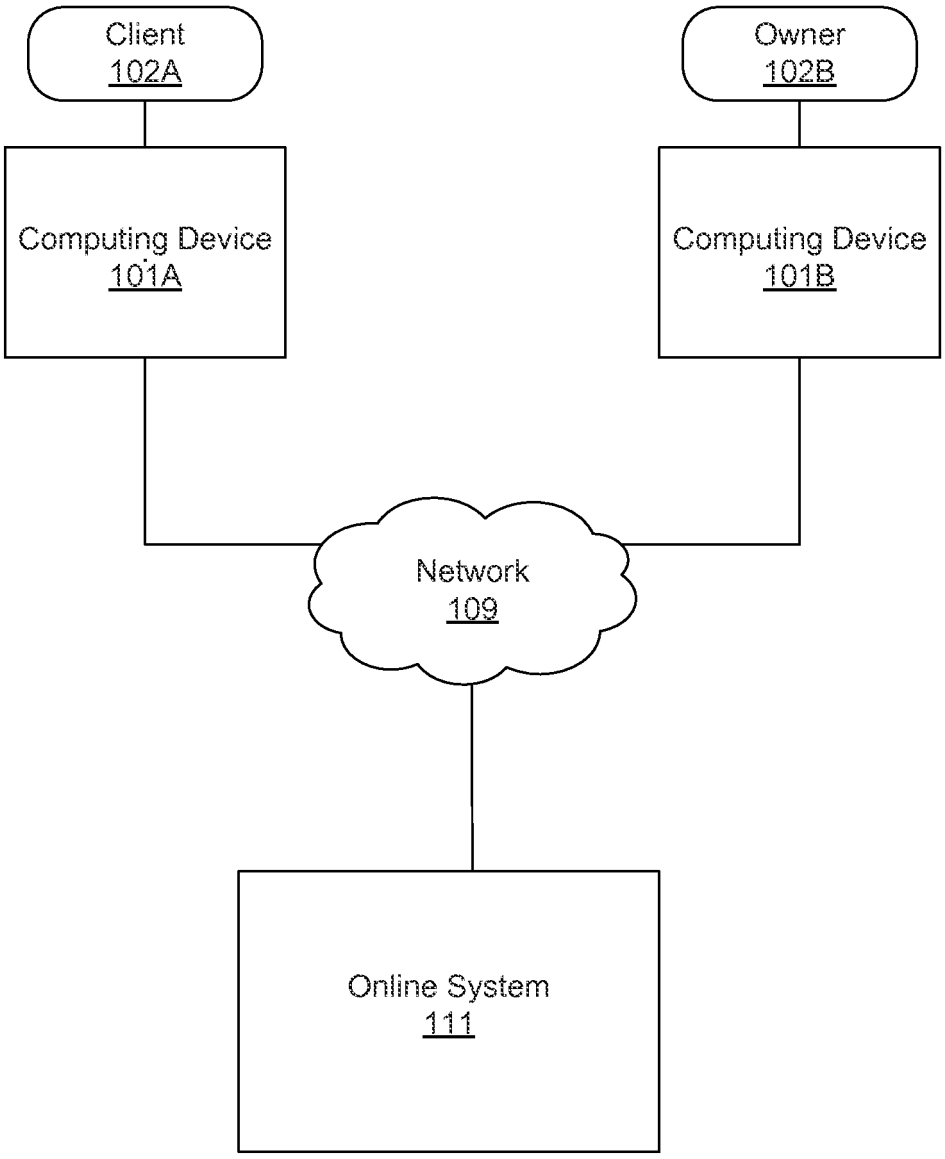

Client
102A
Owner
102B
Computing Device
101A
Computing Device
101B
Network
109
Online System
111

FIG. 1

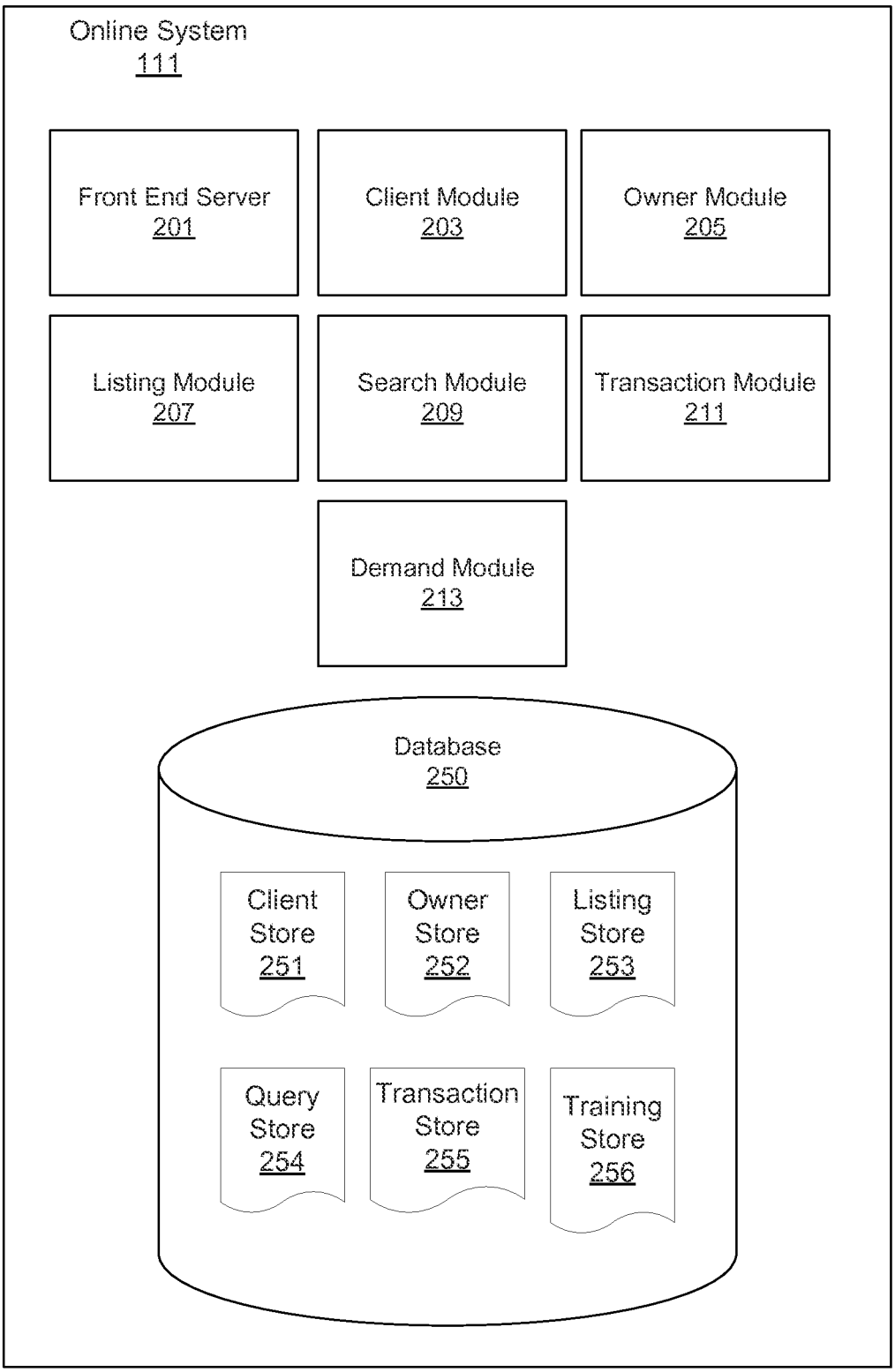

Online System
111
Front End Server
201
Client Module
203
Owner Module
205
Listing Module
207
Search Module
209
Transaction Module
211
Demand Module
213
Database
250
Client
Store
251
Owner
Store
252
Listing
Store
253
Query
Store
254
Transaction
Store
255
Training
Store
256

FIG. 2

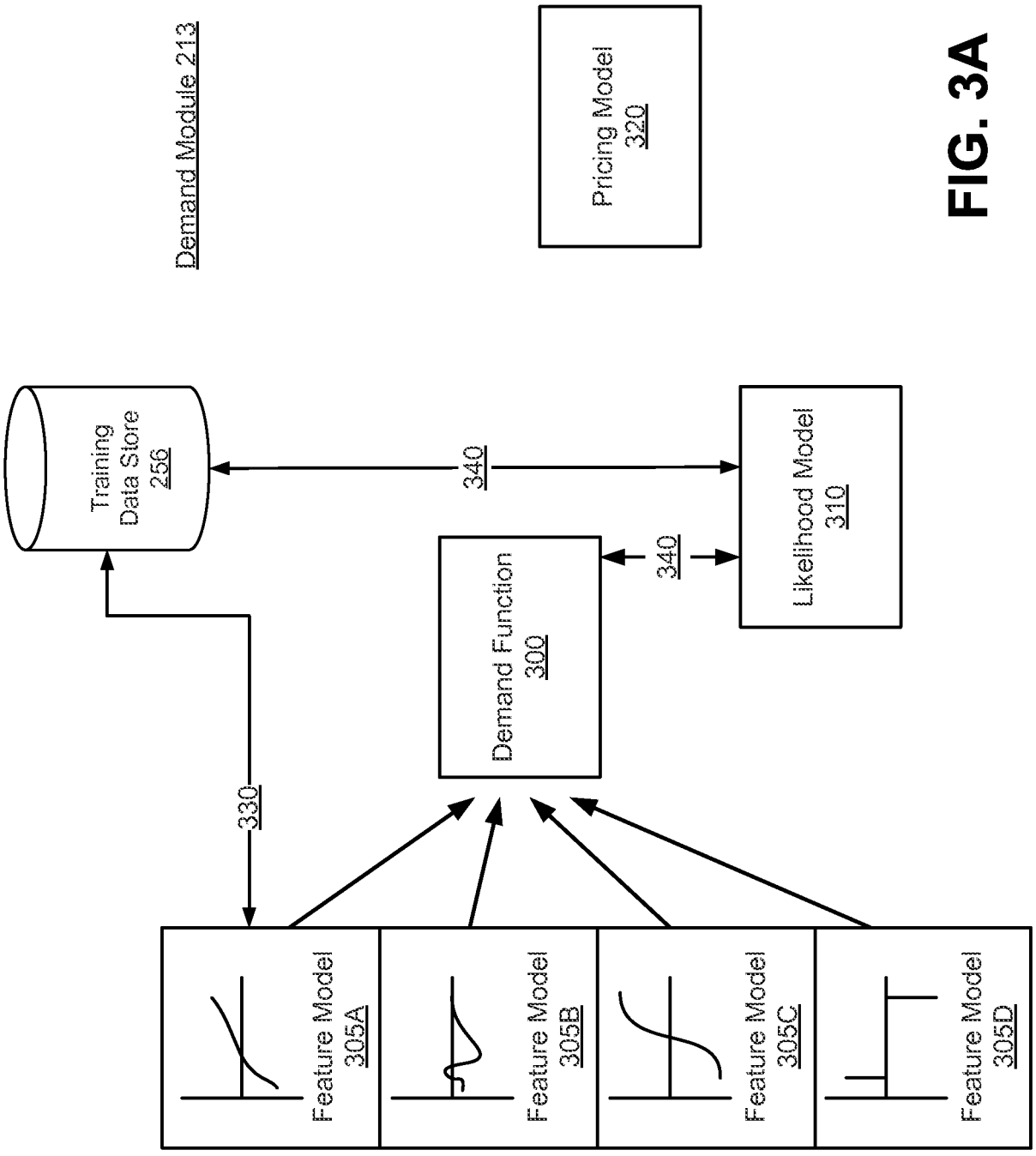

Demand Module 213
Pricing Model 320
Training Data Store 256
340
Likelihood Model 310
340
Demand Function 300
330
Feature Model 305A
Feature Model 305B
Feature Model 305C
Feature Model 305D

FIG. 3A

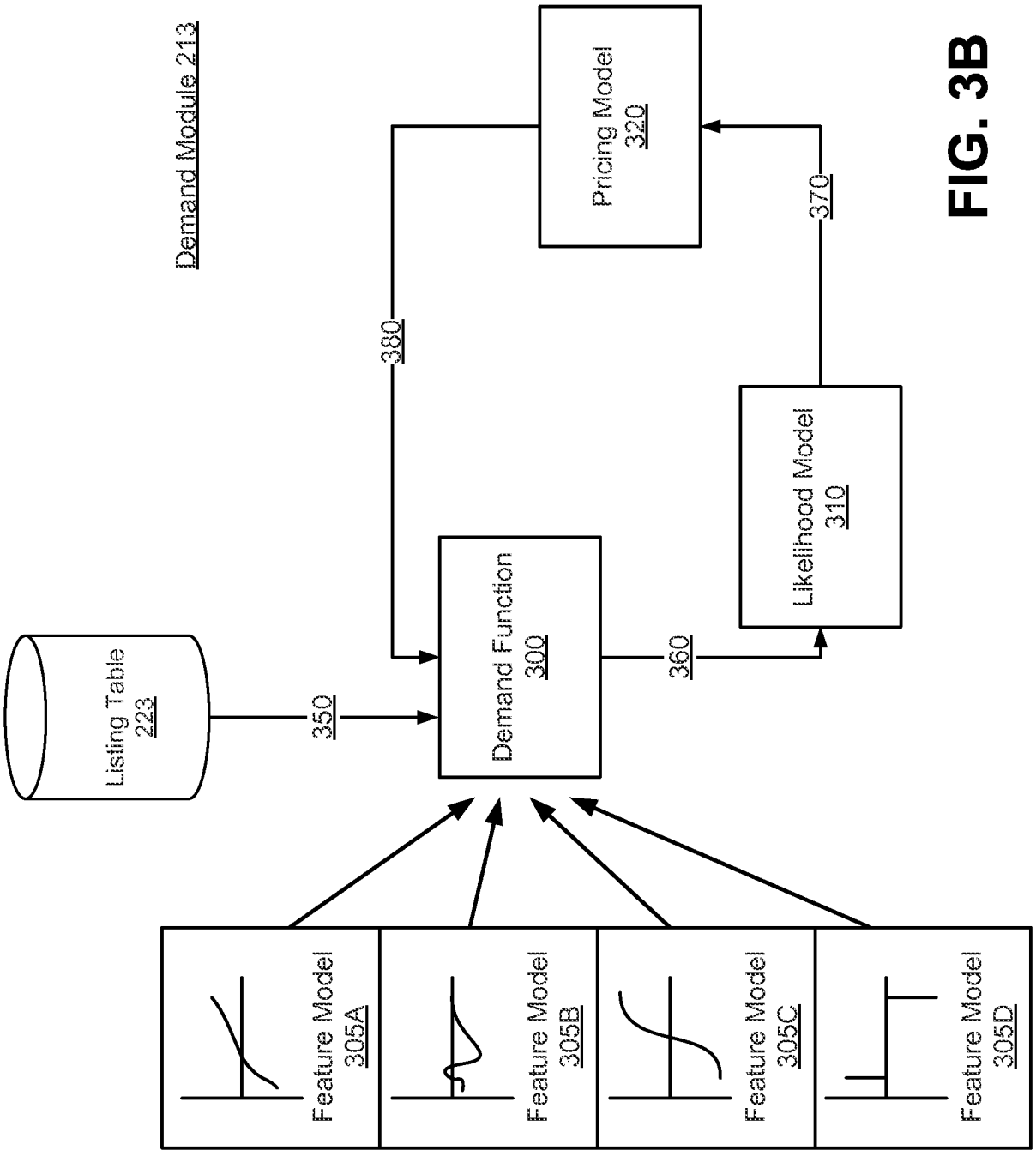

Demand Module 213
Pricing Model
320
380
370
Likelihood Model
310
Demand Function
300
360
Listing Table
223
350
Feature Model
305A
Feature Model
305B
Feature Model
305C
Feature Model
305D

FIG. 3B

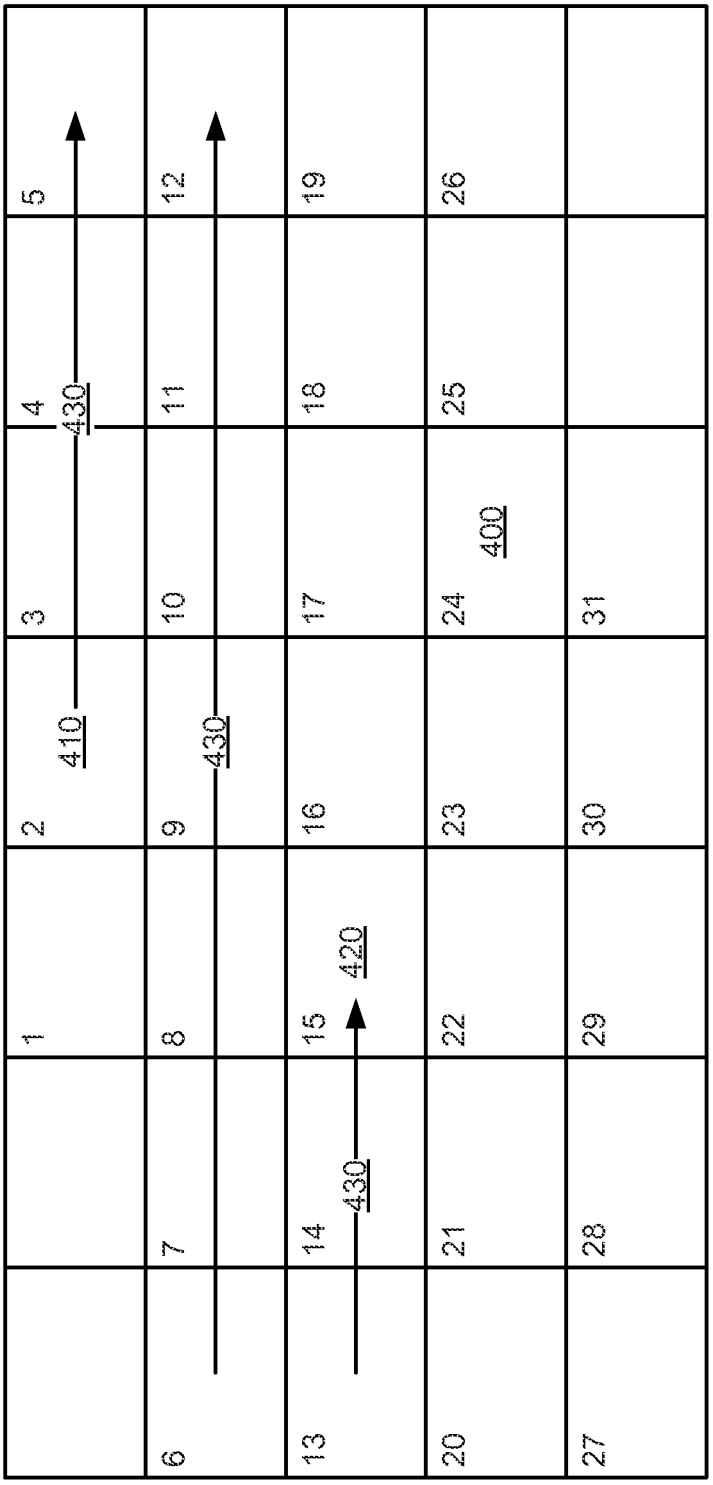

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
410
430
430
430
420
400
October

FIG. 4A

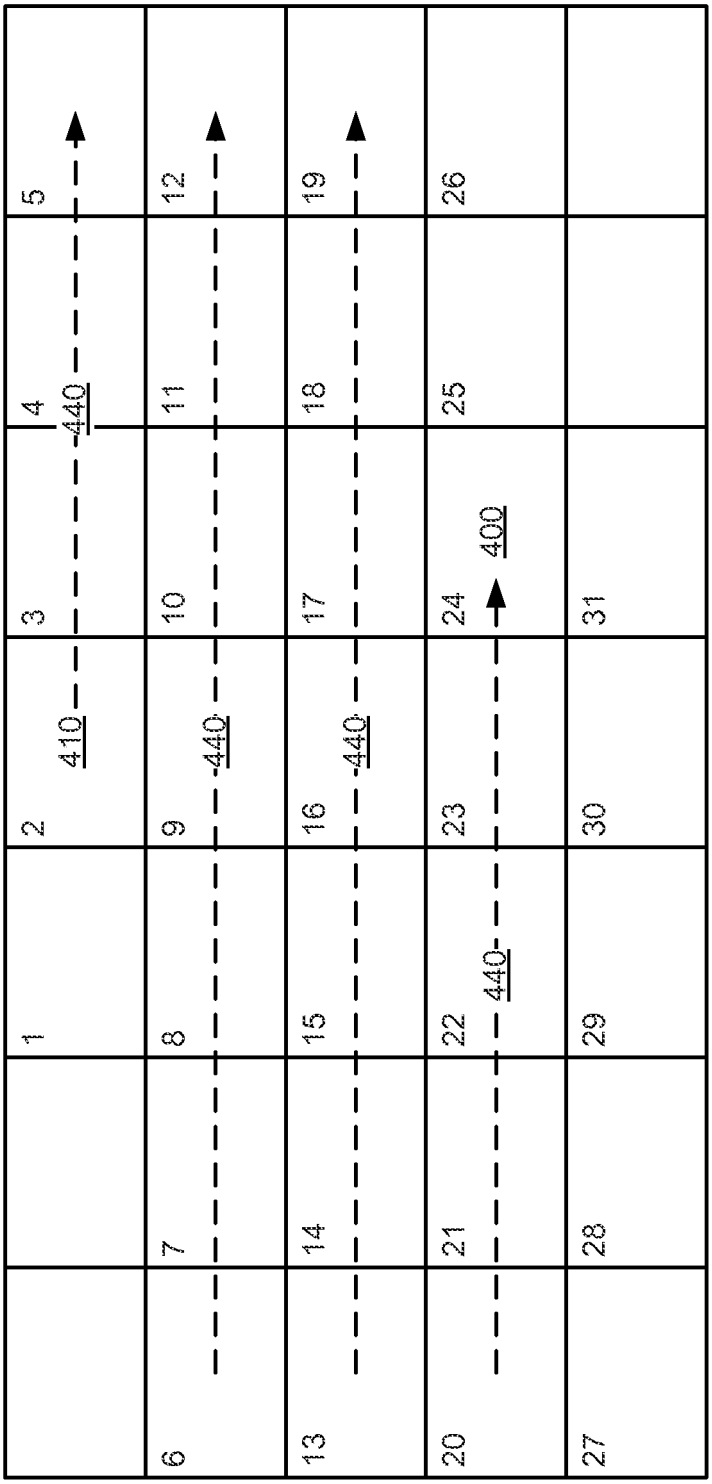


FIG. 4B

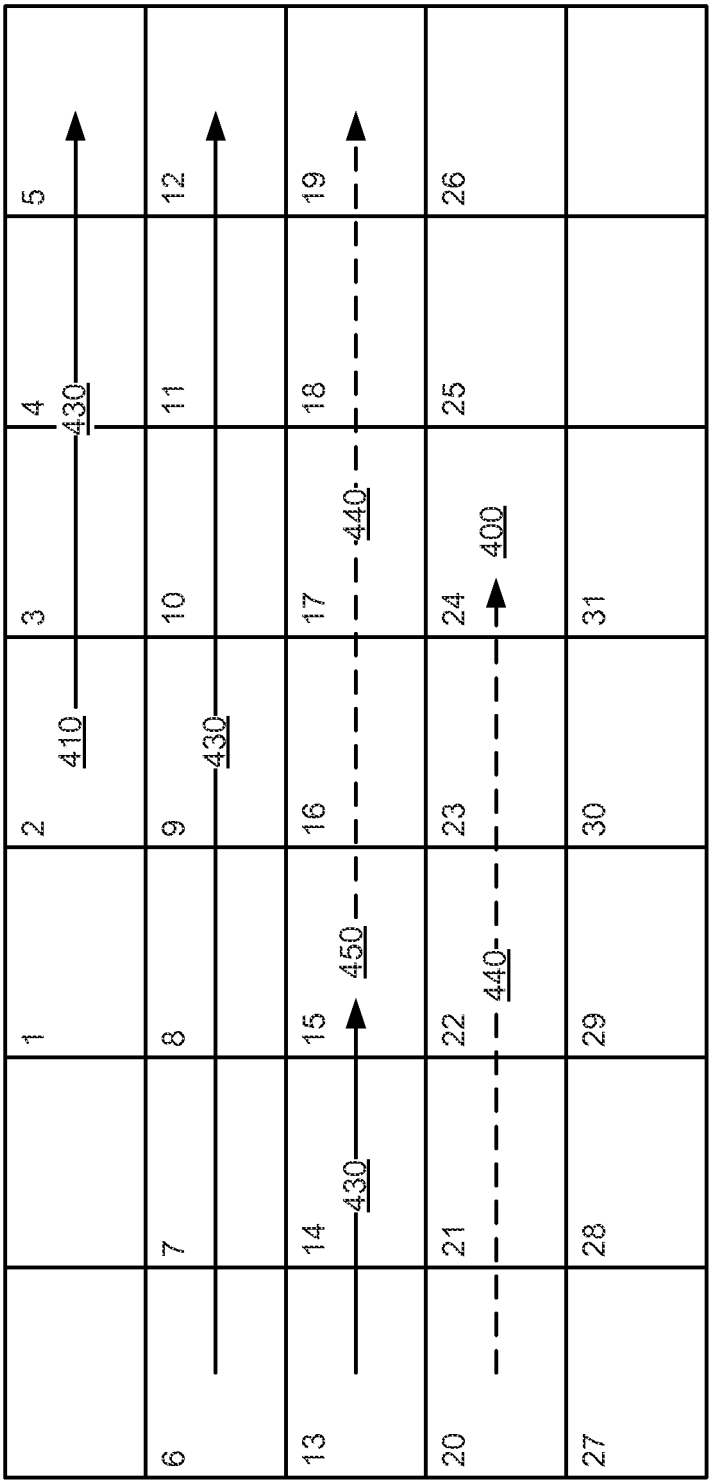

1
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8
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10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
410
430
430
430
450
440
440
400
October

FIG. 4C

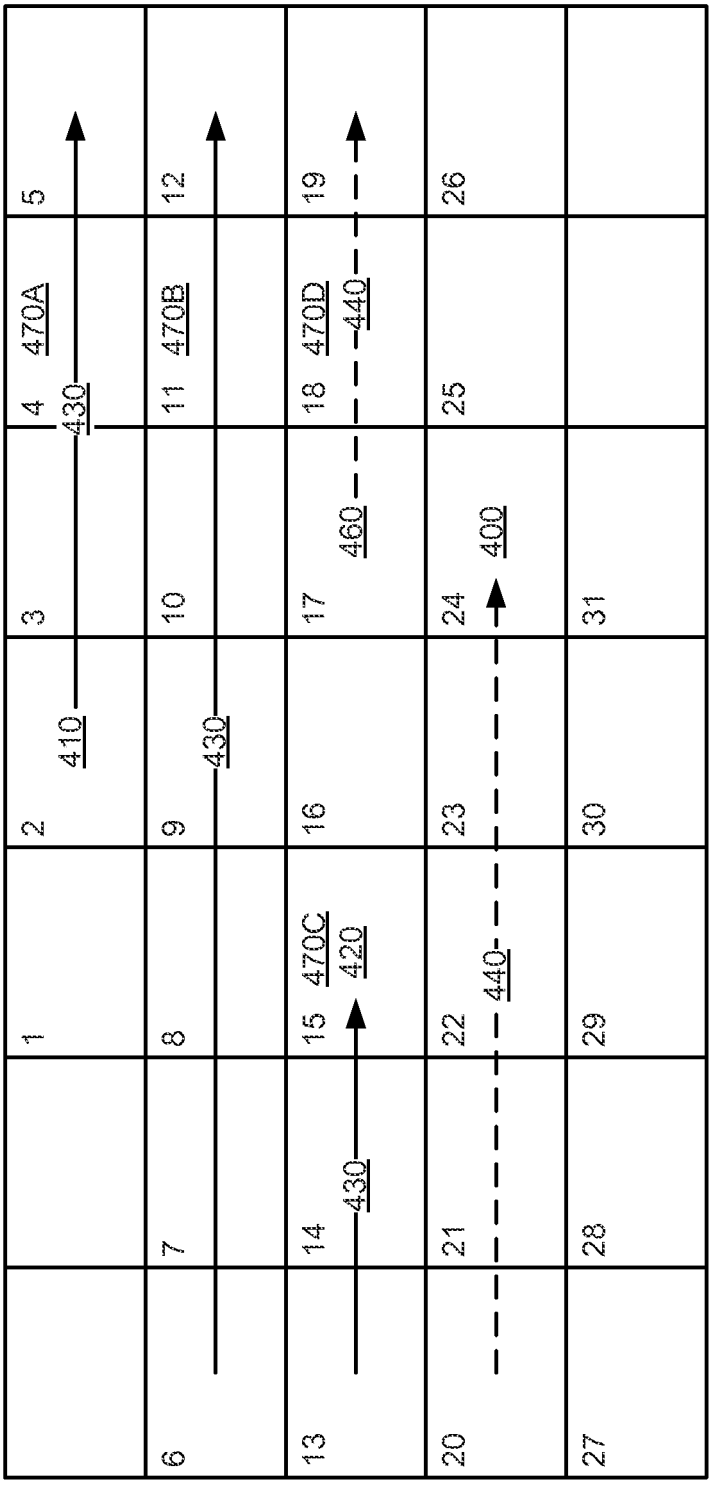

1
2
410
3
4
470A
430
5
6
7
8
9
430
10
11
470B
12
13
14
430
15
470C
420
16
17
460
18
470D
440
19
20
21
22
440
23
24
400
25
26
27
28
29
30
31
October

FIG. 4D

Training Store 256

	Label	Feature 1	Feature 2	Feature 3	...	Feature m
Training Sample 1	1	14	100	Detroit		1
Training Sample 2	1	7	75	LA		0
Training Sample 3	-1	5	220	SF		0
Training Sample 4	1	24	140	New York		1
Training Sample 5	-1	3	300	Seattle		0
...						
Training Sample N	-1	18	75	Portland		1

500

	Label	Days Until Expiration	Price	City	WiFi
470A	1	20	120	SF	1
470B	1	13	100	SF	1
470C	1	9	100	SF	1
470D	-1	6	90	SF	1

510

FIG. 5

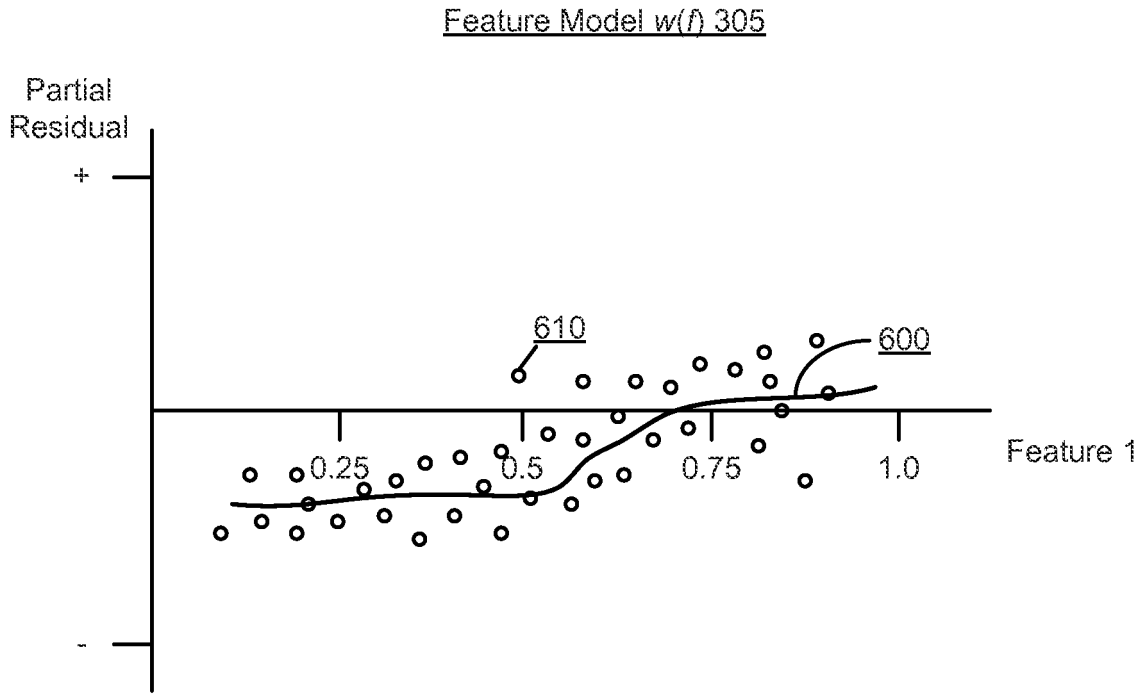

Feature Model w(f) 305
Partial Residual
+
-
610
600
0.25
0.5
0.75
1.0
Feature 1

FIG. 6

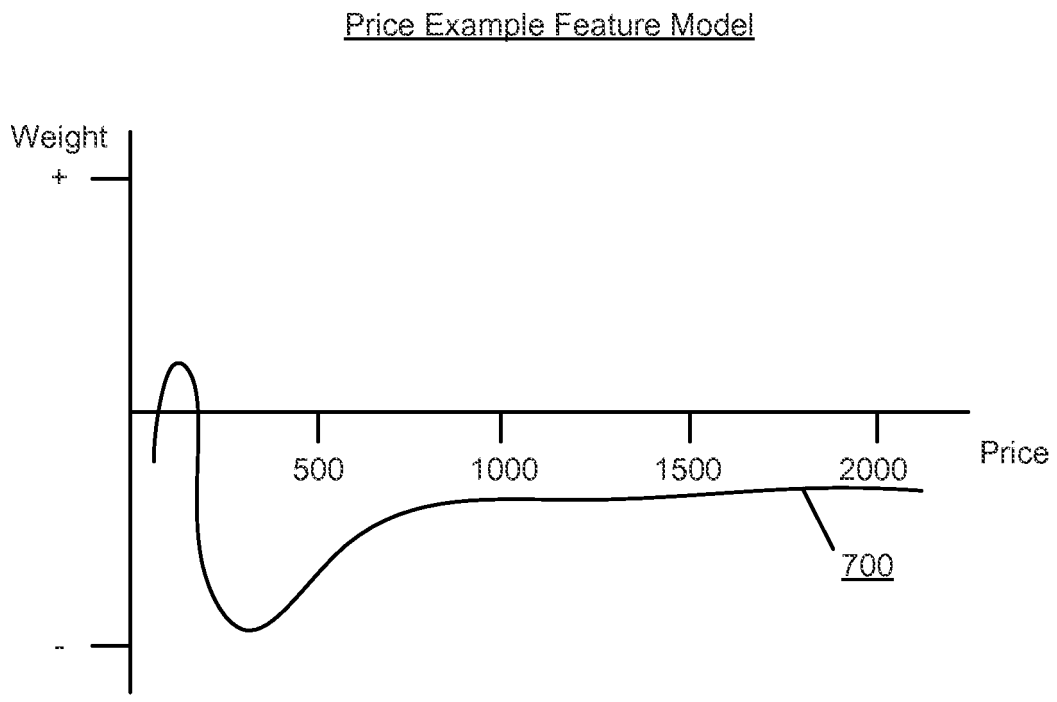

Price Example Feature Model
Weight
+
-
500
1000
1500
2000
Price
700

FIG. 7A

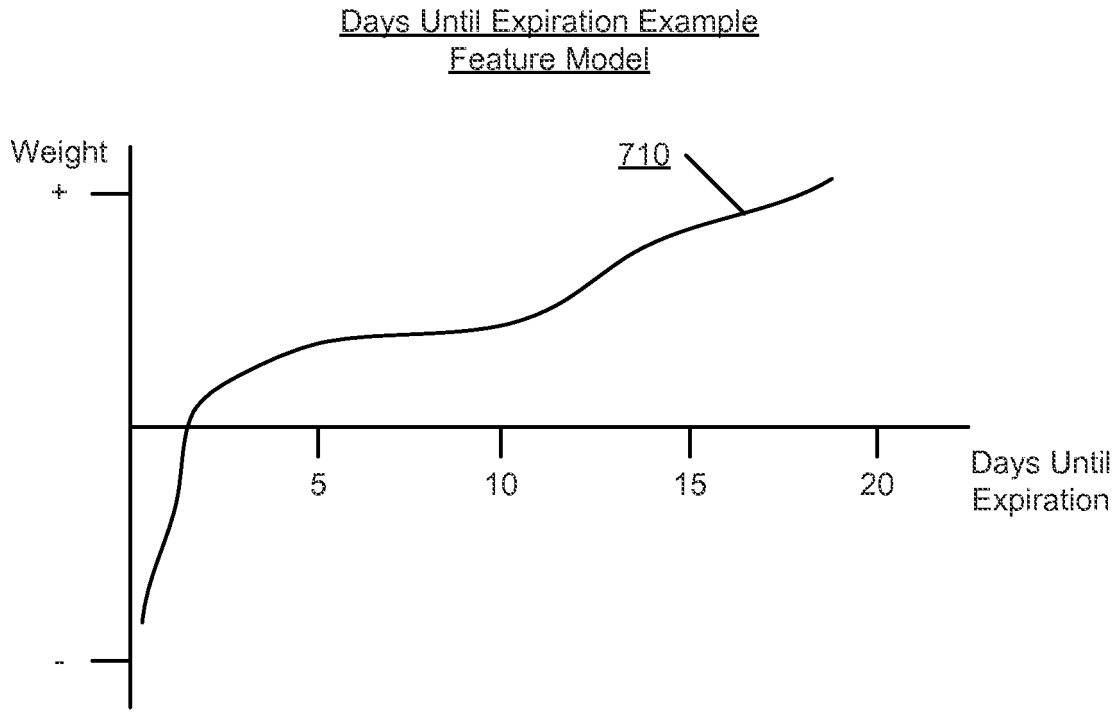

Days Until Expiration Example
Feature Model
Weight
+
-
710
5
10
15
20
Days Until
Expiration

FIG. 7B

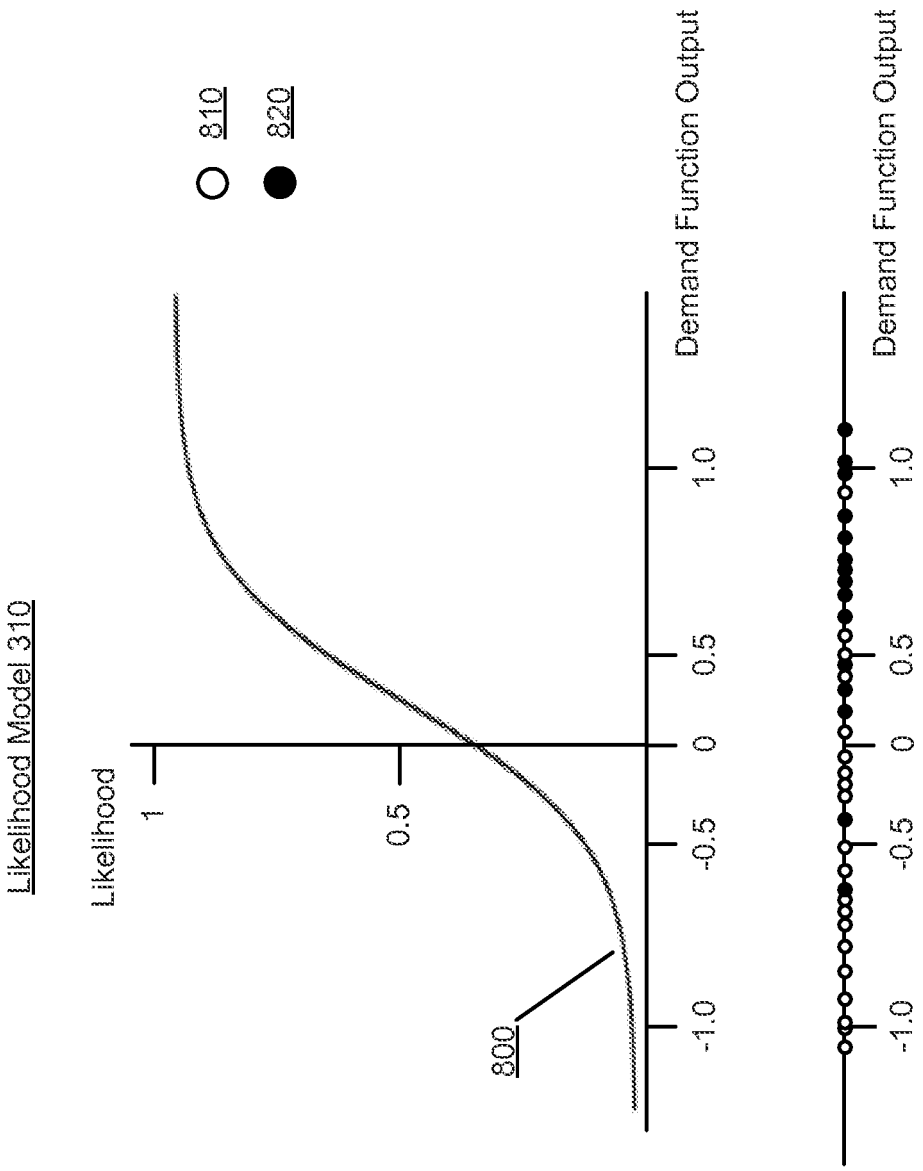

Likelihood Model 310
Likelihood
1
0.5
800
810
820
-1.0
-0.5
0
0.5
1.0
Demand Function Output
Demand Function Output

FIG. 8

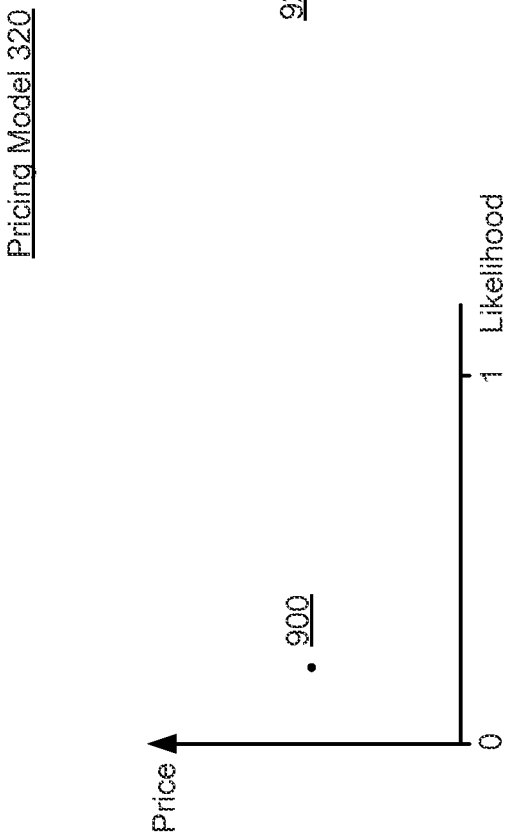


FIG. 9A

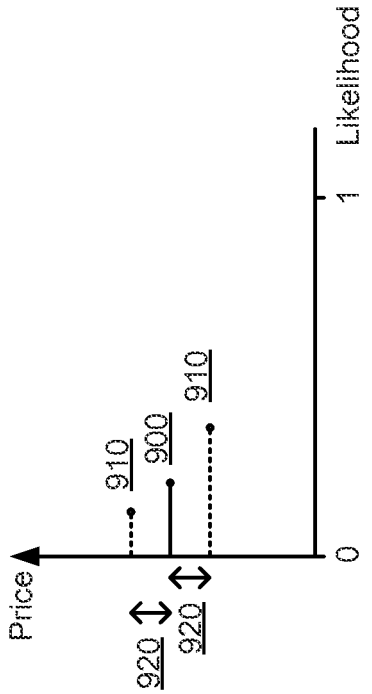


FIG. 9B

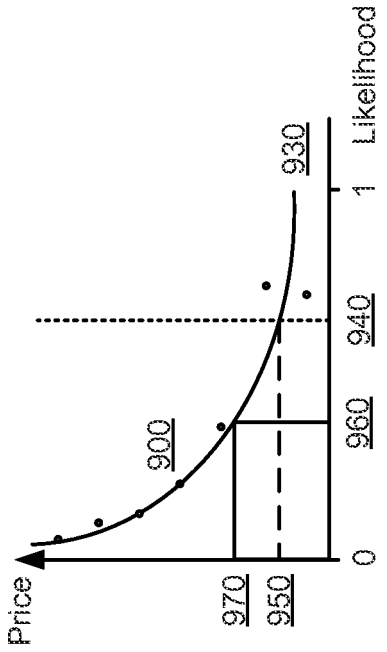


FIG. 9C