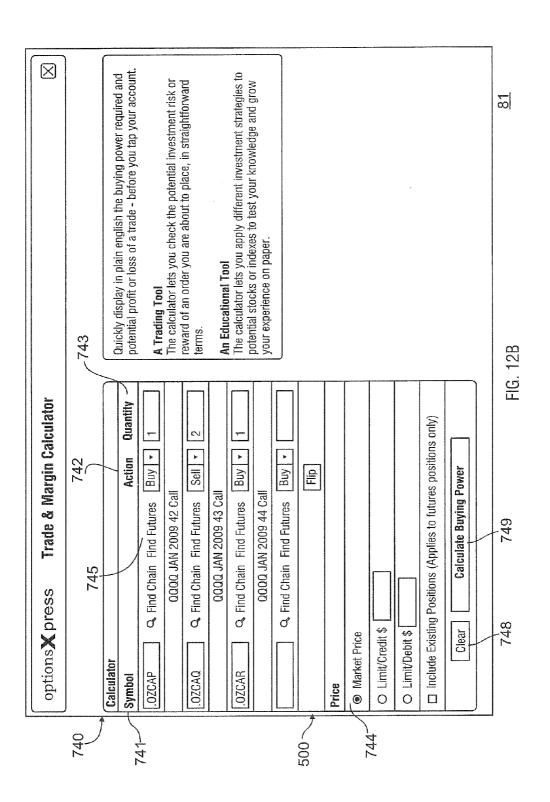
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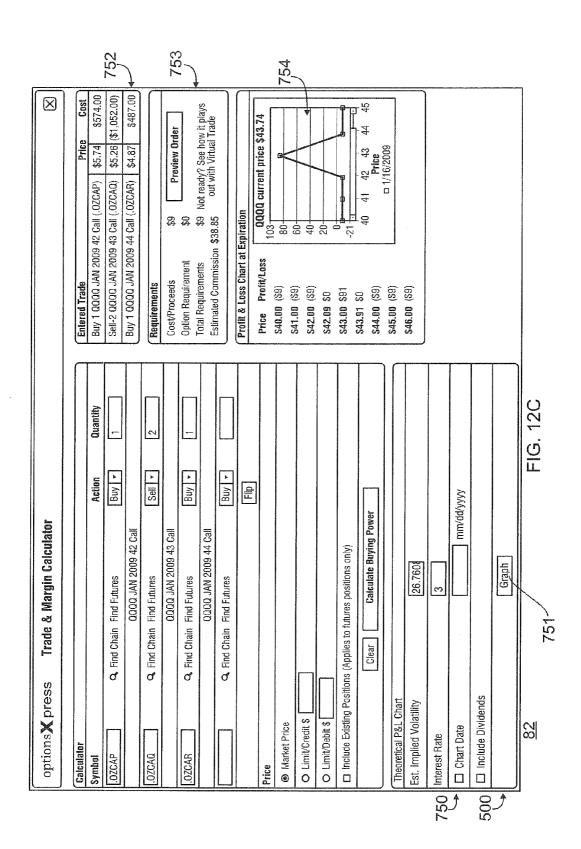
																-500						740								
ew   News			Roli Overs	Action	Puts	9,151 Trade	55,455 Trade 🔲	Trade	Trade	Trade	48,110 Trade	Trade	54,317 Trade	Trade	Trade	Trade D	Trade	Trade	Trade	97,181 Trade	Trade	Trade D	Trade	Trade 🗌	Trade 🔲	1,515 Trade		0	Π	
Time & Sales   Chart   Volatility View   News	O	1000 Expiration Months: Mar 08   01 Mar 08   Apr 08   May 08   Jun 08   02 Jun 08   Sep 08   03 Sep 08   04 Dec 08   Jan 09   04 Dec 09   Jan 10	Disable Roll Overs	Opint	Mar 03 Puts	9,151	55,455	5,951 Trade [	20,185	14,989	48,110	136,502 Trade	54,317	93,149 Trade	134,383 Trade [	189,514	188.307	42,295	286,856 Trade 🗖	97,181	168,059 Trade 🗌	105,971 Trade	11.156	35,381	225	1,515		art   more	🗆 Refresh	
ales   Chai		19   04 Dec		Vol		39	65	40	212	7 2.841	32,308	2,961	39,805	14,381	51,239	57,661	19,443	18.078	2,943	932	296	494	100	16	16	5		chain   trade   chart   more		
Time & S	Chart	08   Jan 0		Ask		0.04	0.05	0.07	0.11		CIUSE		000	769.1		0.61	0.109		-0.0244	0.049		0.021	ţ		9.30	10.32		chain	Streaming Quotes	
		3   04 Dec	Puts	Bid		0.03	0.03	2 0.05	0.10					I UBO VAI			Gamma 0.						Г		9.21	5 10.20	et	<b>Time</b> 16:27:34	Streami	
	Volume 110,214,818	03 Sep 08		t Chg		4 0.01	4 -0.01	6 -0.02	1 0.01		ulica + nulu + muve	G	۲		Γ	Delta	Γ	] [	Theta	Vega	] [	Rho MR	- Induction	Calculate	0 -0.16	0 -0.86	Reset			
		Sep 08		el Last		H 0.04	01 0.04	JJ 0.06	K 0.11			.00000	0		E E	28.00	43.00		43.74	31		9	Ľ	_	A 9.20	B 9.60	List	Vol 77,929,4	1.21	ő
	<b>Low</b> 43.27	Jun 08		Symbol	43.74	.QAVOH	10000	.0000.	.aaaok			Symbol	Turo.	i yµc		Volatility	Strike	201	Stock Price	Days to	2	Int Rate %			A0000.	.0000B	Add to Watch List	88) 1(	8.78▼-1	FIG. 11B
	<b>High</b> 44.50	an 08   02		Strike	0000 @ 43.74	34.00	35.00	36.00	37.00	38.0	39.0	40.0	41.6	42.0	43.0	4	45.0	46.0	47.0	48.0	49.0	50.0	51.0	52.0	53.00	54.00	Add 1	Ask 43.73	S&P500 1348.78 -1.21	Ш
		May 08   J		Action		rade 🔲	irade 🔲	Trade	rade 🔲	Trade	Trade	Trade	rade 🔲	rade 🔲	Trade	Trade 🔲	Trade 🗌	Trade 🔲	Trade 🛛	rade 🗆	rade 🔲	rade 🔲	rade 🔲	Trade 🛛	Trade 🔲	rade 🔲	Mini Pricer	Bid Ask Vol 43.71 (1) 43.73 (88) 107,929,459		
	Ask 43.71	Apr 08		Opint	ration)	3,268 Trade [	1,828 Trade	3,665 1	3,235 Trade 🗌	3,680 7	5,746	14,423 1	9,224 Trade	19,128 Trade	31,551 1	37,153 1	93,800 1	71,215 1	99,603 1	40,532 Trade 🗌	72,496 Trade 🗖	118,995 Trade 🗖	39.965 Trade 🗖	43,336 1	23,650 1	54,779 Trade 🗌	] Min	Change 08	6.2*-15	
	<b>Bid</b> 43.69	01 Mar 08	Calls	Vol	31 days to expiration)	11	10	15	104	121	96	655	1,366	15,166	12,812	37,754	70,717	19,431	27,455	16,819	1,834	3.095 1	922	433	30	162	culator	Last ( 43.74	DJIA 12337.22 *-10.99 NASDAQ 2306.2 *-15.6	
SERIES	Change -0.08 ▼	:: Mar 08		Ask	(31 da	9.88	8.89	7.91	6.94	6.00	5.08	4.20	3.34	2.57	1.89	1.27	0.81	0.47	0.24	0.11	0.05	0.03	0.02	0.01	0.01	0.01	Trade Calculator	AO	39 NAS	
TRUST.		on Months		Bid		9.77	8.80	7.81	6.85	5.91	5.00	4.11	3.28	2.52	1.84	1.26	0.80	0.45	0.23	0.10	0.04	0.02	0.01	0	0	0		<b>QQQQ</b> NASDAQ	2 ¥-10.9	
S 000	<b>Last</b> 43.74	0 Expiratio		Chg	Calls	-1.39	-0.04	-0.16	-0.35	-0.34	-0.02	-0.11	-0.15	-0.11	-0.16	-0.10	-0.09	-0.07	-0.05	-0.04	-0.02	-0.01	0	0	-0.01	0	Trade	Go	2337.2	സ
POWERSHARES QQQ TRUST SERIES	la di	000		Last	Mar 08 Calls	9.37	8.63	8.32	6.80	5.70	4.85	4.12	3.27	2.57	1.82	1.27	0.81	0.45	0.23	0.10	0.05	0.02	0.02	0.01	0.01	0.01		0000	DUIA 1	<u>73</u>
POWEF	Symbol 0000			Symbol		.QAVCH	.aqaci	.aaacJ	.aaack	.00001	.000CM	.000CN	.00000	.000CP	.aaaca	.000CR	.000CS	.aaacT	.aaacu	.aaacv	.aaacw	.000CX	.aaacy	.00002	,000CA	.aaacB	Action		U	

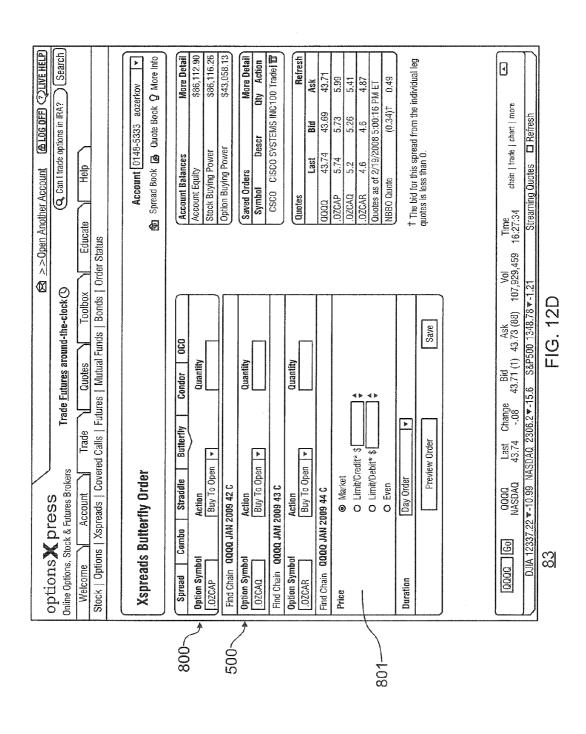
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Symbol QQQQ	POWERSHARES QOQ	000 T	RUST 5	TRUST SERIES									Time & S	ales   Charl	Time & Sales   Chart   Volatility View   News	View   New
		Last 43.74	<b>Cha</b> -0.	Change -0.08 ▼	<b>Bid</b> 43.70		<b>Ask</b> 43.72 4	High 44.50	Low 43,27	Voli 110,18	Volume 110,188,268	оЦ	E C	000 NASDAR-IDO		
0000	Expirat	ion Mon	ths: Mar	08 01	Mar 08	Apr 08	May 08	Jun 08   (	0000 Expiration Months: Mar 08   01 Mar 08   Apr 08   May 08   Jun 08   02 Jun 08   Sep 08   03 Sep 08   D4 Dec 08   Jan 09   04 Dec 09   Jan 10	Sep 08	03 Sep (	38   04	Dec 08   .	Jan 09   Q	4 Dec 09 J	an 10
					Calls							Puts			Disable	Disable Roll Overs
Symbol L	Last	Chg	Bid	Ask	Val	Opint	Action		Strike Symbol	I Last	Chg	Bid	Ask	Vol	Opint	Action
Lan Lan	lan 09 Calls	ills		(332)	days to e.	(332 days to expiration)		0000 @ 43.74	g 43.74						Jan 0	Jan 09 Puts
OZCAH 1	12.46	0	11.24	11.64	00		2,146 Trade 🗖	34.00	HMOZO.	1.46	0	1.31	1,40	00	6,134	6,134 Trade 🗖
.0ZCAI 1	10.90	0	10.54	10.85	00		1,083 Trade 🗖	35.00	0ZCMI	1.50	-0.05	1.50	1.61	15	5,785	5,785 Trade 🗖
.0ZCAJ	9.95	0	9.79	10.08	00		1,688 Trade 🗖	36.00	LMDZO. (	J 1.80	0.02	1.72	1.84	52	7,199	7,199 Trade 🗖
.OZCAK	9.05	-0.38	9.00	9.32	90		2,839 Trade 🗖	37.00	MM0Z0. (	< 2.05	0	1.95	2.07	8	3,107	3,107 Trade 🗖
.0ZCAL	8.70	0	8.33	8.62	00	2,722	Trade	38.00	1MOZO. 0	L 2.45	0	2.21	2.35	8	16,713	16,713 Trade
.OZCAM	8.00	0	7.65	7.91	00	3,267	Trade	39.00	0ZCMM	1 2.35	0	2.50	2.64	00	5,190	5,190 Trade 🔲
.OZCAN	7.00	-0.05	6.99	7.24	60	4,325	Trade	40.00	0ZCMN	V 2.72	-0.26	2.81	2.98	02	56,425	56,425 Trade 🗖
.0ZCA0	6.75	0.29	6.31	6.61	20	4,461	Trade	41.00	0 .0ZCM0	3.08	-0.15	3.16	3.34	02	6,426	Trade 🗆
OZCAP	5.74	-0.23	5.73	5.99	74	22,059	Trade B	42.00	0 .0ZCMP	P 3.50	-0.09	3.53	3.70	20	40,389	40,389 Trade
.0ZCAQ	5.20	-0.15	5.26	5.41	36	13,038	Trade S	43.00	DMOZOMO	<b>1</b> 4.15	0.05	3.94	4.08	65	33,224	Trade
OZCAR	4.60	-0.04	4.60	4.87	39	14,306	Trade B	44.00	OZCMR	3 4.24	-0.20	4.36	4.58	11	16,869	Trade
.0ZCAS	4.08	-0.07	4.11	4.35	71	35,137	Trade	45.00	0ZCMS	5 4.94	-0.06	4.82	4.99	65	38,332	Trade 🗆
0ZCAB	3.34	0	3.20	3.41	00	3,897	Trade	47.00	0ZCMB	8 5.60	0	5.87	6.04	00	1,352	Trade
DZCAY	3.09	0.15	2.82	3.01	43	14,223	Trade	48.00	OZCMY	Y 6.21	0.09	6.46	6.64	668	18,636	Trade
OZCAX	2.13	-0.02	2.12	2.29	22	53,223	Trade	50.00	0 OZCIMIX	X 7.91	0.15	7.88	7.88	187	16,378	Trade
.0ZCAA	1.49	-0.06	1.53	1.68	110	12,821	Trade	52.00	AMDZO. 0	A 9.53	0.35	9.30	9.30	136	11,077	Trade
Action	Ľ	Trade		Trade Calculator	fculator		Mini Pricer	Adi	Add to Watch List	List	Reset	Ē				
Comments on our Chains?	n our C	hains?		725		720		715	$\mathcal{P}$	710		705	5			
□ Vellow options are in-the-money Q About Chains □ - Chack Box IB - Single Click on check box indicates a "Buy" action	tions ar ains kox fick on	e in-the check b	-money ox indic	ates a "t	suy" actic		-	2		2		-				
OCCO Let us know	0 0	Go	QQQQ NASDAQ	AQ	Last 43.74	Change 08	43.71 (	<b>Bid</b> Ask 43.71 (1) 43.73 (88)	sk 3 (88) 10	<b>Vol</b> 107,929,459		Time 16:27:34	chain	chain   trade   chart   more	lart   more	0
á	<u> </u>	337.22	¥-10.9	39 NAS	SDAQ 2:	306.2 •-	15.6 St	3P500-15	DJIA 12337.22 ▼ -10.99 NASDAQ 2306.2 ▼ -15.6 S&P500 1348.78 ▼ -1.21	:21		Streami	Streaming Quotes	es 🗆 Refresh	efresh	

Patent Application Publication Apr. 3, 2014 Sheet 16 of 23 US 2014/0095377 A1

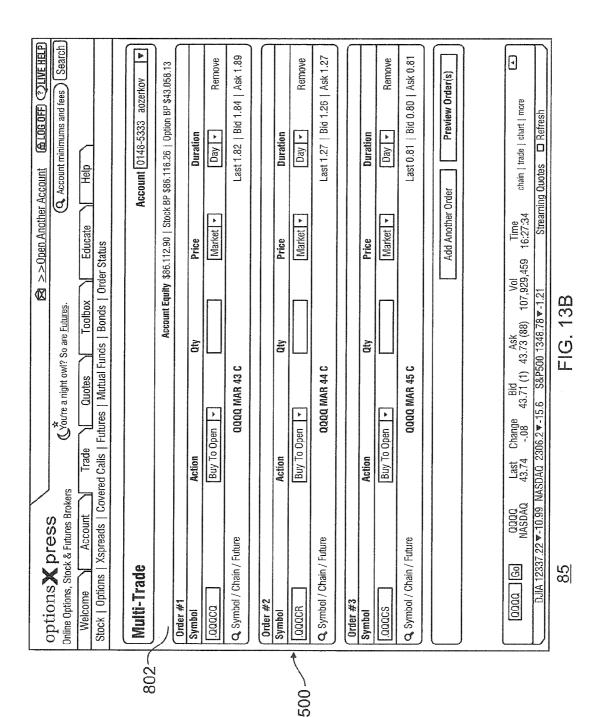


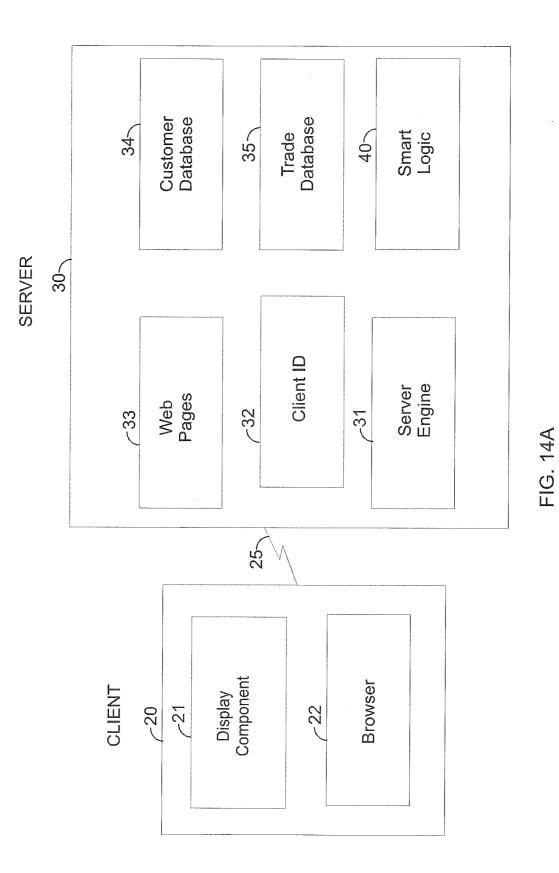




04 Dec 09 Jan 10
Jan 09
Q4 Dec 08
Q3 Sep 08
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L						Calls							Puts			Disable	Disable Roll Overs
ŝy	Symbol	Last	Chg	Bid	Ask	Vol	Opint	Action	Strike	Symbol	Last	Chg	Bid	Ask	Vol	Opint	Action
		Mar 08 Cal	alls		(31 d	days to expiration)	piration)	-	0000 @ 4	43.74						Mar 08 Puts	Puts
ą	.DAVCH	9.37	-1.39	9.77	9.88	11	3,268	Trade	34.00	HOVAD.	0.04	0.01	0.03	0.04	39	9,151	Trade
ď	.000Cl	8.63	-0.04	8.80	8.89	10	1,828	Trade	35.00	0000.	0.04	-0.01	0.03	0.05	65	55,455	Trade
ă	aaacu	8.32	-0.16	7.81	7.91	15	3,665	Trade	36.00	.0000	0.06	-0.02	0.05	0.07	40	5,951	Trade
ă.	.аааск	6.80	-0.35	6.85	6.94	104	3,235	Trade	37.00	.0000K	0.11	0.01	0.10	0.11	212	20,185	Trade 🗌
ą	.000CL	5.70	-0.34	5.91	6.00	121	3,680	Trade 🗆	38.00	.0000L	0.16	0	0.15	0.16	2,841	14,989	Trade 🗌
8	.000CM	4.85	-0.02	5.00	5.08	96	5,746	Trade	39.00	.aaaaM	0.23	-0.02	0.22	0.23	32,308	48,110	Trade
О(	.000CN	4.12	-0.11	4.11	4.20	655	14,423	Trade	40.00	NODOD.	0.35	-0.01	0.34	0.35	2,961	136,502	Trade 🗌
ğ	.00000	3.27	-0.15	3.28	3.34	1,366	9,224	Trade	41.00	.00000	0.51	-0.04	0.49	0.51	39,805	54,317	Trade
ăļ 	.000CP	2.57	-0.11	2.52	2.57	15,166	19,128	Trade	42.00	.0000	0.75	-0.01	0.73	0.76	14,381	93,149	Trade
ю. Ю	.aaaca	1.82	-0.16	1.84	1.89	12,812	31,551	Trade <sup>B</sup>	43.00	.00000	1.05	0	1.05	1.08	51,239	134,383	Trade
ō	0000R	1.27	-0.10	1.26	1.27	37,754	37,153	Trade S	44.00	.0000R	1.48	0	1.47	1.50	57,661	189,514	Trade
10.	.aaacs	0.81	-0.09	0.80	0.81	70,717	93,800	Trade B	45.00	.0000	2.06	0.06	1.98	2.03	19,443	188,397	Trade 🗌
đ	.aaact	0.45	-0.07	0.45	0.47	19,431	71,215	Trade	46.00	.aaaot	2.79	0.19	2.65	2.69	18,076	42,295	Trade
, j	.מממכט	0.23	-0.05	0.23	0.24	27,455	99,603	Trade	47.00	.00000	3.73	0.32	3.41	3.47	2,943	286,856	Trade
<u>g</u>	aqacv	0.10	-0.04	0.10	0.11	16,819	40,532	Trade	48.00	.00000	4.70	0.42	4.32	4.37	932	97,181	Trade
00.	aaacw	0.05	-0.02	0.04	0.05	1,834	72,496	Trade 🔲	49.00	.aaaow	5.70	0.48	5.22	5.33	296	168,059	Trade
<u>a</u> i	.aaacx	0.02	-0.01	0.02	0.03	3,095	118,995	Trade 🔲	50.00	.aaaax	6.70	0.50	6.21	6.30	494	105,971	Trade
ġ	ааасу	0.02	0	0.01	0.02	922	39,965	Trade	51.00	.αααογ	7.70	0.23	7.20	7.30	04	11,156	Trade 🔲
ą	.000CZ	0.01	0	0	0.01	433	43,336	Trade 🔲	52.00	.0000	8.53	0.34	8.20	8.30	16	36,381	Trade
Ю.	.000CA	0.01	-0.01	0	0.01	30	23,650	Trade 🔲	53.00	.0000A	9.20	-0.16	9.21	9.30	16	225	Trade
ă	.QQQCB	0.01	0	0	0.01	162	54,779	Trade	54.00	.00008	9.60	-0.86	10.20	10.32	01	1,515	Trade
•	Action		Trade		Trade Calculator	alculator		Mini Pricer	Add tu	Add to Watch List		Reset					
CO	Comments on our Chains?	on our	Chains!	6	$\sim$					~							
			725		720	0	715-	EIG	FIG_13A	710		P	-705			84	
			)					)	5								





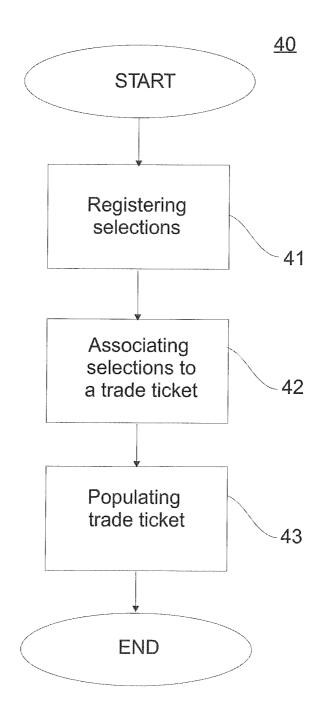


FIG. 14B

# TRADING SYSTEM AND METHODS

# CROSS REFERENCE TO RELATED APPLICATIONS

**[0001]** This is a continuation application of U.S. application Ser. No. 12/074,265 filed Feb. 28, 2008, which claims the benefit of U.S. Provisional Application No. 60/904,028 filed Feb. 28, 2007.

### FIELD OF THE INVENTION

**[0002]** The present invention is related to the field of trading, and, more specifically, to an improved mode of online communication by which the trading of an item utilizing certain embodiments, a single screen is facilitated.

# BACKGROUND OF THE INVENTION

[0003] Those engaging in the trading of items through the online access of a computer system often need additional information to determine the details of that which is being offered as the subject of the trade, to gauge the merits of the trade, and possibly plan a more involved trading strategy. For purposes of this application, the term "trading" includes the transfer of any consideration for the subject of the tradetermed "item" herein-and the ordering of one or more items. An "item" may be anything of value including a financial security, for example, stocks, commodities, bonds and derivatives such as futures, forwards, options, and swaps. A "customer" is any individual or entity that may, or does engage in the trading of items whose value varies according to market perception such as coins, stamps, books, objects of fine art, craftsmanship, and those having historical significance, among others. A customer is also referred to herein as an investor for purposes of this application. The present invention has application to all such items, including properties and securities, that may be bought and sold in a generally open marketplace at a price that varies according to market perception, including with respect to the trading of stock equity options. Embodiments of the present invention will be described by reference to one type of item-security options-but has utility with respect to all items.

[0004] Security options—such as stock options—are essentially contract rights that can be bought and sold on the open market. By paying a certain premium amount, the owner of an option acquires the right to buy or sell the underlying security at a designated strike price during a limited period of time prior to expiration of the option. Buyers and sellers of options are termed "holders" and "writers", respectively. A "call option" is an option to buy a certain security at a specific price on or before a certain date. If the underlying security increases in value over the strike price, the value of the call option then increases, as well. The owner of a call option may exercise the right to purchase the security before the expiration date of the option, logically whenever the security exceeds the strike price, at which time the option seller becomes obligated to sell the security. If the security does not exceed the strike price, the owner has lost nothing more than the price paid for the option, or the option premium. A "put option" is an option to sell a security at a specific price on or before a certain date. The owner of a put option may exercise the right to sell the security before the expiration date of the option, logically whenever the security falls beneath the strike price, at which time the option seller becomes obligated to buy the security. If the security does not fall beneath the strike price, the owner has again lost nothing more than the option premium.

[0005] To offset potential financial liabilities that might otherwise accrue from changes in the value of an underlying security, investors often seek to acquire option rights as a type of financial insurance policy. Similar to paying an insurance premium, the cost of buying call options becomes a standard business expense, required for proper risk management. In like manner, investors sell put options to obtain a calculable minimum return on investments as a means for ensuring against financial risk. Separate and apart from their risk management function, security options may furthermore provide investors with a potentially lucrative trading instrument, allowing for investment in the performance of the underlying security with a lesser amount of investment capital required. [0006] Investing in options typically requires specialized financial knowledge. Without it, individual investors may not be aware of the benefits and opportunities that trading in certain options provide, nor the range of possible trading strategies. However, the average individual investor typically does not have access to the same quantity and quality of market information that is ordinarily available to those routinely involved in trading options.

**[0007]** Securities web sites are popular because they allow investors to manage investment information. Financial institutions, including brokerages, have implemented online services that allow investors to engage in trading of various securities over data communication networks, including the Internet. As used herein, the terms "order", "trade", and/or "trading" generally refers to transactions such as buying and/ or selling. Any investor having access to the Internet may more directly engage in trading activity without having the need to speak to a broker to enter his or her orders in the marketplace for execution.

[0008] In addition to the many advantages that may be realized in standard accounting procedures, brokerage firms dealing in financial securities have sought to expand their capabilities for improved interactive computerized communication with their individual retail account investors. Prior to the appearance of the Internet, trading orders from such retail investor clients could be communicated only in person or via telephone, whether using voice or fax transmission, or by delivery of the order through conventional means such as the postal mail. Processing such trade orders typically would require a certain amount of time-minimally from perhaps a few minutes to as much as several hours or more-thereby resulting in a lag in the amount of time before the trade was executed. More recently, online communication capabilities have made it possible for individual investors of financial brokerage firms to have trade orders entered and executed more rapidly, thereby decreasing the lag time to at times less than one minute of lag time between the investor completing the entry of the order online and receiving a reply confirming an online trade confirmation communicated electronically.

**[0009]** In addition, and in further contradistinction to the fairly limited range of standard and traditional types of trading modalities that were previously available to their retail clients, brokerage firms have begun to offer expanded modes of interactive communication and a greater range of trading information, thereby permitting individuals great control over their accounts.

**[0010]** However, while more and more information becomes available online, the information often takes a great

amount of time and effort to access. Navigating to the various levels of information then back to the screen at which the trade is executed is often difficult and fraught with danger. Getting lost in these levels of information may be a typical occurrence. Remembering what is relevant to the trade while navigating back to the screen at which the trade is executed is a challenge to most investors.

**[0011]** Therefore a need exists for a system and methods by which a wide variety of information may be provided to an investor readily and, in certain embodiments, without navigating away from the screen at which the trade can be executed. The present invention satisfies the demand.

# SUMMARY OF THE INVENTION

**[0012]** In one embodiment, the present invention is a method for facilitating trading in one or more items by a customer. Items include anything of value including a financial security, for example, stocks, commodities, bonds and derivatives such as futures, forwards, options, and swaps. A "customer" is any individual or entity that may, or does engage in the trading of items, for example, an investor, trader, buyer, seller, holder, or writer to name a few. According to the present invention, certain embodiments permit the customer to determine the merits of and to execute a trade from a single screen.

[0013] One embodiment of the present invention provides information in the form of an option chain trading screen. An option chain is a matrix that provides quote options prices through a list of all of the options for a given security, including the various strike prices, expiration dates, and whether they are calls or puts. The option chain provides a single screen for the following types of chains for a particular security: "calls and puts", "calls", "puts", "call matrix", "put matrix", "pricer", "straddles", "strangles", "covered calls", "call spreads", "put spreads", "collars", "calendar call spreads", "calendar put spreads", "diagonal call spreads", "diagonal put spreads", "implied volatility", "butterfly call spread", "butterfly put spread", "iron condor spread", "combos (short put/long call)", "futures chain", "futures options" and "option chains". An option chain trading screen enables a customer to view a matrix of all available options for a given security, including the various strike prices, expiration dates, and whether they are calls or puts. All calls and puts for a particular security are viewed in a single screen along with information on each call and put, for example, bids and asks for each strike price and month. The present invention includes an embodiment that includes a matrix through the use of which a customer is able to view a plurality of available options for the item.

**[0014]** The present invention is directed to a system and methods by which an investor can engage in the fully informed trading of a security utilizing a single screen that presents a wide variety of information pertinent to a contemplated trade through a "hover" or "roll over" feature. An embodiment according to the present invention provides a customer with a single option chain trading screen allowing a customer to "hover" at or near various icons to obtain supplemental information without leaving the trading screen. For purposes of this application, an icon is any representation, including a picture, image, region, link, hyperlink, field, symbol, area, button, or checkbox. As the customer hovers at or near an icon, supplemental information is offered. For example, "hover" features or "roll over" features include the display of a chart, a percentage of the price of the option that

is an intrinsic value, a percentage of the price of the option that is a time value, a real-time quote book, a "Greeks" book, a quote box, a trade calculator, a price improvement box, a watch list, a pricing ticket, a theoretical buying power box, or a trade ticket to name a few. The customer simply places the screen indicator over an icon that activates a pop-up of supplemental information. The pop-up floats or levitates in the form of an inset in the option trading screen. The "hover" feature of the present invention allows the investor to maintain a single screen—the trading screen—thereby eliminating the need to scroll or access more than one trading or information screen.

**[0015]** In another embodiment, the present invention includes a selection using what is termed for purposes of this application "triple-action". "Action" includes any physical activity to identify a selection, for example, clicks of a mouse, presses of a button, or strikes on a keyboard. In one embodiment, a triple-action selection formulates a trade by a customer as follows: a customer uses a mouse to click an icon once to denote a "buy"; the customer clicks an icon three times to denote a "reset". Triple-action selection is advantageous in that it allows an investor to make multiple option selections at once. This allows a customer to build a trade more quickly and easily.

[0016] Another embodiment provides a customer with a single option chain trading screen allowing a customer to use a triple-action selection component to formulate a strategy and ultimately execute a trade. For example, multi-leg strategies, or spreads, are provided by clicking, or selecting, an icon next to the option. A "spread" is a limited risk, limited reward strategy established by combining options that would, if separate, profit from opposite moves in the price of the underlying. A "vertical spread" is identified by selecting checkboxes for options that have the same expiration but different strike prices. A "horizontal spread" is also known as a time or calendar spread. This spread is identified, and thereby established by selecting checkboxes for options with different expirations but the same strike price. A "diagonal spread" is identified, and thereby established by selecting checkboxes for options with different strike prices and expirations. It should be noted that in certain embodiments the sequence in which the customer selects checkboxes does not indicate any particular weight in the ultimate trading decision.

[0017] It is an added object of the present invention to provide smart logic such that the investor is directed to the appropriate trade ticket based on the selections made for the particular option(s). For example, smart logic is an algorithm that determines whether the trade is a single leg trade, butterfly, condor, straddle, spread or multi-trade. A "single leg trade" involves a trade of only one option by an investor. A "butterfly" is a limited risk, limited reward strategy that involves four options (all calls or all puts) at three different strike prices. A "condor" is a limited risk, limited reward strategy with profit/loss characteristics similar to a butterfly, but in this case, four options at four strike prices are used. A "straddle" is an option position in which a call and a put with the same strike price and expiration are both bought ("long" straddle) or sold ("short" straddle). A long straddle has unlimited profit potential given a large move up or down. A short straddle has limited profit (if the stock remains stable) and unlimited risk (if the stock moves significantly in either direction. A spread may be vertical, horizontal or diagonal. A multi-trade involves five or more options.

**[0018]** According to one embodiment of the present invention, a system includes a client system and a server system that are connected via a communications link. The client system includes a display component for displaying the plurality of icons as well as the supplemental information that can be accessed by the customer by hovering at or near one or more icons. A server system receives data via the communications link from the client system. Data includes, for example, a trade ticket as well as the fulfillment and execution of the trade of the one or more items.

**[0019]** These, together with other objects and advantages, will be further understood in the details of the construction and operation of the invention as more fully hereinafter described, and with reference to the accompanying drawings, forming a part hereof, wherein the numerals refer to the like part throughout.

### BRIEF DESCRIPTION OF THE DRAWINGS

**[0020]** FIG. **1** is an option chain trading screen according to the present invention;

**[0021]** FIG. **2** is an option chain trading screen illustrating a chart "roll over" feature according to the present invention; **[0022]** FIG. **3**A is an option chain trading screen illustrating a real-time quote book "roll over" feature according to the present invention;

**[0023]** FIG. **3**B is an option chain trading screen illustrating a Greek book "roll over" feature according to the present invention;

**[0024]** FIG. **4** is an option chain trading screen illustrating an intrinsic value and time value "roll over" feature according to the present invention;

**[0025]** FIG. **5** is an option chain trading screen illustrating a quote box "roll over" feature according to the present invention;

**[0026]** FIG. **6**A is an option chain trading screen illustrating a border element according to the present invention;

**[0027]** FIG. **6**B is an option chain trading screen illustrating a price improvement box "roll over" feature according to the present invention;

**[0028]** FIG. **7** is an option chain trading screen illustrating a multi-leg strategy of a horizontal spread according to the present invention;

**[0029]** FIG. **8** is an option chain trading screen illustrating a multi-leg strategy of a vertical spread according to the present invention;

**[0030]** FIG. **9** is an option chain trading screen illustrating a multi-leg strategy of a diagonal spread according to the present invention;

**[0031]** FIG. **10**A is an option chain trading screen illustrating trade manage buttons according to the present invention;

**[0032]** FIG. **10**B is an option chain trading screen illustrating a watch list "roll over" feature according to the present invention;

**[0033]** FIG. **11**A is an option chain trading screen illustrating trade manage buttons according to the present invention;

**[0034]** FIG. **11**B is an option chain trading screen illustrating a pricing ticket "roll over" feature according to the present invention;

**[0035]** FIG. **12**A is an option chain trading screen illustrating trade manage buttons according to the present invention;

**[0036]** FIG. **12**B is an option chain trading screen illustrating a trade calculator "roll over" feature according to the present invention;

**[0037]** FIG. **12**C is an option chain trading screen illustrating a theoretical buying power box "roll over" feature according to the present invention;

[0038] FIG. 12D is an option chain trading screen illustrating a butterfly trade ticket according to the present invention; [0039] FIG. 13A is an option chain trading screen illustrating trade manage buttons according to the present invention; [0040] FIG. 13B is an option chain trading screen illustrating a multi-trade ticket according to the present invention;

**[0041]** FIG. **14**A is a system block diagram according to the present invention; and

**[0042]** FIG. **14**B is a flow chart of the smart logic algorithm according to the present invention.

# DETAILED DESCRIPTION OF THE PRESENTLY-PREFERRED EMBODIMENTS

**[0043]** The system and methods of the present invention will be discussed in the following with respect to the trading of security options, more particularly a stock option. However, the present invention can be used to facilitate more fully informed trading of any security or any item of value.

[0044] FIG. 1 illustrates an option chain trading screen 50. The screen 50 permits a customer to populate fields 205 within a security information box 200 on the screen 50 by typing in information, by selecting from a drop-down menu, or by selecting a button. For purposes of this application, the term "customer" includes anyone utilizing the system and methods according to the present invention, for example, an investor, trader, buyer, seller, holder, or writer to name a few. As shown in FIG. 1, a customer populates security information fields 205 within a security information box 200 including symbol 210, range 230, type of option chain 250, and expiration of the option 270. Symbol 210 is a mnemonic used to uniquely identify a particular security, here a stock. Range 230 includes "near-the-money", "in the money", and "out of the money". Usually, an "in the money" option goes up at the same rate as the stock price. A "near the money" option usually goes up at half of the rate of the stock price. An "out of the money" option typically goes up very little compared to the stock price. Types 250 of option chains include "calls and puts", "calls", "puts", "call matrix", "put matrix", "pricer", "straddles", "strangles", "covered calls", "call spreads", "put spreads", "collars", "calendar call spreads", "calendar put spreads", "diagonal call spreads", "diagonal put spreads", "implied volatility", "butterfly call spread", "butterfly put spread", "iron condor spread", "combos (short put/long call) ", "futures chain", "futures options" and "option chains". The expiration field 270 includes the month and year the offer-to either buy or sell-of an option terminates. Upon populating these fields 205 within the security information box 200, the investor selects the "view chain" button 290 to view the quote box 300 and matrix chain box 400 according to the symbol 210 and type of option chain selected in field 250.

[0045] The screen 50 includes a quote box 300. The quote box 300 includes regions 305 of symbol 310, last 312, change 314, bid 316, ask 318, high 320 (not shown), low 322 (not shown), volume 324 and chart 326. Symbol 310, again, is the mnemonic corresponding to that entered in field 210 of the security information box 200. Last 312 is merely the last bid or ask that was previously entered. Change 314 is the percent difference between the bid 316 and the ask 318. Bid 316 is the price point at which a buyer is willing to purchase the given stock, or sell price. Ask **318** or buy price is the price point where a seller would be willing to sell the given stock. High **320** is the highest price recorded for the trade day whereas low **322** is the lowest price recorded. Volume **324** is the number of shares traded for the particular security, or symbol **310**. Chart **326** is a "hover" or "roll over" feature, such that the investor can display a one-day chart of the stock symbol **310**, as shown in FIG. **2**.

[0046] Trading screen 50 also displays the matrix chain box 400, which is a matrix of price quotes through a list of all options, illustrated as option symbols 410 for a given security including strike prices, expiration dates and whether they are calls 403 or puts 404. The matrix chain box 400 includes expiration month links 402. Each expiration month link 402 is an icon that can be selected to access supplemental information. The expiration month link 402 can be selected for further detail on the option as shown in matrix chain box 400. Matrix chain box 400 displays all available option symbols 410, in one page. The information for each option symbols 410, in one page. The information includes, for example, last 412, change 414, bid 416, ask 418, volume 420, open interest 422 which is the number of option contracts that are open for buy or sell, and strike price 424.

[0047] FIG. 2 is an option chain trading screen 51 illustrating a "hover" feature 500. In this embodiment, the hover over feature 500 is a chart 510. An investor can obtain an expanded chart 510 of the security symbol 210 or 310 (see FIG. 1) by "rolling over" the chart region 326. It is contemplated that the "roll over" chart feature 510 is available for any type 250 (see FIG. 1) of option chain selected. The "roll over" chart feature 510 displays a one-day stock price versus time, although other features are contemplated, for example, a five-day stock price or three month stock price.

[0048] FIG. 3A is an option chain trading screen 52 illustrating another "hover" feature 500 of a real-time quote book 520 for a specific option. An investor can obtain a real-time quote book 520 of the option by "rolling over" the option symbol 410 in the matrix chain box 400 (see FIG. 1). It is contemplated that the "hover" quote book feature 520 is available for any type 250 (see FIG. 1) of option chain selected. The "hover" quote book feature 520 displays size and quote for the option symbol 410 the investor "rolled over", here .OZCAN.

[0049] FIG. 3B is an option chain trading screen 53 illustrating another "roll over" feature 500 of a "Greeks" book 530 for a specific option. An investor can obtain a "Greeks" book 530 of the option by "rolling over" a Greeks link 531. The "hover" "Greeks" book feature 510 displays quantities representing the market sensitivities such as implied volatility and Greeks values, such as Delta, Gamma, Rho, Theta and Vega. An investor can switch back the real-time quote book 520 (FIG. 3A) by rolling over a quote book link 532.

[0050] FIG. 4 is an option chain trading screen 54 illustrating another "roll over" feature 500 of value box 540 for a specific option by rolling over the strike price 424 (see FIG. 1). The investor views the value box 540 as an illustration of the percentage of an option price that is intrinsic or time value. [0051] FIG. 5 is an option chain trading screen 55 illustrating another hover over feature 500 for an information area 550. The information area 550 acts essentially as a quote box, but with more detailed information. Each option includes an information symbol 551. The investor "rolls over" the information symbol 551 next to the option to view the information area **550**. The information area **550** includes detailed information regarding that particular option, such as last trade, change, open, volume, bid, bid size, ask, ask size, expiration, and open interest.

**[0052]** FIG. 6A and FIG. 6B illustrate another hover over feature **500**. FIG. 6A is an option chain trading screen **56** with a spread for price improvement embedded. A spread is a limited risk, limited reward strategy established by combining options that would, if separate, profit from opposite moves in the price of the security. With a price improvement embedded, if a better price exists for the given chain, the price of the ask or bid is highlighted by a border element **552** as shown in FIG. 6A. As the investor hovers over the border element **552**, a price improvement box **560** results as shown in FIG. 6B. FIG. 6B is an option chain trading screen **57** illustrating another hover over feature **500** of a price improvement box **560** that shows the available price improvement.

[0053] FIG. 7, FIG. 8, and FIG. 9 illustrate multi-leg strategies 600 using a triple-action selection feature. Each option symbol has a corresponding checkbox 450. According to the present invention, a triple-action selection feature allows an investor to select one of three states in a checkbox 450—buy, sell, neither—wherein each state is denoted by a click. For example, a first click within a checkbox 450 for a option denotes a buy state, a second click within a checkbox 450 for an option denotes a sell state, and a third click within a checkbox 450 for an option denotes a reset state such that the checkbox returns to its original unselected state. It is also contemplated that a reset button may allow all checkboxes to return to an original or unselected state.

**[0054]** FIG. **7** is an option chain trading screen **60** illustrating a multi-leg strategy **600** of a horizontal spread **610**. A horizontal spread is also known as a time or calendar spread. This spread is established by selecting options via checkboxes with different expirations but the same strike price. As shown, the investor selected a checkbox for a "buy" (one click) and a checkbox for a "sell" (two clicks) for the same strike price of 52.0, but for different expiration of April 2008 for the "buy" and May 2008 for the "sell".

**[0055]** FIG. **8** is an option chain trading screen **61** illustrating a multi-leg strategy **600** of a vertical spread **620**. A vertical spread is selecting options via checkboxes that have the same expiration but different strike prices. As shown in FIG. **8**, the investor selected a checkbox for a "buy" (one click) and a checkbox for a "sell" (two clicks) for the same expiration of March 2008 but different strike prices—41.00 for the "buy" and 42.00 for the "sell".

**[0056]** A diagonal spread is selecting options via checkboxes with different strike prices and different expirations. FIG. **9** is an option chain trading screen **62** illustrating a multi-leg strategy **600** of a diagonal spread **630**. As shown, the investor selected a checkbox for a "buy" (one click) and a checkbox for a "sell" (two clicks) with different expiration dates and different strike prices. The "buy" option has an expiration of March 2008 at a strike price of 41.00 and the "sell" option has an expiration of April 2008 at a strike price of 42.00.

[0057] Another advantage of the present invention is manageability of option trades from a single screen, such as to determining the merits of a trade or executing the trade, through the use of trade manage buttons 700. FIG. 10A is an option chain trading screen 70 illustrating trade manage buttons 700. Trade manage buttons 700 include a reset button 705, add to watch list button 710, mini pricer button 715, trade calculator button **720** and trade button **725**. After an investor selects an option to buy or sell via the checkbox **450** according to the triple-action selection feature described above, the investor can reset the checkboxes **450** to an unselected state by selecting reset button **705**.

[0058] The investor can add certain options to a watch list. As shown in FIG. 10A, the investor selects the options to buy or sell via the corresponding checkbox 450. Upon the investor selecting the add to watch list button 710, an option chain trading screen 71 illustrating a "roll over" feature 500 of a watch list 730 is illustrated as shown in FIG. 10B. The watch list 730 includes the type of watch list 732 and the option symbols 731 to add to the selected type of watch list 732. The option symbols 731 correspond to the selections of FIG. 10A. [0059] FIG. 11A is an option chain trading screen 72 illustrating trade manage buttons 700. Upon the investor selecting an option via the corresponding checkbox 450, the investor can select the mini pricer button 715 to analyze the theoretical value of the option. FIG. 11B is an option chain trading screen 73 illustrating a "roll over" feature 500 of a mini pricing ticket 740. The mini pricing ticket 740 analyzes the theoretical value of the option according to volatility, strike price, stock price, days to expiration, interest rate and Greeks.

[0060] FIG. 12A is an option chain trading screen 80 illustrating trade manage buttons 700. Upon the investor selecting an option via the corresponding checkbox 450, the investor can select the trade calculator button 720 to analyze the trade. The trade calculator quickly displays the buying power required and the potential profit or loss of the trade, before the customer's account is accessed. The trade calculator allows the customer to check the potential investment risk or reward of an order before it is placed. It also allows the customer to apply different investment strategies. If the investor selects the trade calculator button 720, the investor is directed to trading screen 81 as shown in FIG. 12B, although it is contemplated the trade calculator can be a "roll over" feature 500. The trade calculator 740 evaluates the buying power, or potential investment risk or reward of the trade before the investor executes the trade. Components of the trade calculator 740 include option symbol 741, action 742, quantity 743 and price 744. The investor can apply different investment strategies by varying any of these components. The trade calculator 740 also has a find feature 745 to allow an investor to find a chain or futures based on the selected option symbol 741.

[0061] After the investor enters the components 741, 742, 743, 744 of the trade calculator 740, the investor can clear all the selections via the clear button 748 or view the result of the spread by selecting the calculate buying power button 749. [0062] FIG. 12C is an option chain trading screen 82 illustrating a "roll over" feature 500 of the theoretical buying power box 750. The theoretical buying power box 750 includes values of estimated implied volatility, interest rate, chart date and dividends. These values can be illustrated in a graphical format by selecting the graph button 751. Selecting the graph button 751 produces information of the entered trade 752, requirements for the trade 753, and profit and loss chart 754. The entered trade 752 summarizes the information entered from the trade calculator 740. The requirements for the trade 753 breaks down the entire loss or profit the investor would realize if the trade was executed. The profit and loss chart 754 graphically illustrates the theoretical buying power. [0063] Turning back to FIG. 12A, if the trade button 725 is selected, a trade ticket 800 results as shown in FIG. 12D. It is further contemplated that the trade ticket **800** can be a "hover" feature **500**. FIG. **12**D is an option chain trading screen **83** illustrating the trade ticket **800**. Smart logic is an algorithm that determines the appropriate trade ticket according to the options the investor selected and directs the investor to the appropriate trade ticket discussed more fully in reference to FIG. **14**A and FIG. **14**B. Smart logic determines whether the trade is a single leg trade, butterfly, condor, straddle, spread or multi-trade and provides the appropriate trade ticket. As shown in FIG. **12**D, butterfly ticket **801** summarizes the options selected via checkboxes **450** in FIG. **12**A. Here a butterfly ticket **801** is used since the order involves three call options each at a different strike price, more specifically a sell call options.

[0064] FIG. 13A is an option chain trading screen 84 illustrating trade manage buttons 700. If the trade button 725 is selected, a trade ticket results as shown in FIG. 13B. FIG. 13B is an option chain trading screen 85 illustrating the trade ticket 800. It is also contemplated that the trade ticket 800 can be a "hover" feature 500. Again, smart logic of the present invention determines the appropriate ticket according to the options the investor selected and directs the investor to the appropriate trade ticket. As shown in FIG. 13B, multi-trade ticket 802 summarizes the options selected via checkboxes 450 in FIG. 13A. Here a multi-trade ticket 802 is used since the order involves three buy call options each at a different strike prices, more specifically a sell call option at a strike price in between the strike prices of two buy call options.

[0065] FIG. 14A is a block diagram illustrating an embodiment of the present invention. This embodiment supports the present invention over the Internet using the World Wide Web. The server system 30 includes a server engine 31, a client identifier 32, Web pages 33, a customer database 34, a trade database 35 and a smart logic algorithm 40. The server engine 31 receives requests to access Web pages 33 identified by URLs and provides the Web pages 33 to the various client systems 20. Such a request may indicate that the customer has performed the triple-action selection to effect trading. The customer database 34 contains customer information such as the name of the customer and billing information. The trade database 35 contains a description of the various securities or items that may be traded as well as those trades that have been fulfilled or executed. The server 30 implements a smart logic algorithm 40 that registers the selections made by the customer and associates the selections to a trade ticket. The smart logic algorithm then populates the trade ticket in order to execute the trade.

**[0066]** The client identifier **32** is an identifier that uniquely identifies a client system **20**. The client system **20** includes a display component **21** and also contains a browser **22**. A display component **21** is a device conveying visual information, and may further include tactile presentation of images (including text). While most common displays are designed to present information dynamically in a visual medium, tactile displays, usually intended for the blind or visually impaired, use mechanical parts to dynamically update a tactile image (usually of text) so that the image may be felt by the fingers. Examples of display devices include a television, monitor, plasma display, rear projector, or a screen on the portable device.

[0067] In one embodiment, the server system 30 assigns and sends the client identifier 32 to the client system 20 upon interaction between the client system 20 and the server sys-

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tem **30**. The server system **30** and client system **20** interact by exchanging data via communications link **25**, which may include transmission over the Internet. Data includes, for example, the fulfillment and execution of the trade.

[0068] FIG. 14B is a flow chart of the smart logic algorithm 40 according to the present invention. According to the present invention, the server 30 implements a smart logic algorithm 40. The smart logic algorithm 40 registers the selections made by the customer at step 41, for example selections made to checkboxes using triple-action selection. After registering the selections as step 41, the algorithm 40 associates the selection to the appropriate trade ticket (single leg trade, butterfly, condor, straddle, spread or multi-trade) at step 42. At step 43, the trade ticket is populated with the trade selections in order to execute the trade.

**[0069]** One skilled in the art would appreciate that the present invention can be used in various environments other than the Internet. Also, various communication channels may be used such as local area network, wide area network, or point-to-point dial up connection. Also, a server system may comprise any combination of hardware or software that can execute a smart logic algorithm and generate trades. A client system may comprise any combination of hardware or software that can interact with the server system.

**[0070]** While the disclosure is susceptible to various modifications and alternative forms, specific exemplary embodiments thereof have been shown by way of example in the drawings and have herein been described in detail. It should be understood, however, that there is no intent to limit the disclosure to the particular embodiments disclosed, but on the contrary, the intention is to cover all modifications, equivalents, and alternatives falling within the scope of the disclosure as defined by the appended claims.

What is claimed is:

**1**. A computer-implemented method for facilitating trading in one or more items by a customer, the method comprising the steps of:

providing a computer trading screen with a plurality of icons representing information linked to the one or more items, a plurality of trade checkboxes and a plurality of supplemental information that can be accessed by the customer by hovering a screen indicator at one or more of the icons;

displaying on the computer trading screen the supplemental information as the screen indicator hovers at the one or more of the icons, the supplemental information comprising one or more selected from a group consisting of: a chart, a percentage, a real-time quote book.

2. The method of claim 1, wherein the group further comprises of: a Greeks book, a quote box, a trade calculator, a price improvement box, a watch list, a pricing ticket, a theoretical buying power box, or a trade ticket.

3. The method of claim 1, wherein the one or more items is a security option.

**4**. The method of claim **1**, wherein the percentage is a price of a security option that is an intrinsic value.

5. The method of claim 1, wherein, wherein the percentage is a price of a security option that is a time value.

**6**. A computer system for trading one or more items, by a customer, comprising:

- a screen component configured to display a plurality of icons;
- a screen indicator configured to be movable on the screen component, the screen indicator configured to hover at or near one or more icons of the plurality in order to activate an inset of information on the screen component, the inset of information comprising one or more selected from a group consisting of: a chart, a percentage, a real-time quote book.

7. The system of claim 6, wherein the group further comprises of: a Greeks book, a quote box, a trade calculator, a price improvement box, a watch list, a pricing ticket, a theoretical buying power box, or a trade ticket.

8. The system of claim 6, wherein the one or more items is a security option.

9. The system of claim 6, wherein the percentage is a price of a security option that is an intrinsic value.

**10**. The system of claim **6**, wherein the percentage is a price of a security option that is a time value.

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