FIG. 1

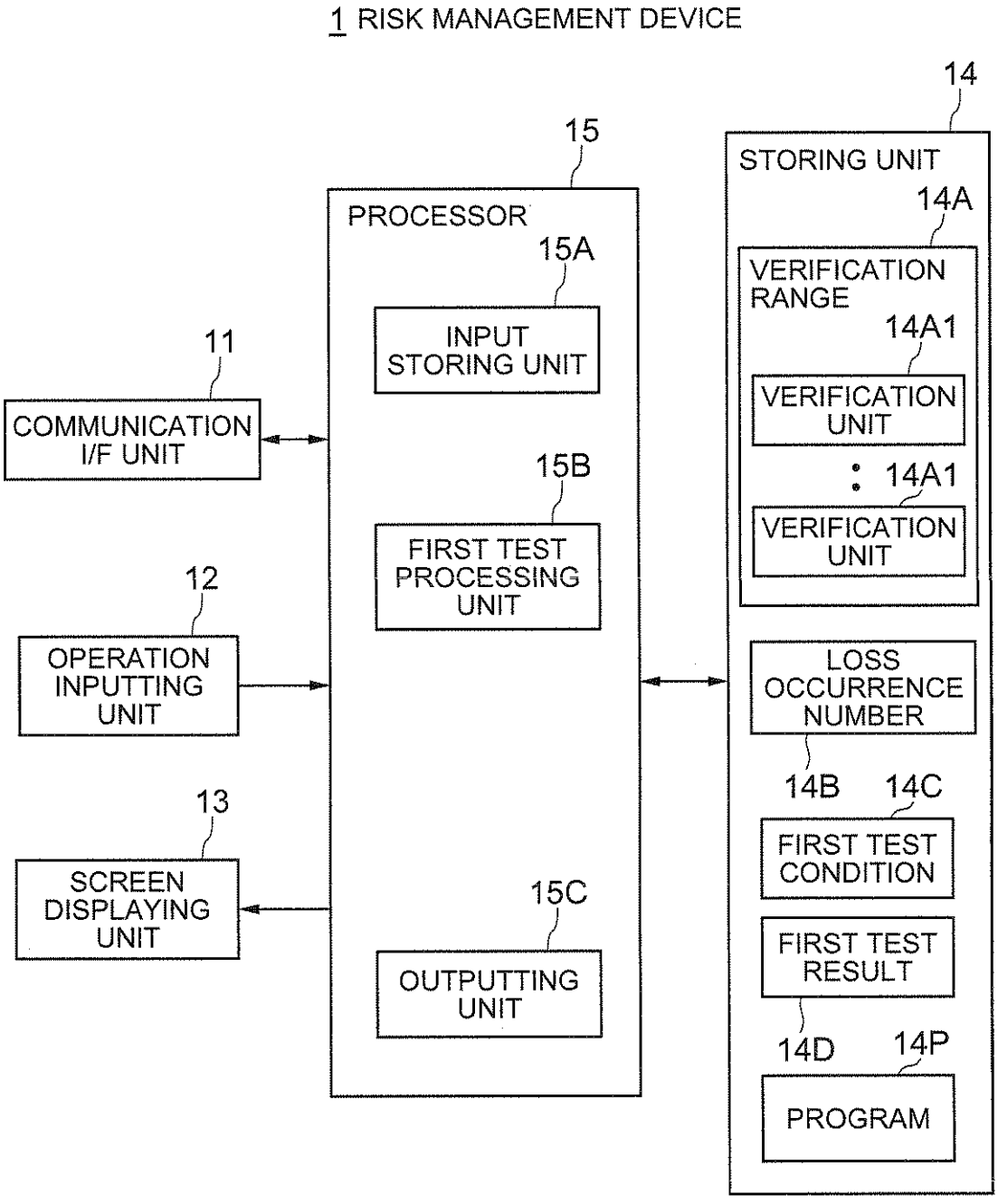

1 RISK MANAGEMENT DEVICE
14
STORING UNIT
14A
VERIFICATION RANGE
14A1
VERIFICATION UNIT
: 14A1
VERIFICATION UNIT
LOSS OCCURRENCE NUMBER
14B
14C
FIRST TEST CONDITION
FIRST TEST RESULT
14D
14P
PROGRAM
15
PROCESSOR
15A
INPUT STORING UNIT
15B
FIRST TEST PROCESSING UNIT
15C
OUTPUTTING UNIT
11
COMMUNICATION I/F UNIT
12
OPERATION INPUTTING UNIT
13
SCREEN DISPLAYING UNIT

FIG. 2

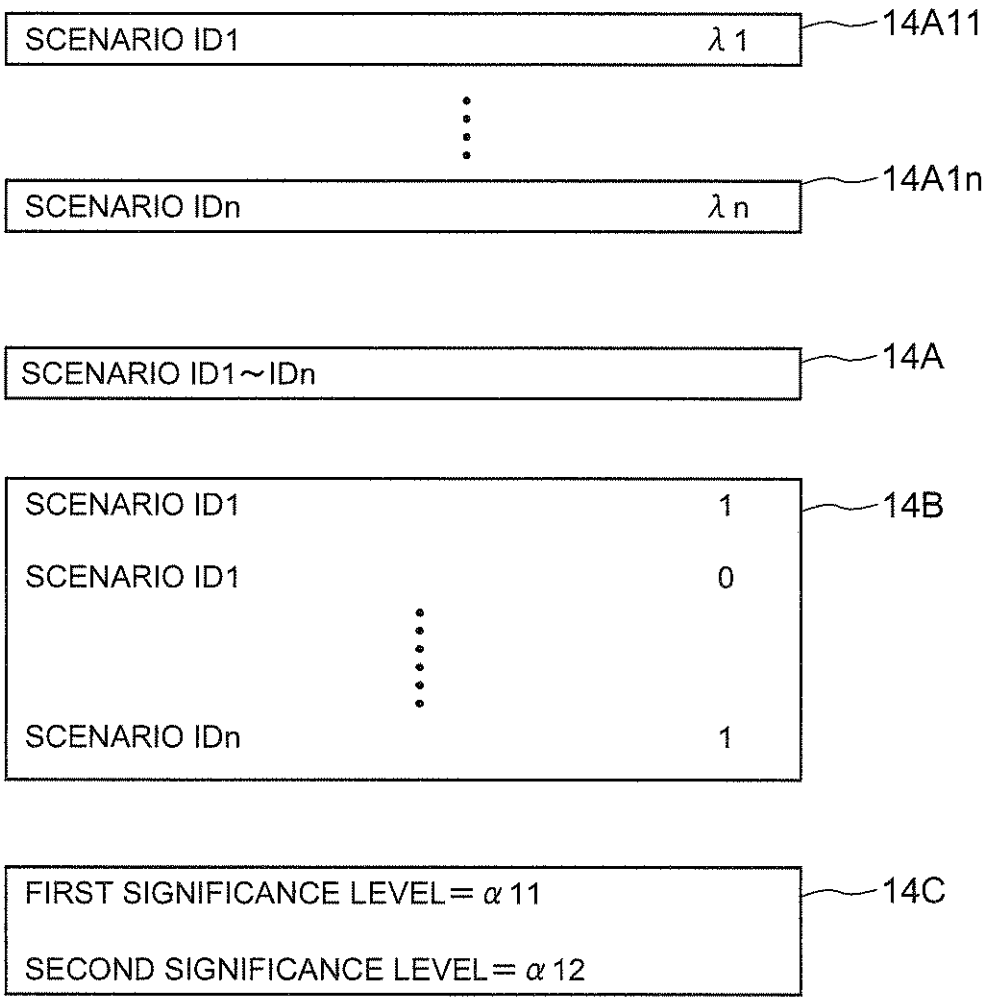

SCENARIO ID1 λ1
14A11
SCENARIO IDn λn
14A1n
SCENARIO ID1～IDn
14A
SCENARIO ID1 1
SCENARIO ID1 0
SCENARIO IDn 1
14B
FIRST SIGNIFICANCE LEVEL＝α11
SECOND SIGNIFICANCE LEVEL＝α12
14C

FIG. 3

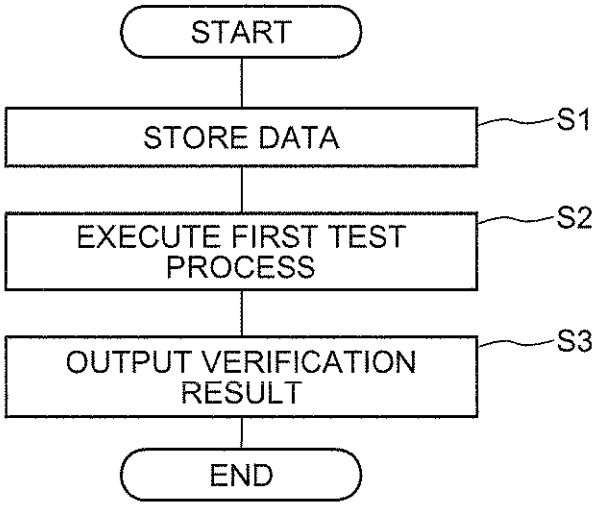

START
STORE DATA
S1
EXECUTE FIRST TEST PROCESS
S2
OUTPUT VERIFICATION RESULT
S3
END

FIG. 4

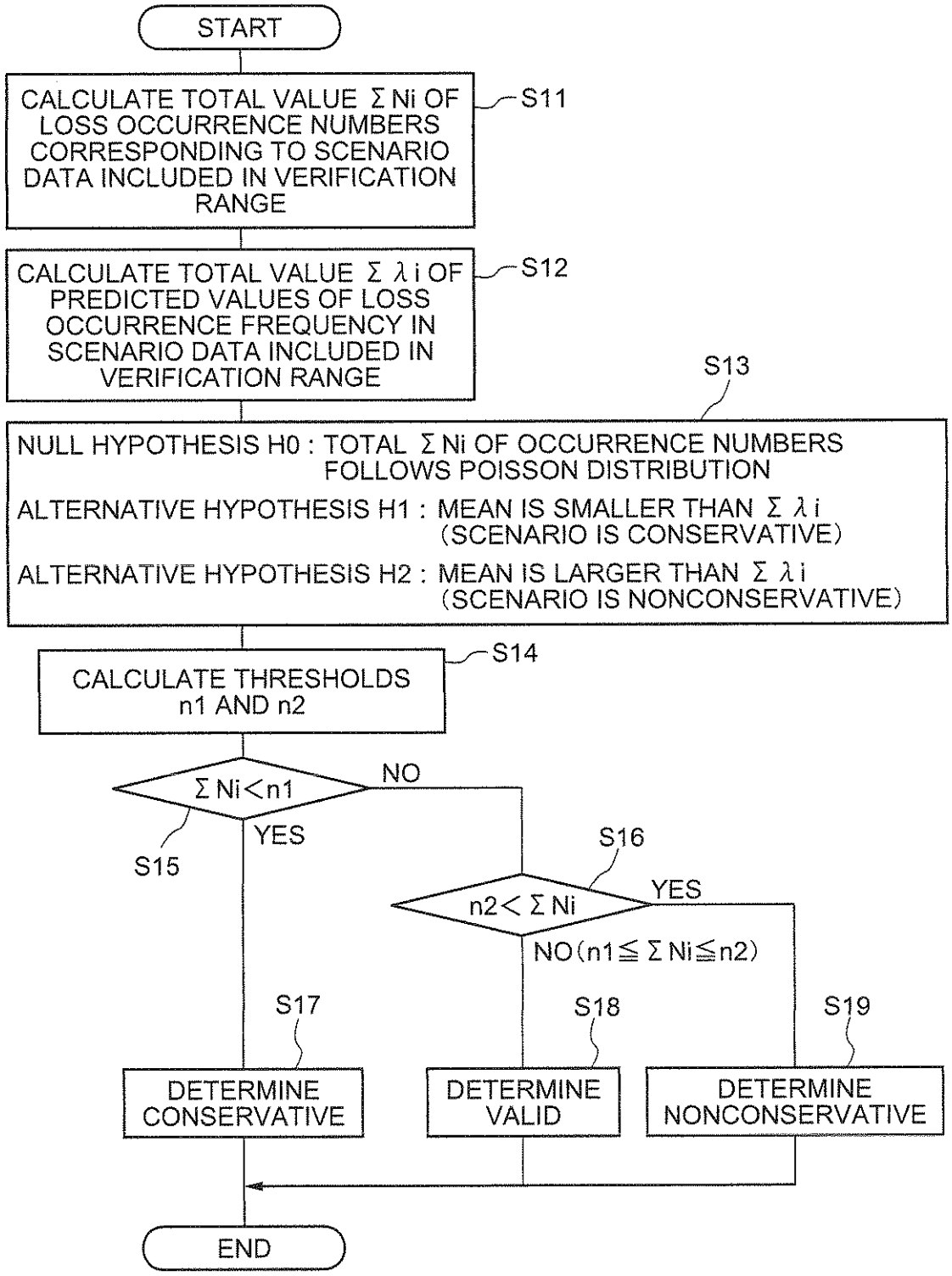

START
CALCULATE TOTAL VALUE Σ Ni OF LOSS OCCURRENCE NUMBERS CORRESPONDING TO SCENARIO DATA INCLUDED IN VERIFICATION RANGE
S11
CALCULATE TOTAL VALUE Σ λi OF PREDICTED VALUES OF LOSS OCCURRENCE FREQUENCY IN SCENARIO DATA INCLUDED IN VERIFICATION RANGE
S12
S13
NULL HYPOTHESIS H0 : TOTAL Σ Ni OF OCCURRENCE NUMBERS FOLLOWS POISSON DISTRIBUTION
ALTERNATIVE HYPOTHESIS H1 : MEAN IS SMALLER THAN Σ λi (SCENARIO IS CONSERVATIVE)
ALTERNATIVE HYPOTHESIS H2 : MEAN IS LARGER THAN Σ λi (SCENARIO IS NONCONSERVATIVE)
CALCULATE THRESHOLDS n1 AND n2
S14
Σ Ni＜n1
NO
YES
S15
S16
n2＜Σ Ni
YES
NO(n1≦Σ Ni≦n2)
S17
S18
S19
DETERMINE CONSERVATIVE
DETERMINE VALID
DETERMINE NONCONSERVATIVE
END

FIG. 5

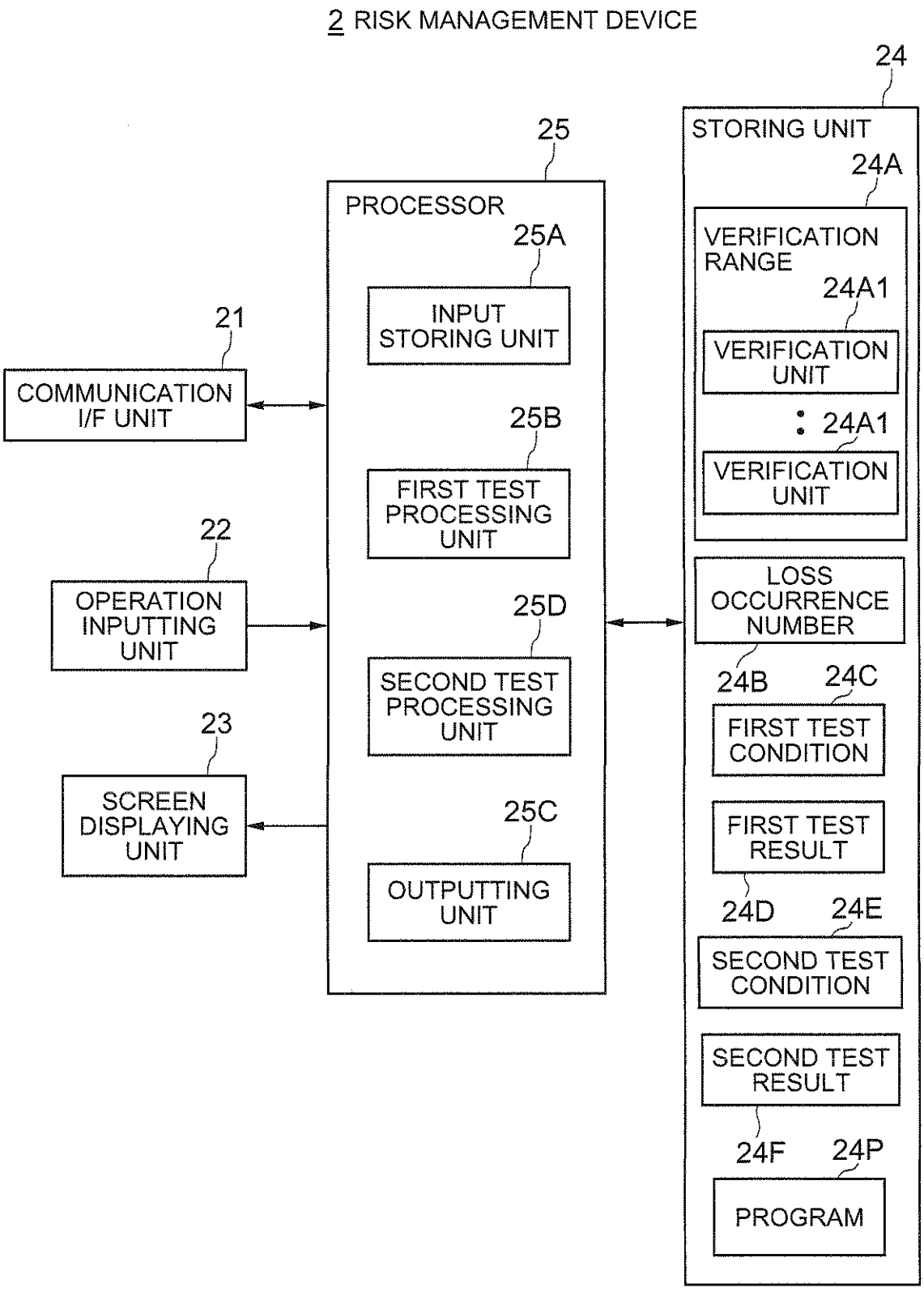

2 RISK MANAGEMENT DEVICE
24
STORING UNIT
24A
VERIFICATION RANGE
24A1
VERIFICATION UNIT
: 24A1
VERIFICATION UNIT
LOSS OCCURRENCE NUMBER
24B
24C
FIRST TEST CONDITION
FIRST TEST RESULT
24D
24E
SECOND TEST CONDITION
SECOND TEST RESULT
24F
24P
PROGRAM
25
PROCESSOR
25A
INPUT STORING UNIT
25B
FIRST TEST PROCESSING UNIT
25D
SECOND TEST PROCESSING UNIT
25C
OUTPUTTING UNIT
21
COMMUNICATION I/F UNIT
22
OPERATION INPUTTING UNIT
23
SCREEN DISPLAYING UNIT

FIG. 6



FIG. 7

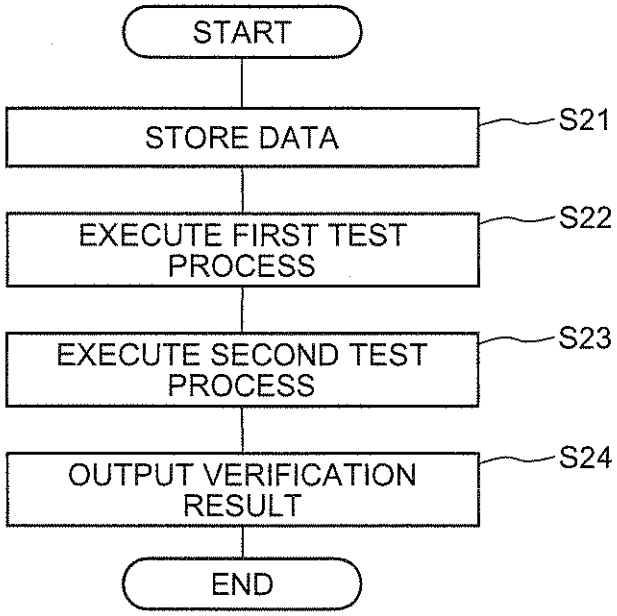

START
STORE DATA
S21
EXECUTE FIRST TEST PROCESS
S22
EXECUTE SECOND TEST PROCESS
S23
OUTPUT VERIFICATION RESULT
S24
END

FIG. 8

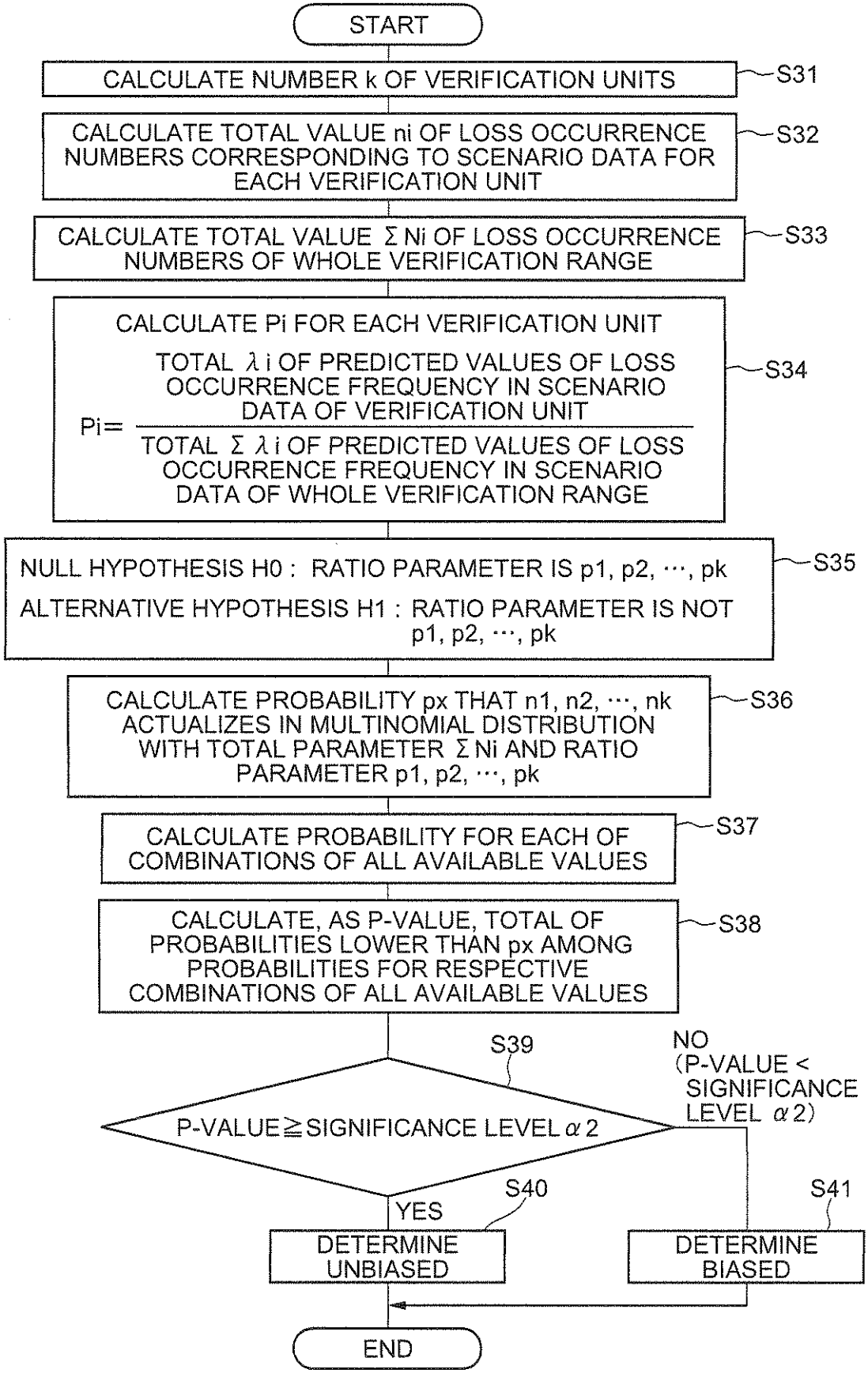

START
CALCULATE NUMBER k OF VERIFICATION UNITS
S31
CALCULATE TOTAL VALUE ni OF LOSS OCCURRENCE NUMBERS CORRESPONDING TO SCENARIO DATA FOR EACH VERIFICATION UNIT
S32
CALCULATE TOTAL VALUE Σ Ni OF LOSS OCCURRENCE NUMBERS OF WHOLE VERIFICATION RANGE
S33
CALCULATE Pi FOR EACH VERIFICATION UNIT
Pi= TOTAL λ i OF PREDICTED VALUES OF LOSS OCCURRENCE FREQUENCY IN SCENARIO DATA OF VERIFICATION UNIT / TOTAL Σ λ i OF PREDICTED VALUES OF LOSS OCCURRENCE FREQUENCY IN SCENARIO DATA OF WHOLE VERIFICATION RANGE
S34
NULL HYPOTHESIS H0 : RATIO PARAMETER IS p1, p2, ⋯, pk
ALTERNATIVE HYPOTHESIS H1 : RATIO PARAMETER IS NOT p1, p2, ⋯, pk
S35
CALCULATE PROBABILITY px THAT n1, n2, ⋯, nk ACTUALIZES IN MULTINOMIAL DISTRIBUTION WITH TOTAL PARAMETER Σ Ni AND RATIO PARAMETER p1, p2, ⋯, pk
S36
CALCULATE PROBABILITY FOR EACH OF COMBINATIONS OF ALL AVAILABLE VALUES
S37
CALCULATE, AS P-VALUE, TOTAL OF PROBABILITIES LOWER THAN px AMONG PROBABILITIES FOR RESPECTIVE COMBINATIONS OF ALL AVAILABLE VALUES
S38
S39
P-VALUE≧SIGNIFICANCE LEVEL α2
NO (P-VALUE < SIGNIFICANCE LEVEL α2)
YES
S40
DETERMINE UNBIASED
S41
DETERMINE BIASED
END

FIG. 9

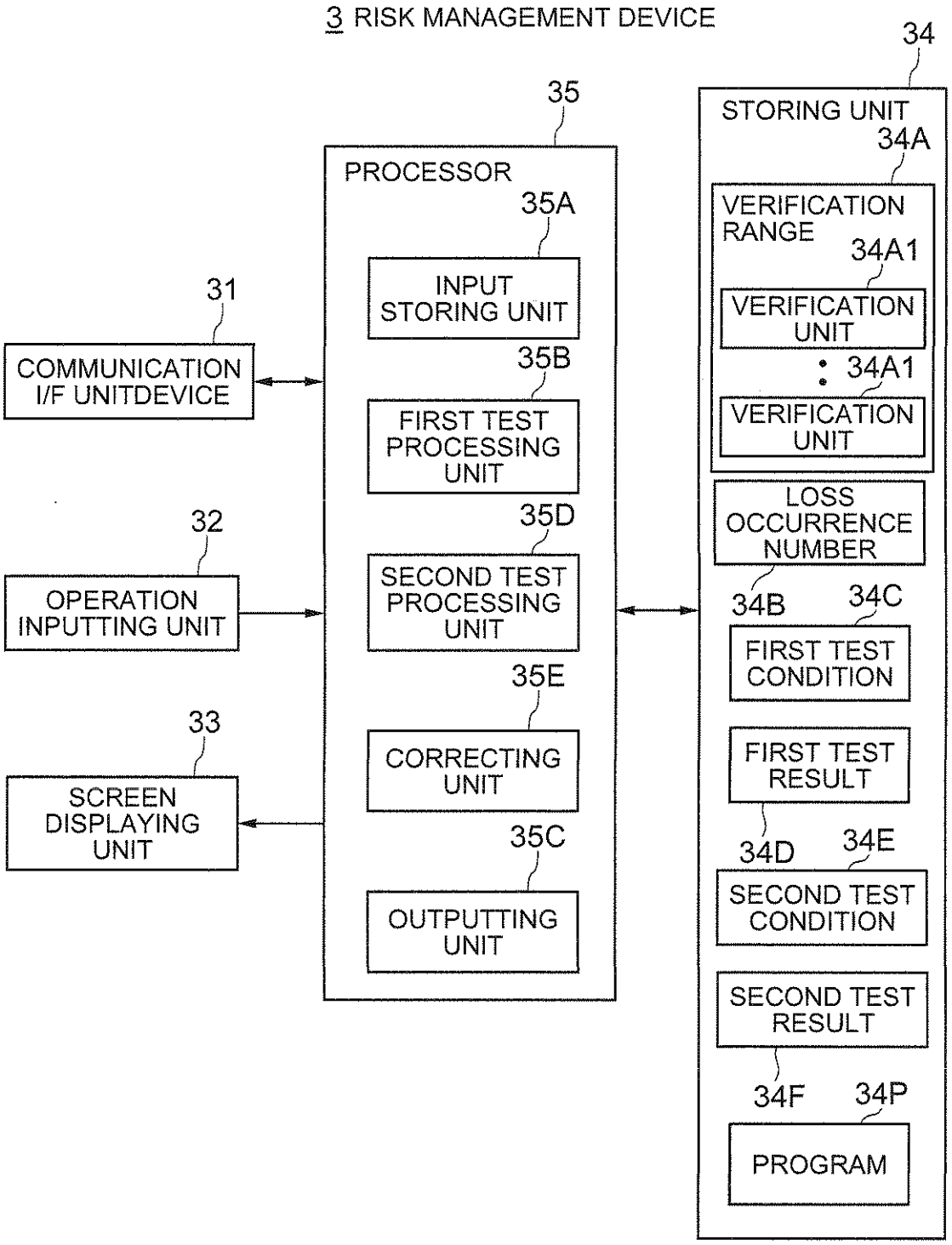

3 RISK MANAGEMENT DEVICE
34
35
STORING UNIT
34A
PROCESSOR
35A
VERIFICATION RANGE
34A1
INPUT STORING UNIT
31
VERIFICATION UNIT
35B
34A1
COMMUNICATION I/F UNITDEVICE
FIRST TEST PROCESSING UNIT
VERIFICATION UNIT
35D
LOSS OCCURRENCE NUMBER
32
SECOND TEST PROCESSING UNIT
34B
34C
OPERATION INPUTTING UNIT
FIRST TEST CONDITION
35E
FIRST TEST RESULT
33
CORRECTING UNIT
34D
34E
SCREEN DISPLAYING UNIT
SECOND TEST CONDITION
35C
SECOND TEST RESULT
OUTPUTTING UNIT
34F
34P
PROGRAM

FIG. 10

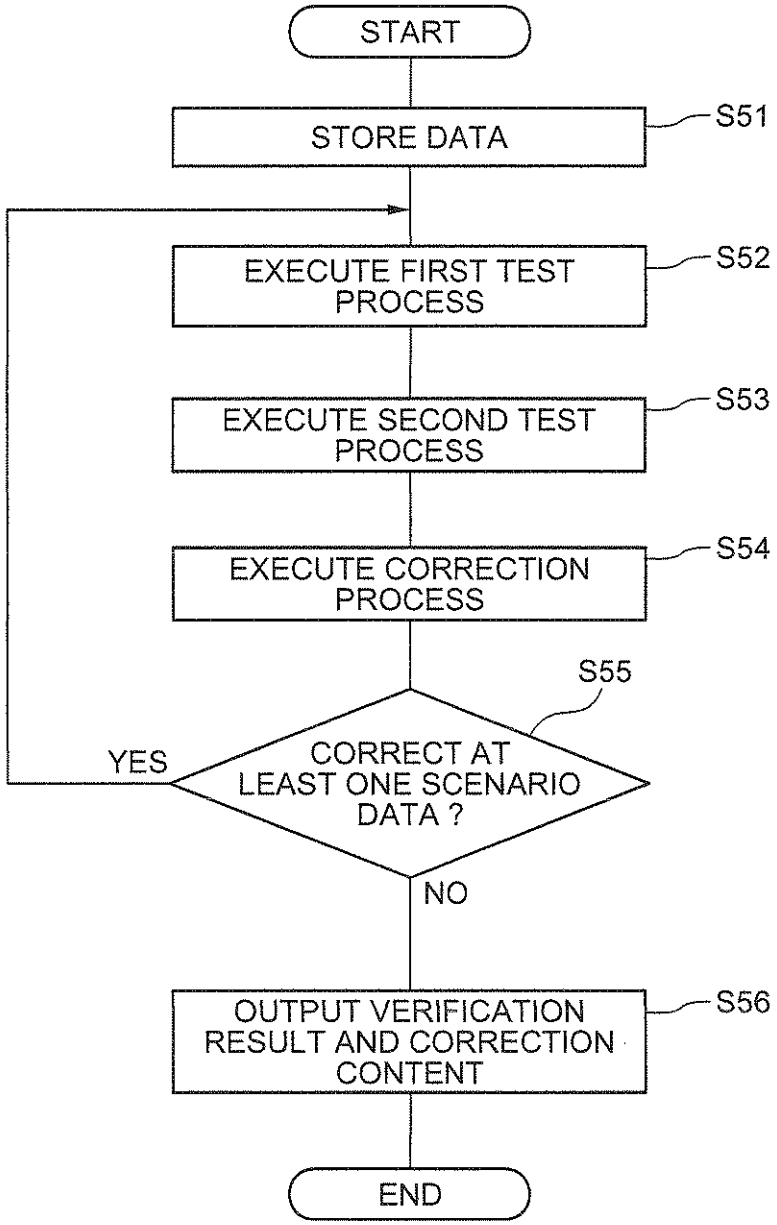

START
STORE DATA
S51
EXECUTE FIRST TEST PROCESS
S52
EXECUTE SECOND TEST PROCESS
S53
EXECUTE CORRECTION PROCESS
S54
S55
CORRECT AT LEAST ONE SCENARIO DATA ?
YES
NO
OUTPUT VERIFICATION RESULT AND CORRECTION CONTENT
S56
END

FIG. 11

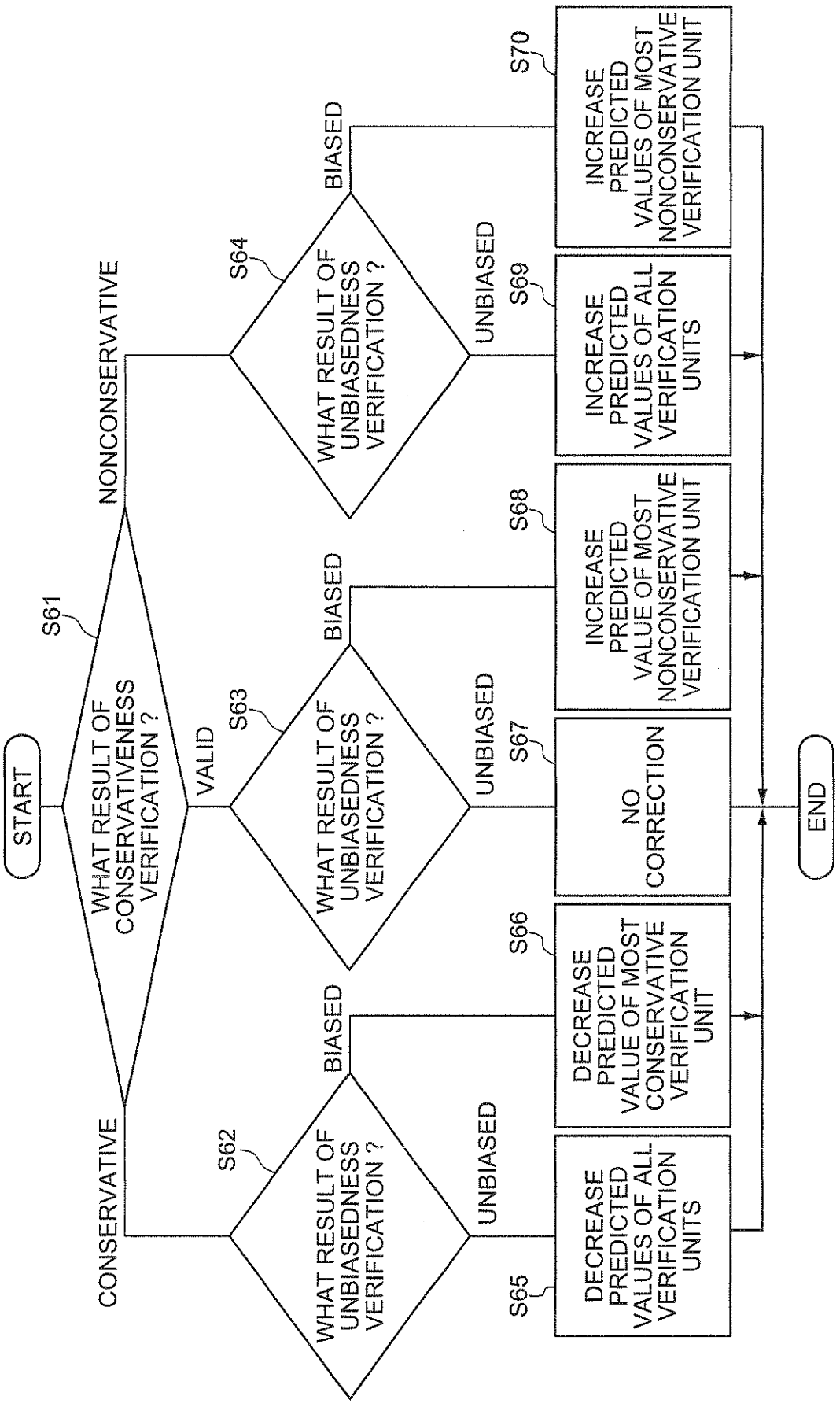

START
WHAT RESULT OF CONSERVATIVENESS VERIFICATION ?
S61
CONSERVATIVE
NONCONSERVATIVE
VALID
WHAT RESULT OF UNBIASEDNESS VERIFICATION ?
S62
BIASED
UNBIASED
WHAT RESULT OF UNBIASEDNESS VERIFICATION ?
S63
BIASED
UNBIASED
WHAT RESULT OF UNBIASEDNESS VERIFICATION ?
S64
BIASED
UNBIASED
DECREASE PREDICTED VALUES OF ALL VERIFICATION UNITS
S65
DECREASE PREDICTED VALUE OF MOST CONSERVATIVE VERIFICATION UNIT
S66
NO CORRECTION
S67
INCREASE PREDICTED VALUE OF MOST NONCONSERVATIVE VERIFICATION UNIT
S68
INCREASE PREDICTED VALUES OF ALL VERIFICATION UNITS
S69
INCREASE PREDICTED VALUES OF MOST NONCONSERVATIVE VERIFICATION UNIT
S70
END

FIG. 12

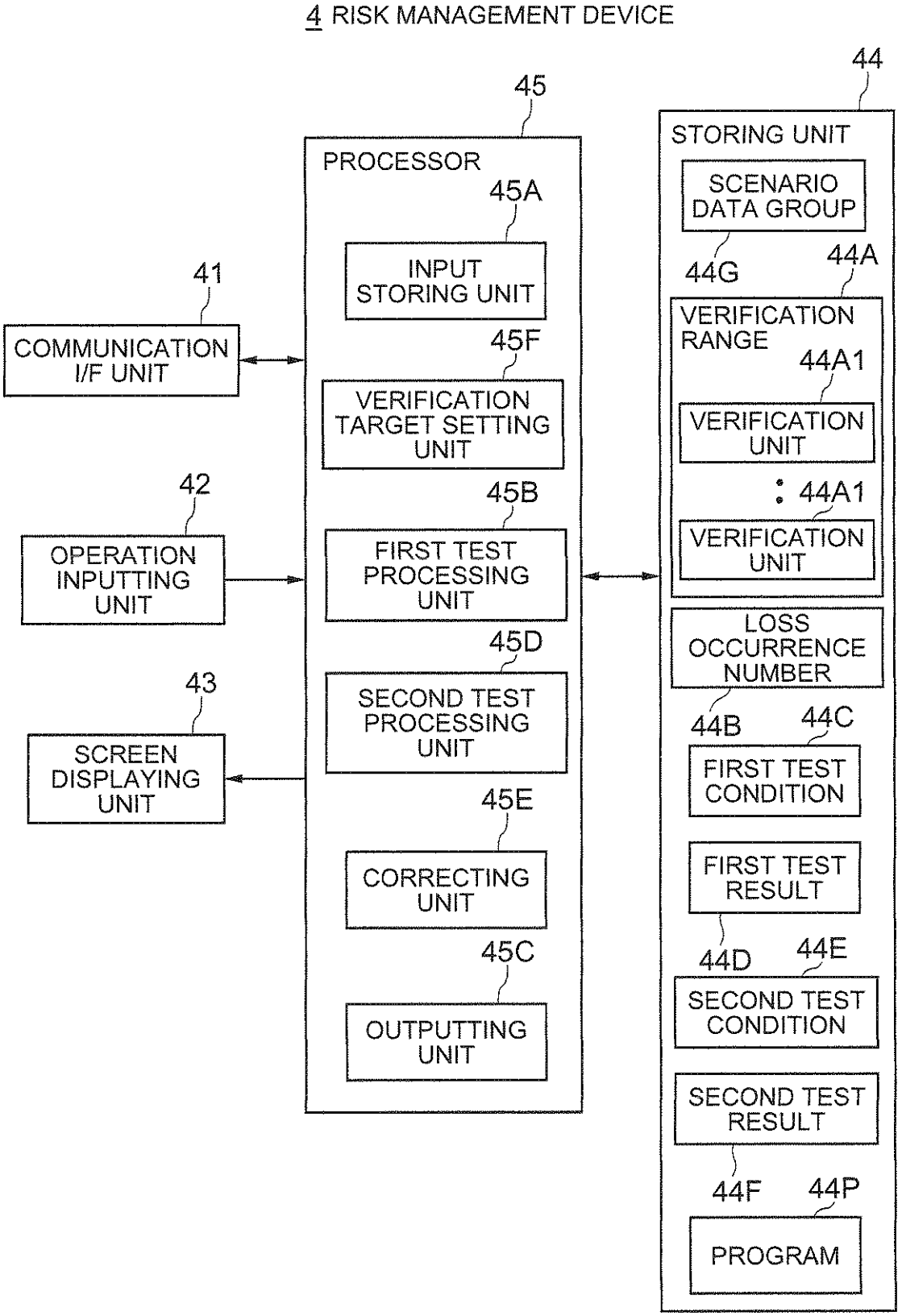

4 RISK MANAGEMENT DEVICE
44
45
STORING UNIT
PROCESSOR
SCENARIO DATA GROUP
45A
INPUT STORING UNIT
44G
44A
41
VERIFICATION RANGE
COMMUNICATION I/F UNIT
45F
44A1
VERIFICATION TARGET SETTING UNIT
VERIFICATION UNIT
: 44A1
42
45B
VERIFICATION UNIT
OPERATION INPUTTING UNIT
FIRST TEST PROCESSING UNIT
LOSS OCCURRENCE NUMBER
45D
43
44B
44C
SECOND TEST PROCESSING UNIT
FIRST TEST CONDITION
SCREEN DISPLAYING UNIT
FIRST TEST RESULT
45E
44D
44E
CORRECTING UNIT
SECOND TEST CONDITION
45C
SECOND TEST RESULT
OUTPUTTING UNIT
44F
44P
PROGRAM

FIG. 13

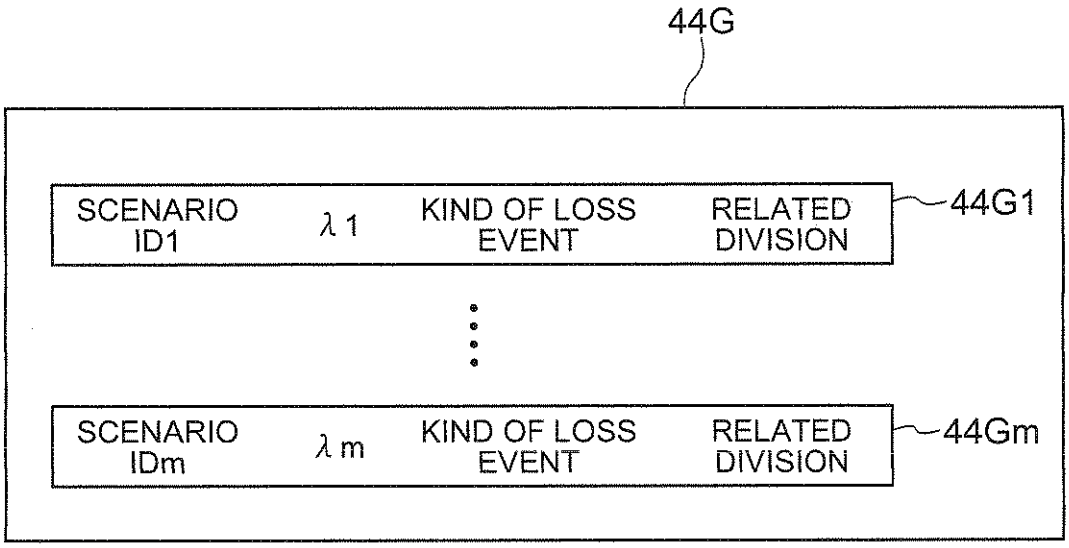
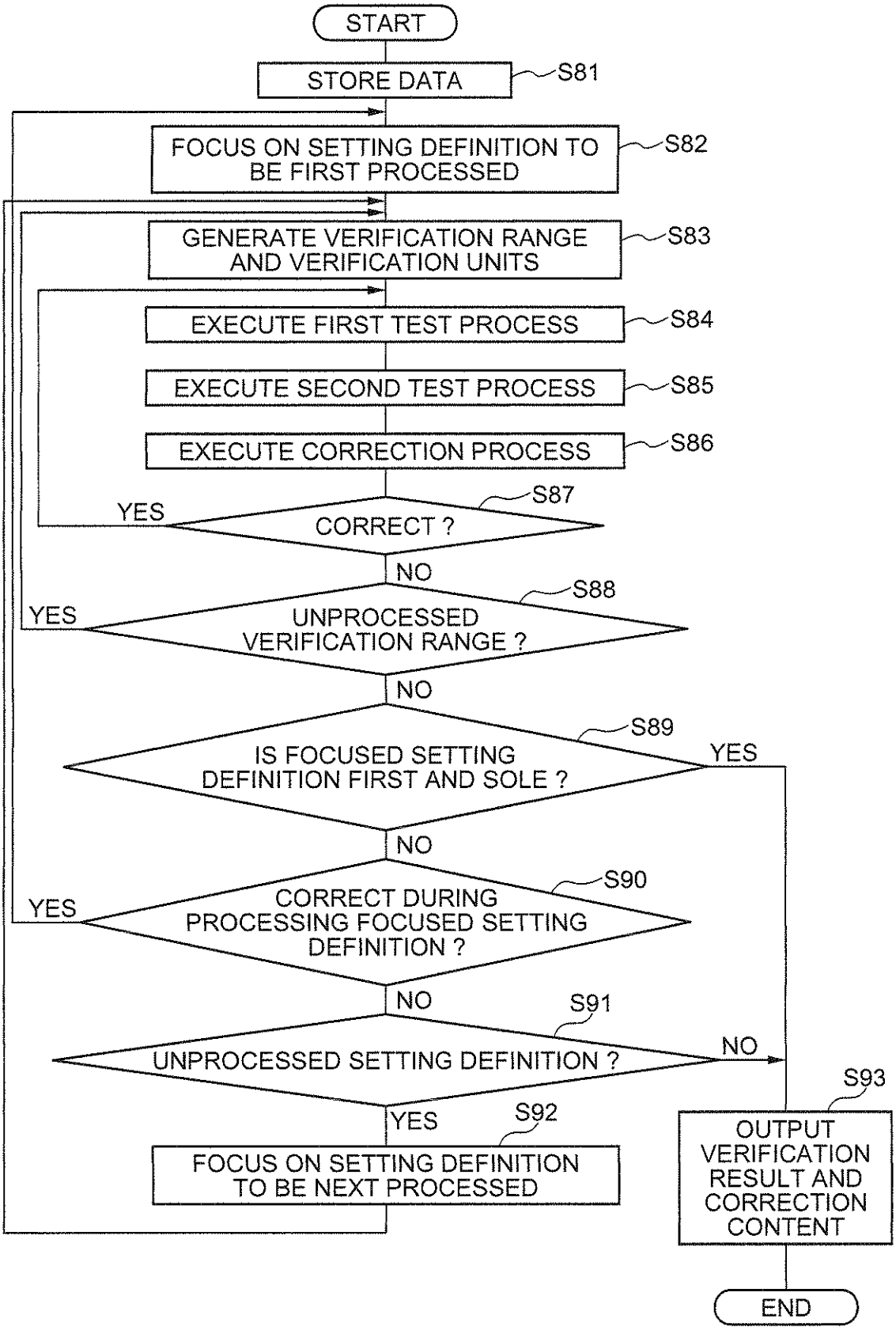

44G
SCENARIO ID1
λ 1
KIND OF LOSS EVENT
RELATED DIVISION
44G1
SCENARIO IDm
λ m
KIND OF LOSS EVENT
RELATED DIVISION
44Gm

FIG. 14

	VERIFICATION RANGE	VERIFICATION UNIT
SETTING 1	EACH DEPARTMENT	SCENARIO
SETTING 2	EACH OPERATIONAL DIVISION	DEPARTMENT
SETTING 3	EACH OPERATIONAL DIVISION	KIND OF LOSS EVENT

FIG. 15


START
STORE DATA
S81
FOCUS ON SETTING DEFINITION TO BE FIRST PROCESSED
S82
GENERATE VERIFICATION RANGE AND VERIFICATION UNITS
S83
EXECUTE FIRST TEST PROCESS
S84
EXECUTE SECOND TEST PROCESS
S85
EXECUTE CORRECTION PROCESS
S86
CORRECT ?
S87
YES
NO
UNPROCESSED VERIFICATION RANGE ?
S88
YES
NO
IS FOCUSED SETTING DEFINITION FIRST AND SOLE ?
S89
YES
NO
CORRECT DURING PROCESSING FOCUSED SETTING DEFINITION ?
S90
YES
NO
UNPROCESSED SETTING DEFINITION ?
S91
NO
YES
FOCUS ON SETTING DEFINITION TO BE NEXT PROCESSED
S92
OUTPUT VERIFICATION RESULT AND CORRECTION CONTENT
S93
END