

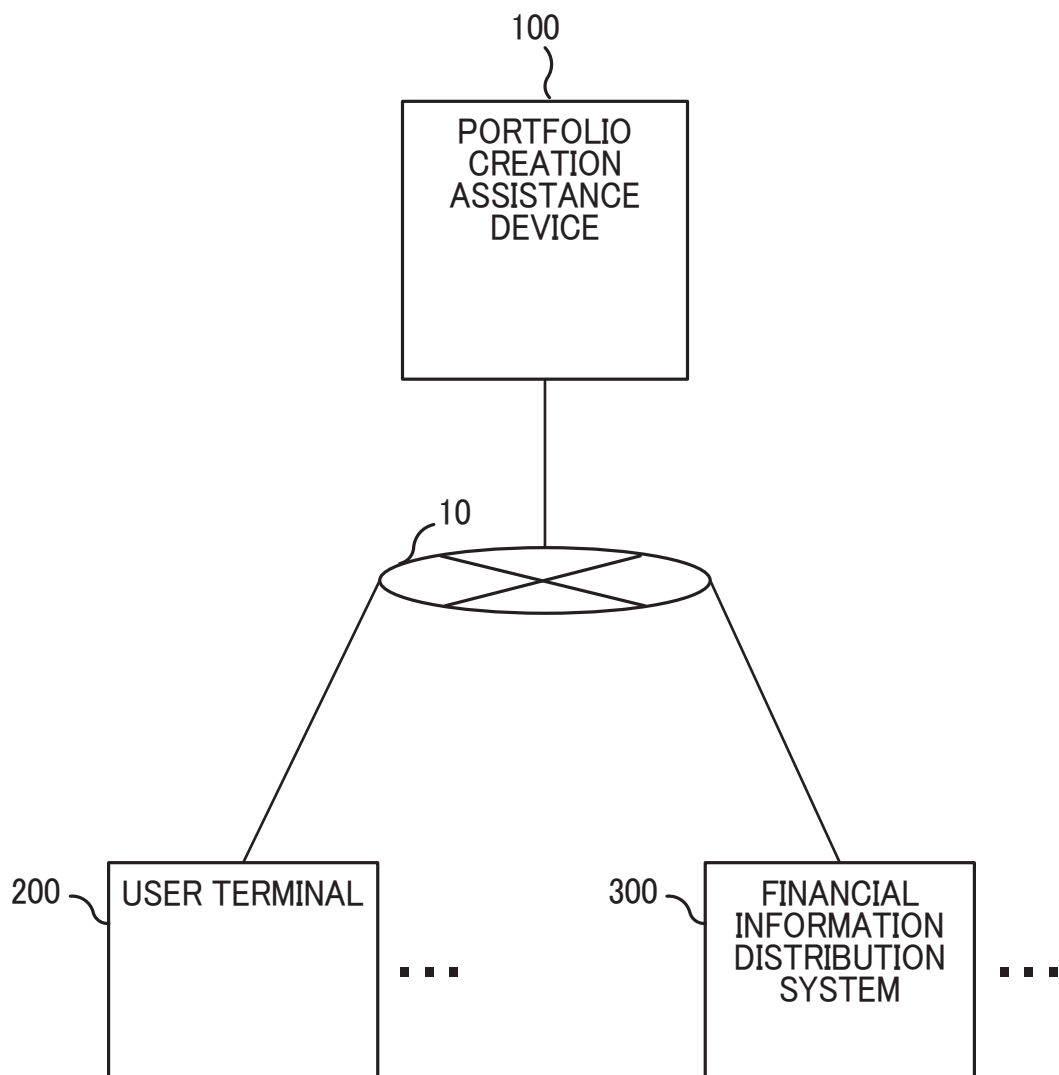


FIG. 1

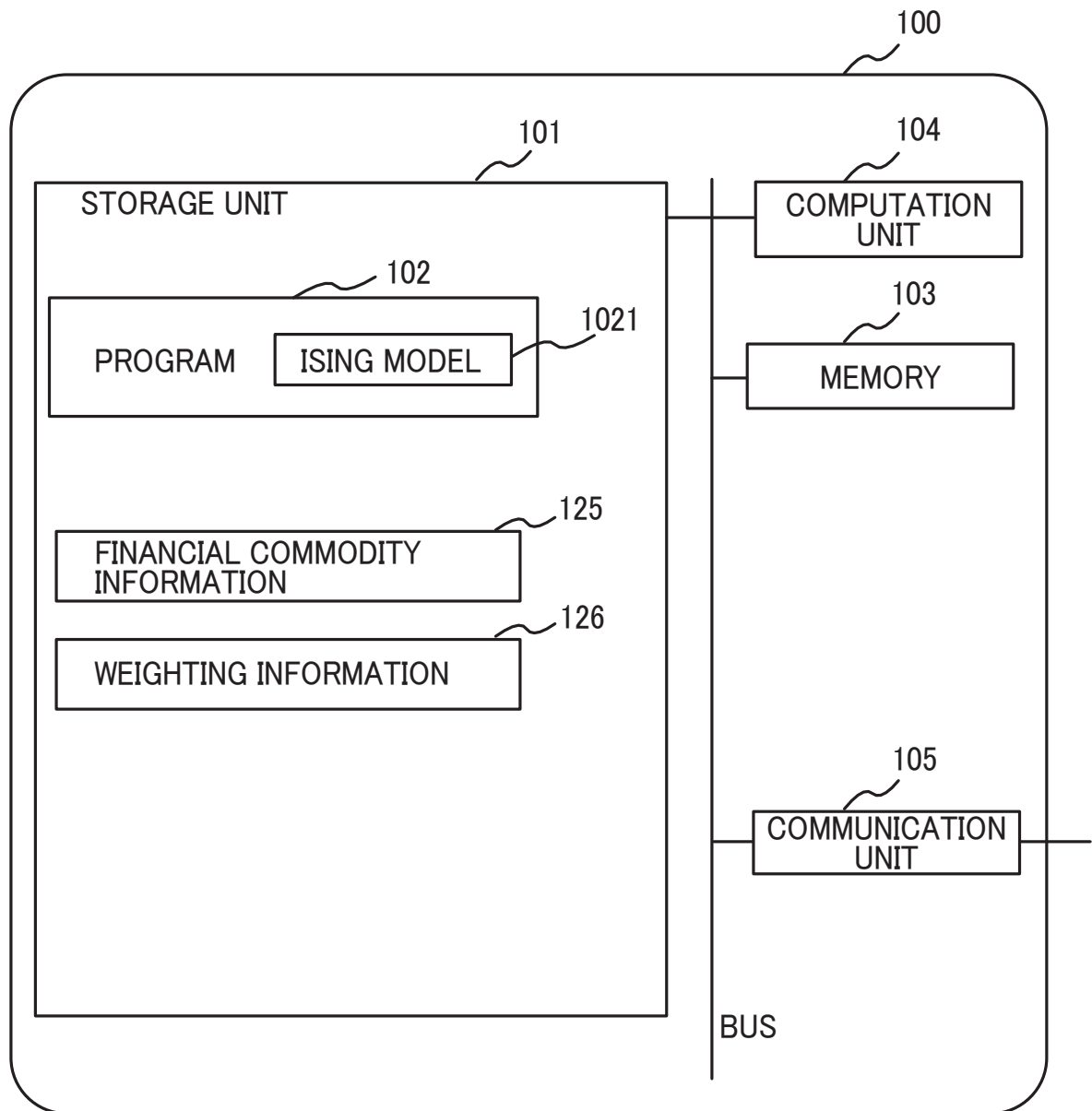


FIG. 2

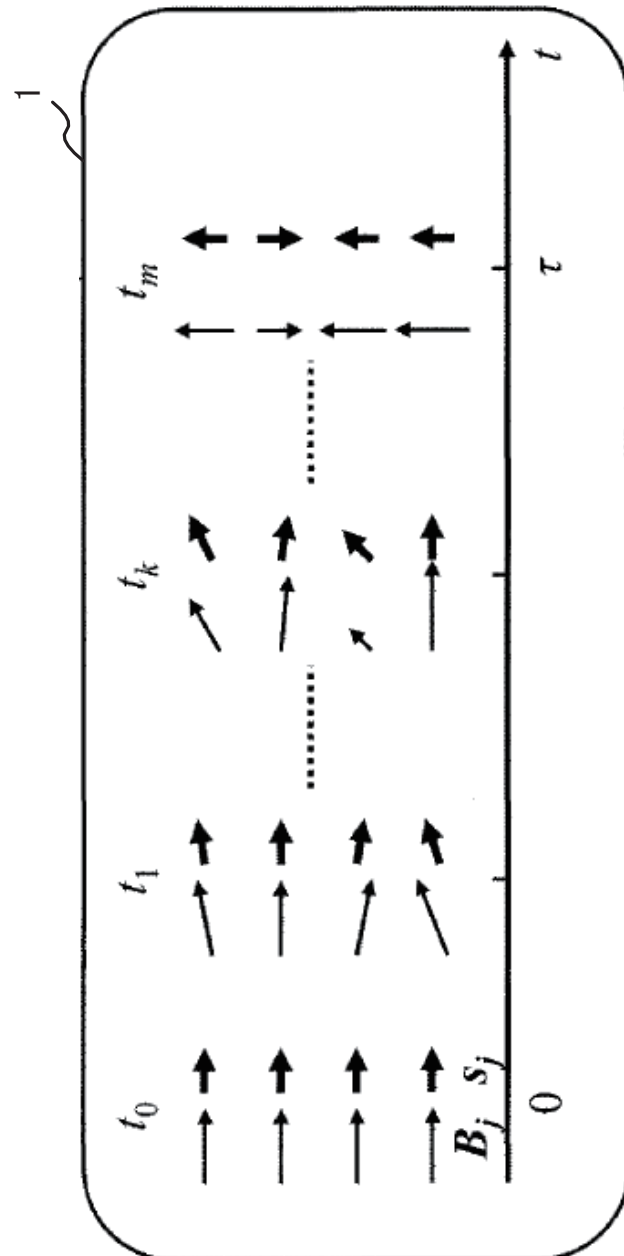


FIG. 3

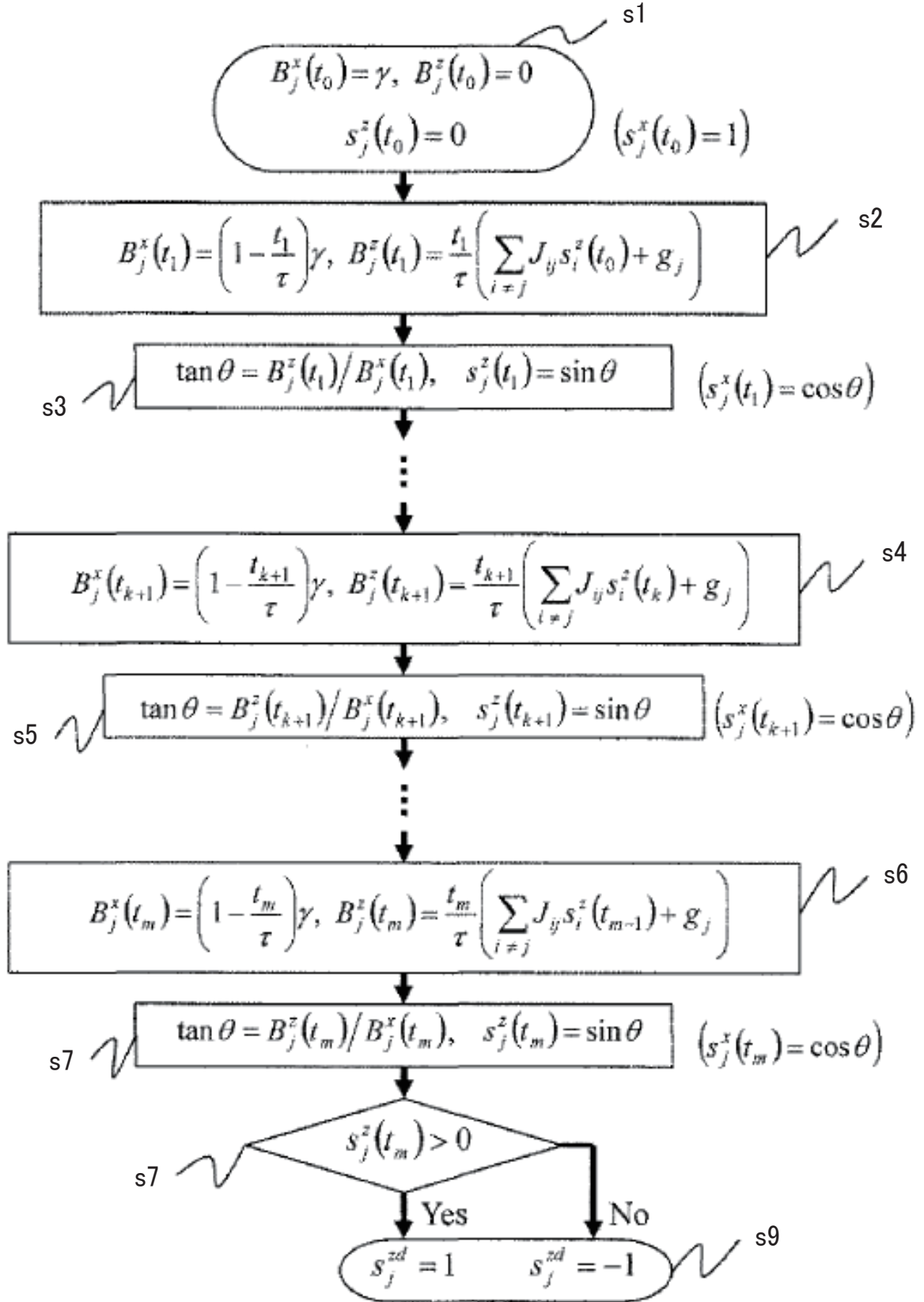


FIG. 4

FINANCIAL COMMODITY INFORMATION

NAME	EXPECTED RETURN RATE	PRICE DROP RISK	INTEREST DELTA	EXCHANGE DELTA	COMMODITY PRICE	COMMISSION	...
A	10	2	10	15	10,000	BUY : *** SELL : ***	...
B	5	1	20	50	524,000	BUY : *** SELL : ***	...
C	20	25	50	90	98,500	BUY : *** SELL : ***	...
...	...	...	...	...	...	...	...

FIG. 5

WEIGHTING INFORMATION

126



EXPECTED RETURN RATE	PRICE DROP RISK	INTEREST DELTA	EXCHANGE DELTA	...
0	0	100	0	...
10	0	90	0	...
20	0	80	0	...
...	...	...	...	...

FIG. 6

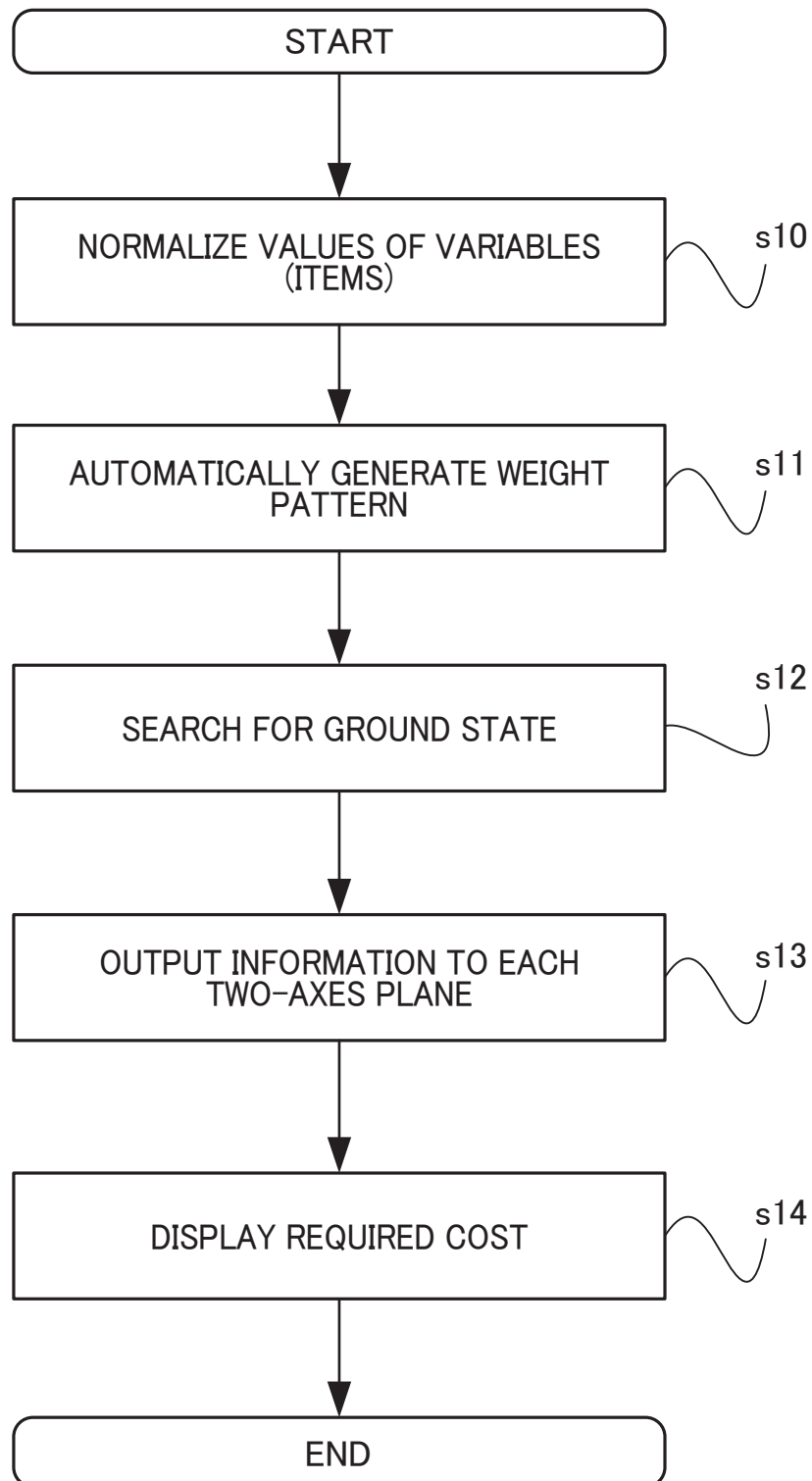


FIG. 7

FINANCIAL COMMODITY: ISSUES A TO C

ISSUE	RETURN	RISK	INTEREST DELTA	EXCHANGE DELTA
A	10	2	10	15
B	5	1	20	50
C	20	5	50	90

FIG. 8

FINANCIAL COMMODITY: PRICE SENSITIVITY OF ISSUES A TO C

ISSUE	A	B	C
A	1	0.9	-0.5
B	0.9	1	0.8
C	-0.5	0.8	1

FIG. 9

	RETURN	RISK	INTEREST DELTA	EXCHANGE DELTA
SLOPE	0.6	2.25	0.225	0.12
INTERCEPT	-2	-1.25	-1.25	-0.8

FIG. 10

ISSUE	RETURN	RISK	INTEREST DELTA	EXCHANGE DELTA
A	4	3.25	1	1
B	1	1	3.25	5.2
C	10	10	10	10

FIG. 11

WEIGHTING PARAMETER			EVALUATION RESULT				
c1 (reward)	c2 (risk)	c3 (ir)	OBJECTIVE FUNCTION VALUE	RETURN	RISK	INTEREST DELTA	TOTAL RATE
0%	0%	100%	-1022317	0.000113	0.000029	0.298500	100%
10%	0%	90%	-1023614	0.000173	0.000095	0.295500	100%
20%	0%	80%	-1024903	0.000294	0.000162	0.290000	100%
30%	0%	70%	-1026287	0.000590	0.000231	0.273000	100%
40%	0%	60%	-1027622	0.000482	0.000205	0.279000	100%
50%	0%	50%	-1029048	0.000535	0.000212	0.275500	100%
60%	0%	40%	-1030442	0.000558	0.000210	0.273000	100%
70%	0%	30%	-1031843	0.000569	0.000206	0.270000	100%
80%	0%	20%	-1033245	0.000580	0.000212	0.270000	100%
90%	0%	10%	-1034662	0.000623	0.000243	0.270000	100%
100%	0%	0%	-1036094	0.000623	0.000243	0.270000	100%
0%	10%	90%	-1078239	0.000053	0.000004	0.300000	100%
10%	10%	80%	-1079565	0.000120	0.000033	0.296500	100%
20%	10%	70%	-1080917	0.000322	0.000124	0.290000	100%
30%	10%	60%	-1082309	0.000340	0.000113	0.286000	100%
40%	10%	50%	-1083784	0.000539	0.000200	0.274500	100%
50%	10%	40%	-1085199	0.000536	0.000193	0.270000	100%
60%	10%	30%	-1086698	0.000574	0.000213	0.271500	100%
70%	10%	20%	-1088161	0.000580	0.000212	0.270000	100%
80%	10%	10%	-1089632	0.000616	0.000225	0.237000	100%
90%	10%	0%	-1091119	0.000616	0.000225	0.237000	100%
0%	20%	80%	-1138828	0.000026	0.000000	0.300000	100%
10%	20%	70%	-1140221	0.000075	0.000009	0.299000	100%
20%	20%	60%	-1141631	0.000231	0.000041	0.290000	100%

FIG. 12

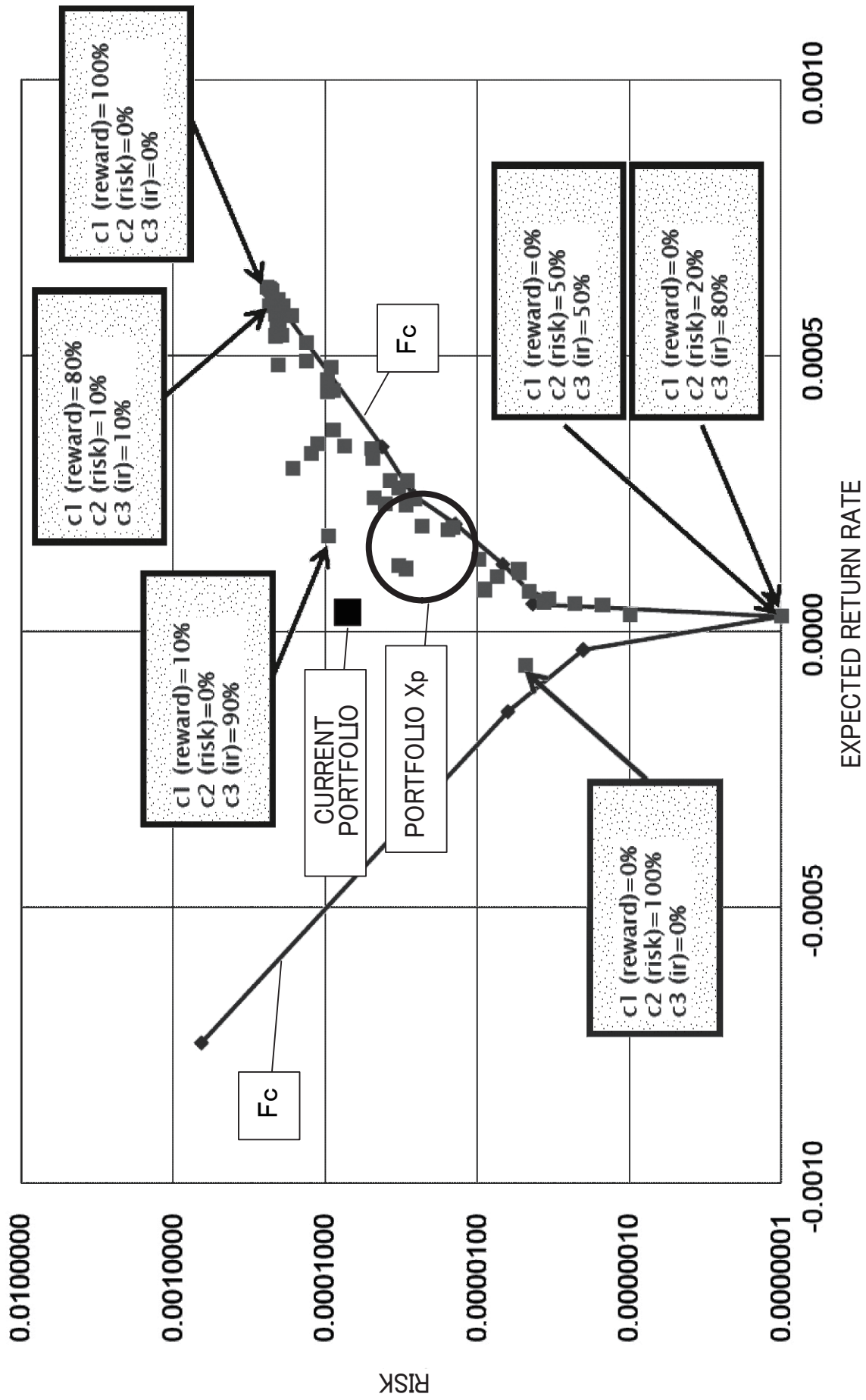


FIG. 13

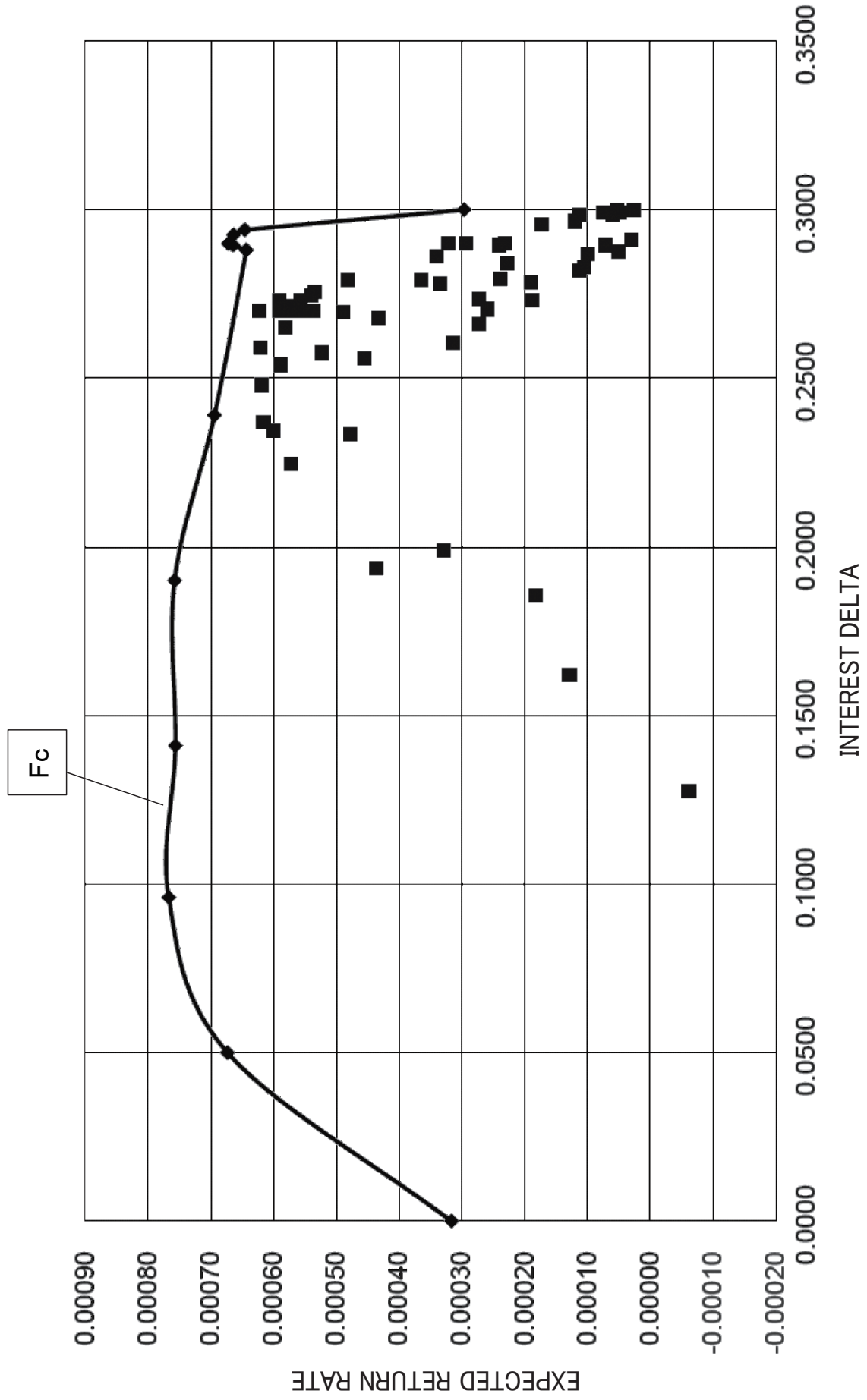


FIG. 14

PORTFOLIO NUMBER	EXPECTED RETURN RATE	PRICE DROP RISK	INTEREST DELTA	RISK ASSET	NUMBER OF ISSUES TO BUY	NUMBER OF ISSUES TO SELL	REQUIRED COST
CURRENT	0.00010	0.00008	0.231	100	2	1	* * *
34	0.0012	0.0007	0.220	90	3	3	* * *
37	0.00013	0.0008	0.250	110	1	1	* * *
...	...	...	...	...	...	...	...

FIG. 15

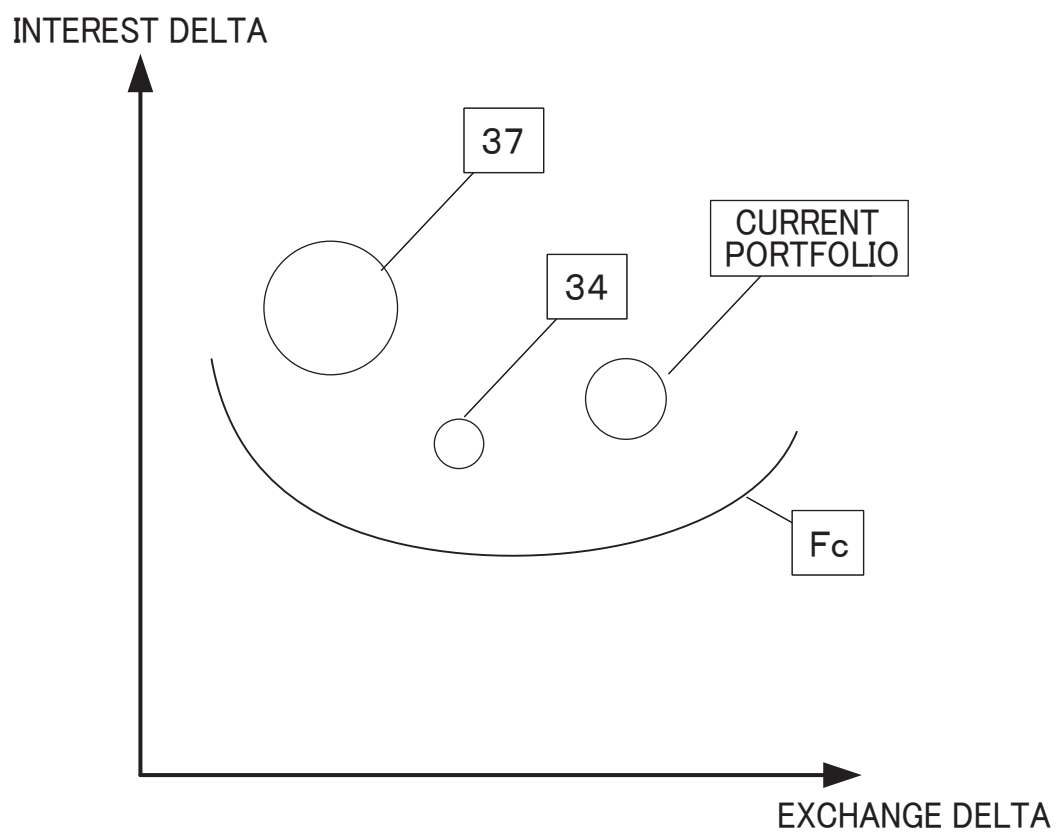


FIG. 16