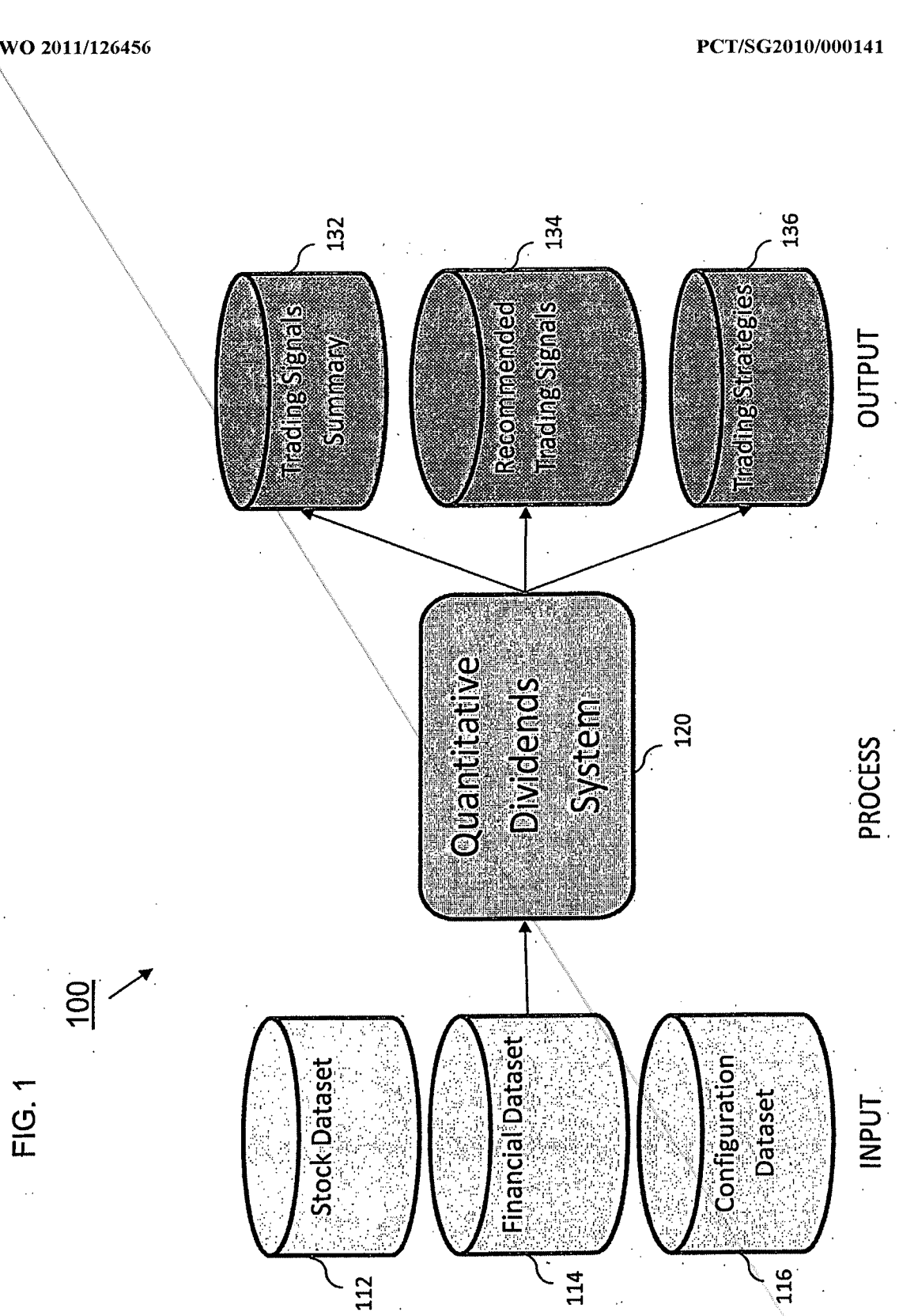

100
INPUT
PROCESS
OUTPUT
Stock Dataset
112
Financial Dataset
114
Configuration Dataset
116
Quantitative Dividends System
120
Trading Signals Summary
132
Recommended Trading Signals
134
Trading Strategies
136

FIG. 1

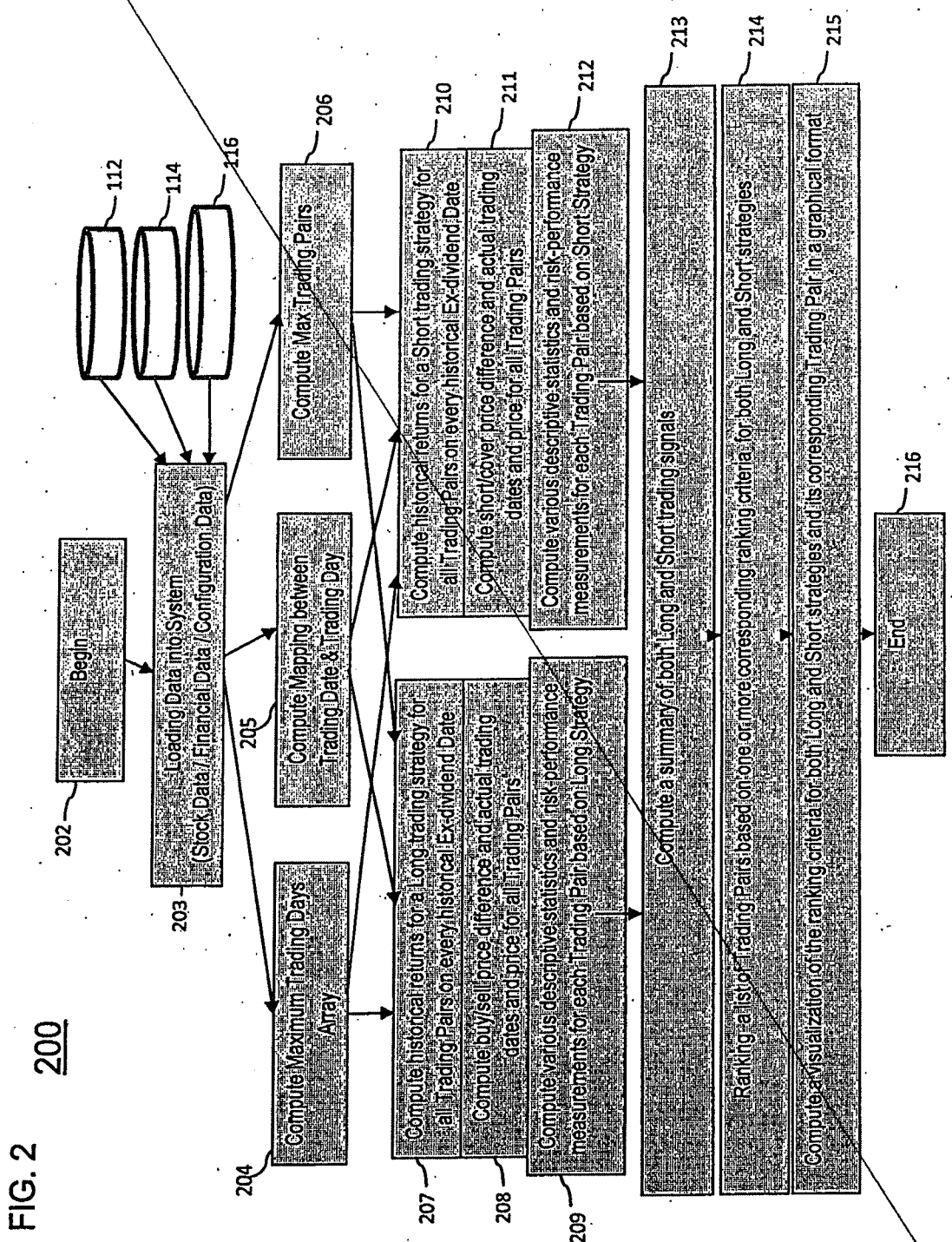

112
114
116
Begin
202
Loading Data into System
(Stock Data / Financial Data / Configuration Data)
203
Compute Maximum Trading Days Array
204
Compute Mapping between Trading Date & Trading Day
205
Compute Max Trading Pairs
206
Compute historical returns for a Long trading strategy for all Trading Pairs on every historical Ex-dividend Date
207
Compute buy/sell price difference and actual trading dates and price for all Trading Pairs
208
Compute various descriptive statistics and risk performance measurements for each Trading Pair based on Long Strategy
209
Compute historical returns for a Short trading strategy for all Trading Pairs on every historical Ex-dividend Date
210
Compute short/cover price difference and actual trading dates and price for all Trading Pairs
211
Compute various descriptive statistics and risk-performance measurements for each Trading Pair based on Short Strategy
212
Compute a summary of both Long and Short trading signals
213
Ranking a list of trading Pairs based on one or more corresponding ranking criteria for both Long and Short strategies
214
Compute a visualization of the ranking criteria for both Long and Short strategies and its corresponding Trading Pair in a graphical format
215
End
216

FIG. 2 200

FIG. 7

700

710

Buy|Sell	2010-02-17	2009-11-23	2009-08-26	2009-05-27	2009-02-25	2009-02-23	2008-11-26	2008-08-27	2008-05-28	2008-02-26
-10dd|-9dd	-1.1	-.35	2.05	-3.84	-3.84	2.63	-1.7	-2.01	1.07	2.
-10dd|-8dd	-.66	-2.16	2.95	-11.16	-11.16	2.71	-3.6	-2.01	1.86	2.
-10dd|-7dd	-.81	-3.2	5.19	11.88	11.88	7.73	-4.45	-2.15	2.05	1.8
-10dd|-6dd	.8	-3.13	5.72	11.42	11.42	16.4	-5.44	-1.58	4.1	.9
-10dd|-5dd	2.27	-2.58	6.53	8.4	8.4	15.29	-7.4	-.81	6.64	1.2
-10dd|-4dd	4.32	-2.23	8.05	11.79	11.79	16.36	-5.82	-1.66	7.37	.9
-10dd|-3dd	4.69	-3.76	7.43	13.25	13.25	16.99	-6.32	.31	7.37	-2.4
-10dd|-2dd	4.47	-2.58	6.44	6.12	6.12	18.99	-6.76	.42	7.28	1.4
-10dd|-1dd	4.76	2.01	10.74	6.39	6.39	11.98	-2.49	-.98	4.56	1.
-10dd|DD	5.27	2.92	12.26	8.77	8.77	8.11	-.5	-1.26	3.98	.4
-10dd|1dd	6.52	.27	14.5	6.58	6.58	-7.31	-2.69	-.43	6.39	-2.9

711

7ed|8ed	-.27	1.47	1.83	-3.22	-4.46	-7.35	-4.74		-1.27	-1
7ed|9ed	-1.67	-1.31	-.52	3.78	-5.33	-7.42	-5.48	.54	-3.86	-.
7ed|10ed	-1.74	-2.54	-2.72	9.74	-8.37	-1.32	-6.87	.54	-5.07	-.
8ed|9ed	-1.41	-2.75	-2.31	7.22	-.91	-.08	-.78	.54	-2.63	.9
8ed|10ed	-1.48	-3.96	-4.47	13.38	-4.1	6.51	-2.24	.54	-3.85	.6
9ed|10ed	-.07	-1.25	-2.22	5.74	-3.22	6.59	-1.48		-1.26	-.

Table (partial): For LONG strategy, actual returns (%), ie. Buy and Sell for all Trading Pair, inclusive of dividend where applicable

FIG. 10

1000

1010

ShortS|CoverB	2010-02-17	2009-11-23	2009-08-26	2009-05-27	2009-02-25	2009-02-23	2008-11-26	2008-08-27	2008-05-28	2008-02-26
-10dd|-9dd	1.11	.34	-2.02	3.99	3.99	-2.57	1.72	2.04	-1.07	-2.8
-10dd|-8dd	.66	2.2	-2.87	12.55	12.55	-2.65	3.72	2.04	-1.84	-2.1
-10dd|-7dd	.81	3.3	-4.94	-10.63	-10.63	-7.18	4.64	2.19	-2.02	-1.8
-10dd|-6dd	-.8	3.23	-5.42	-10.26	-10.26	-14.1	5.74	1.59	-3.95	-.5
-10dd|-5dd	-2.23	2.64	-6.14	-7.76	-7.76	-13.27	7.98	.8	-6.24	-1.2
-10dd|-4dd	-4.15	2.27	-7.46	-10.55	-10.55	-14.07	6.17	1.68	-6.88	-.5
-10dd|-3dd	-4.49	3.9	-6.92	-11.71	-11.71	-14.53	6.73	-.32	-6.88	2
-10dd|-2dd	-4.29	2.64	-6.06	-5.78	-5.78	-15.97	7.24	-.43	-6.8	-1.4
-10dd|-1dd	-4.55	-1.98	-9.71	-6.02	-6.02	-10.71	2.54	.98	-4.37	-1.7
-10dd|DD	-5.02	-2.84	-10.93	-8.07	-8.07	-7.51	.49	1.27	-3.83	-.4
-10dd|1dd	-6.13	-.28	-12.67	-6.18	-6.18	7.88	2.76	.43	-6.02	2.5

1011

7ed|8ed	.26	-1.46	-1.8	3.31	4.65	7.93	4.96		1.28	1
7ed|9ed	1.69	1.32	.51	-3.65	5.61	8	5.79	-.54	4.01	.1
7ed|10ed	1.76	2.6	2.78	-8.89	9.12	1.32	7.36	-.54	5.33	.4
8ed|9ed	1.42	2.81	2.35	-6.75	.91	.07	.78	-.54	2.69	-.9
8ed|10ed	1.49	4.11	4.67	-11.81	4.26	-6.12	2.28	-.54	4	-.6
9ed|10ed	.06	1.25	2.26	-5.44	3.31	-6.19	1.49	-.01	1.26	.2

Table (partial): For SHORT strategy, actual returns (%), ie. Short and Cover for all Trading Pair, inclusive of dividend payment where applicable

FIG. 1

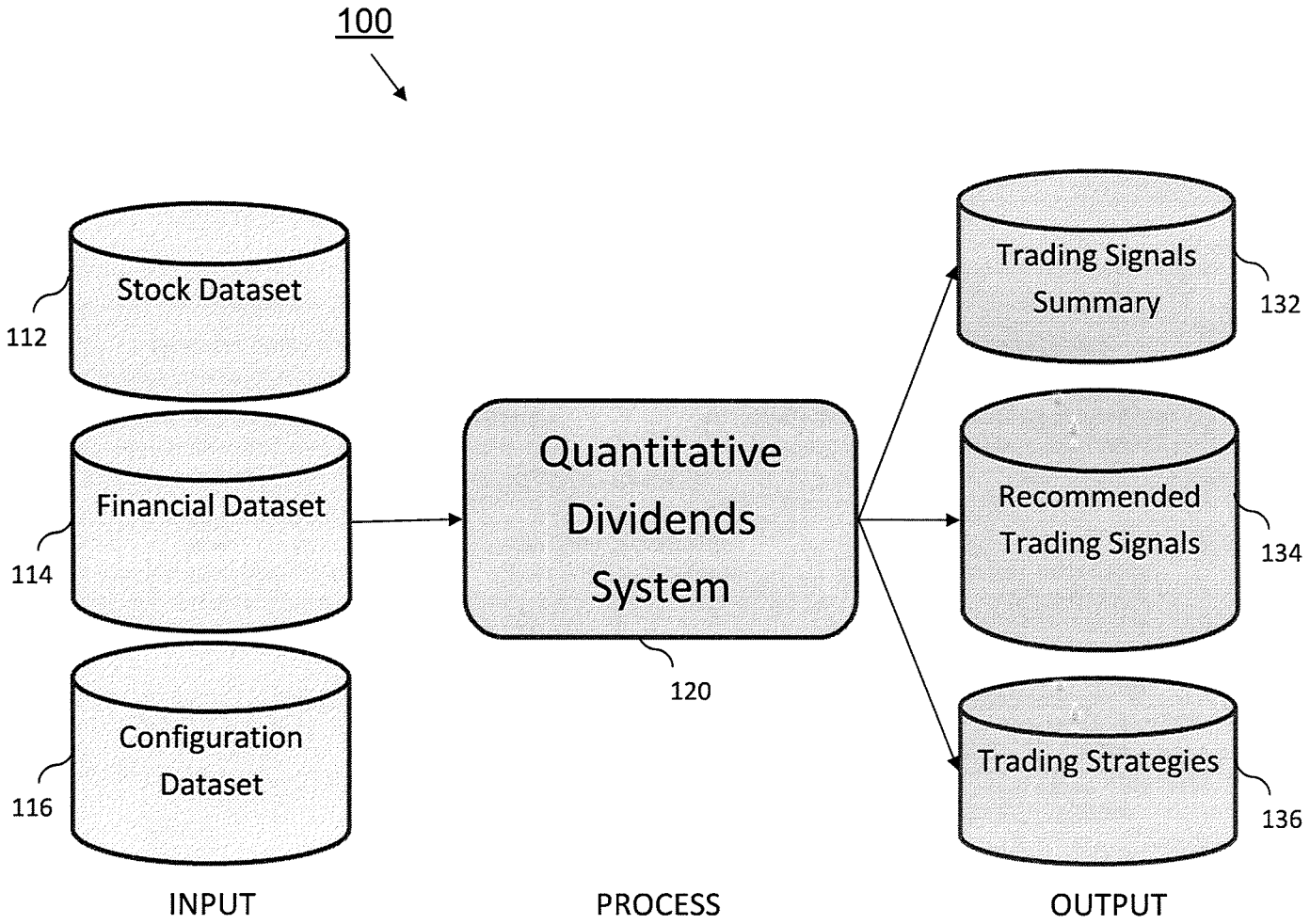

100
Stock Dataset
112
Financial Dataset
114
Configuration Dataset
116
Quantitative Dividends System
120
Trading Signals Summary
132
Recommended Trading Signals
134
Trading Strategies
136
INPUT
PROCESS
OUTPUT

FIG. 2

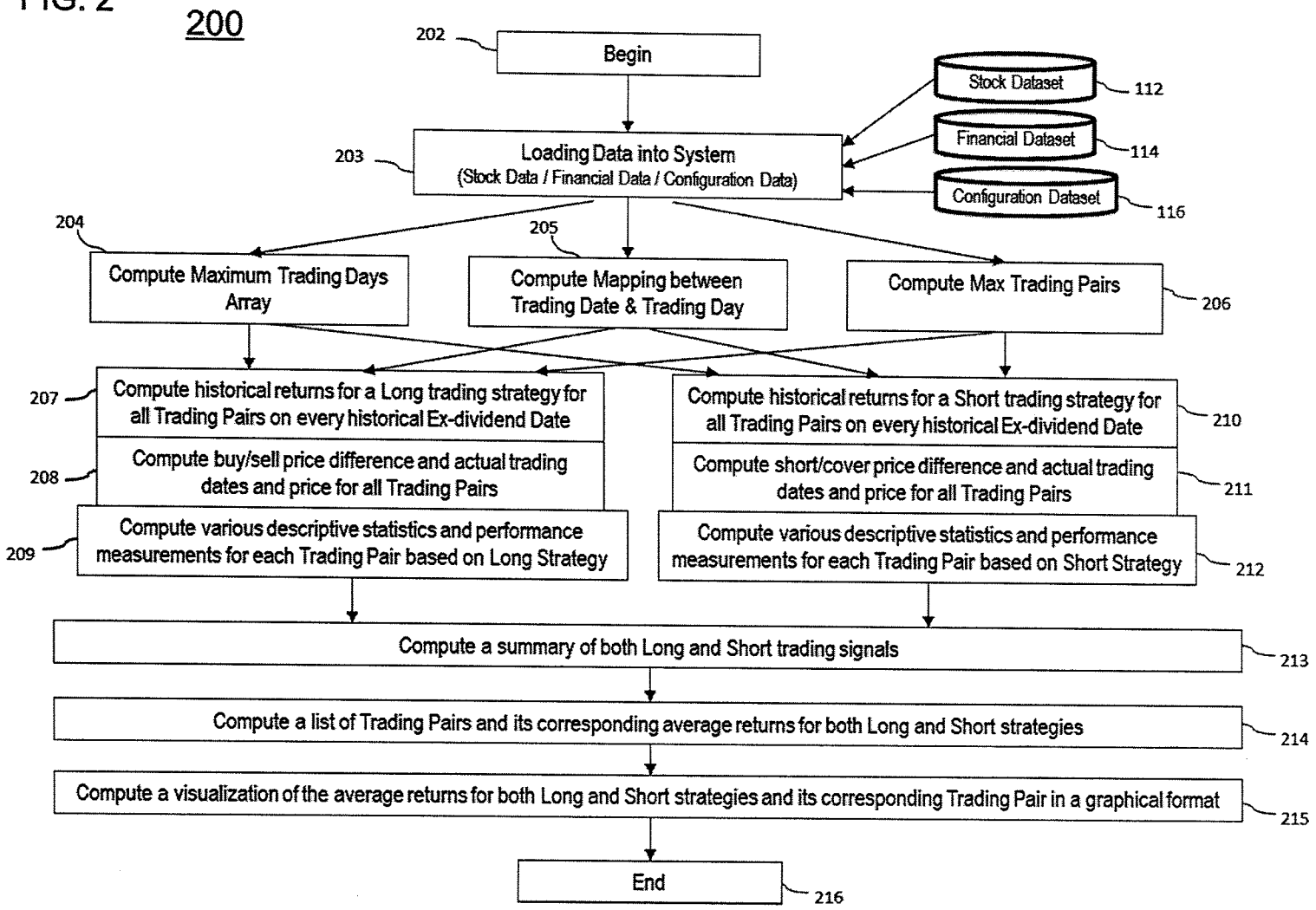

200
202
Begin
Stock Dataset
112
Financial Dataset
114
Configuration Dataset
116
203
Loading Data into System
(Stock Data / Financial Data / Configuration Data)
204
Compute Maximum Trading Days Array
205
Compute Mapping between Trading Date & Trading Day
Compute Max Trading Pairs
206
207
Compute historical returns for a Long trading strategy for all Trading Pairs on every historical Ex-dividend Date
Compute historical returns for a Short trading strategy for all Trading Pairs on every historical Ex-dividend Date
210
208
Compute buy/sell price difference and actual trading dates and price for all Trading Pairs
Compute short/cover price difference and actual trading dates and price for all Trading Pairs
211
209
Compute various descriptive statistics and performance measurements for each Trading Pair based on Long Strategy
Compute various descriptive statistics and performance measurements for each Trading Pair based on Short Strategy
212
Compute a summary of both Long and Short trading signals
213
Compute a list of Trading Pairs and its corresponding average returns for both Long and Short strategies
214
Compute a visualization of the average returns for both Long and Short strategies and its corresponding Trading Pair in a graphical format
215
End
216

FIG. 7

700

710

Buy|Sell	2010-02-17	2009-11-23	2009-08-26	2009-05-27	2009-02-25	2009-02-23	2008-11-26	2008-08-27	2008-05-28	2008-02-26
-10dd|-9dd	-1.1	-.35	2.05	-3.84	-3.84	2.63	-1.7	-2.01	1.07	2
-10dd|-8dd	-.66	-2.16	2.95	-11.16	-11.16	2.71	-3.6	-2.01	1.86	2
-10dd|-7dd	-.81	-3.2	5.19	11.88	11.88	7.73	-4.45	-2.15	2.05	1.8
-10dd|-6dd	.8	-3.13	5.72	11.42	11.42	16.4	-5.44	-1.58	4.1	.9
-10dd|-5dd	2.27	-2.58	6.53	8.4	8.4	15.29	-7.4	-.81	6.64	1.2
-10dd|-4dd	4.32	-2.23	8.05	11.79	11.79	16.36	-5.82	-1.66	7.37	.9
-10dd|-3dd	4.69	-3.76	7.43	13.25	13.25	16.99	-6.32	.31	7.37	-2.4
-10dd|-2dd	4.47	-2.58	6.44	6.12	6.12	18.99	-6.76	.42	7.28	1.4
-10dd|-1dd	4.76	2.01	10.74	6.39	6.39	11.98	-2.49	-.98	4.56	1
-10dd|DD	5.27	2.92	12.26	8.77	8.77	8.11	-.5	-1.26	3.98	.4
-10dd|1dd	6.52	.27	14.5	6.58	6.58	-7.31	-2.69	-.43	6.39	-2.5
:										
7ed|8ed	-.27	1.47	1.83	-3.22	-4.46	-7.35	-4.74		-1.27	-1
7ed|9ed	-1.67	-1.31	-.52	3.78	-5.33	-7.42	-5.48	.54	-3.86	-.1
7ed|10ed	-1.74	-2.54	-2.72	9.74	-8.37	-1.32	-6.87	.54	-5.07	-.4
8ed|9ed	-1.41	-2.75	-2.31	7.22	-.91	-.08	-.78	.54	-2.63	.9
8ed|10ed	-1.48	-3.96	-4.47	13.38	-4.1	6.51	-2.24	.54	-3.85	.6
9ed|10ed	-.07	-1.25	-2.22	5.74	-3.22	6.59	-1.48		-1.26	-.2

711

Table (partial): For LONG strategy, actual returns (%), ie. Buy and Sell for all Trading Pairs, inclusive of dividend where applicable

FIG. 10

1000

1010

ShortS|CoverB	2010-02-17	2009-11-23	2009-08-26	2009-05-27	2009-02-25	2009-02-23	2008-11-26	2008-08-27	2008-05-28	2008-02-26
-10dd|-9dd	1.11	.34	-2.02	3.99	3.99	-2.57	1.72	2.04	-1.07	-2.8
-10dd|-8dd	.66	2.2	-2.87	12.55	12.55	-2.65	3.72	2.04	-1.84	-2.1
-10dd|-7dd	.81	3.3	-4.94	-10.63	-10.63	-7.18	4.64	2.19	-2.02	-1.8
-10dd|-6dd	-.8	3.23	-5.42	-10.26	-10.26	-14.1	5.74	1.59	-3.95	-.9
-10dd|-5dd	-2.23	2.64	-6.14	-7.76	-7.76	-13.27	7.98	.8	-6.24	-1.2
-10dd|-4dd	-4.15	2.27	-7.46	-10.55	-10.55	-14.07	6.17	1.68	-6.88	-.5
-10dd|-3dd	-4.49	3.9	-6.92	-11.71	-11.71	-14.53	6.73	-.32	-6.88	2
-10dd|-2dd	-4.29	2.64	-6.06	-5.78	-5.78	-15.97	7.24	-.43	-6.8	-1.4
-10dd|-1dd	-4.55	-1.98	-9.71	-6.02	-6.02	-10.71	2.54	.98	-4.37	-1.7
-10dd|DD	-5.02	-2.84	-10.93	-8.07	-8.07	-7.51	.49	1.27	-3.83	-.4
-10dd|1dd	-6.13	-.28	-12.67	-6.18	-6.18	7.88	2.76	.43	-6.02	2.5

:

1011

7ed|8ed	.26	-1.46	-1.8	3.31	4.65	7.93	4.96		1.28	1
7ed|9ed	1.69	1.32	.51	-3.65	5.61	8	5.79	-.54	4.01	.1
7ed|10ed	1.76	2.6	2.78	-8.89	9.12	1.32	7.36	-.54	5.33	.4
8ed|9ed	1.42	2.81	2.35	-6.75	.91	.07	.78	-.54	2.69	-.9
8ed|10ed	1.49	4.11	4.67	-11.81	4.26	-6.12	2.28	-.54	4	-.6
9ed|10ed	.06	1.25	2.26	-5.44	3.31	-6.19	1.49	-.01	1.26	.2

Table (partial): For SHORT strategy, actual returns (%), ie. Short and Cover for all Trading Pairs, inclusive of dividend payment where applicable