FIG. 1

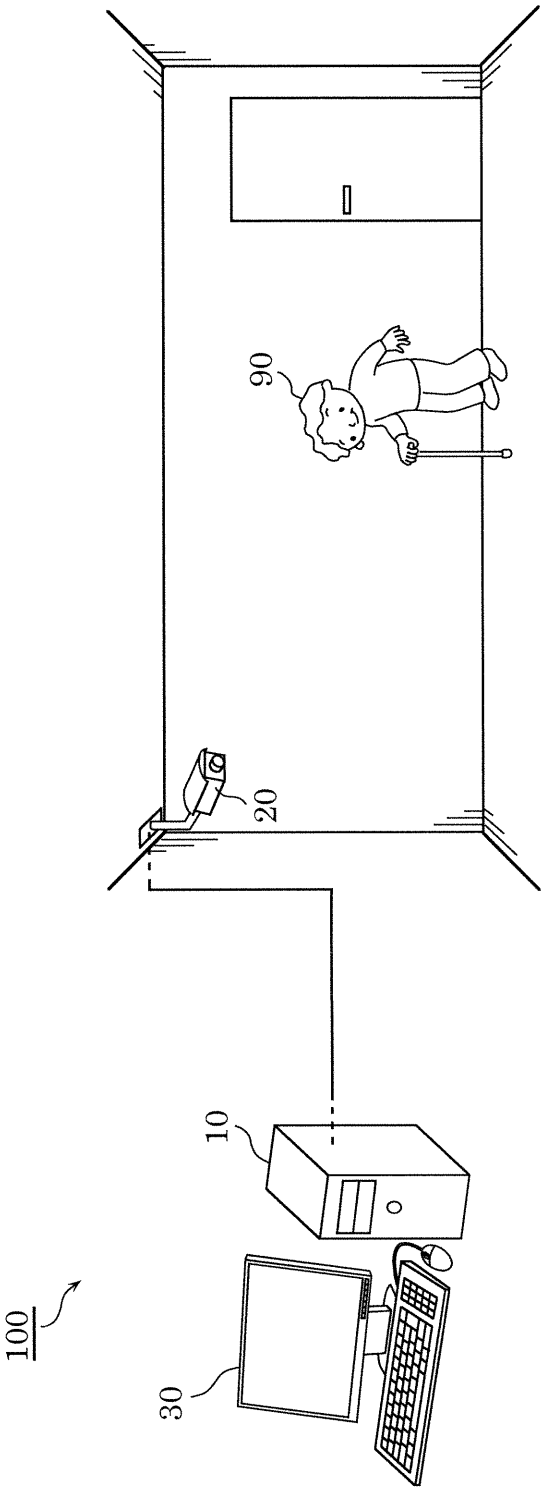


FIG. 2

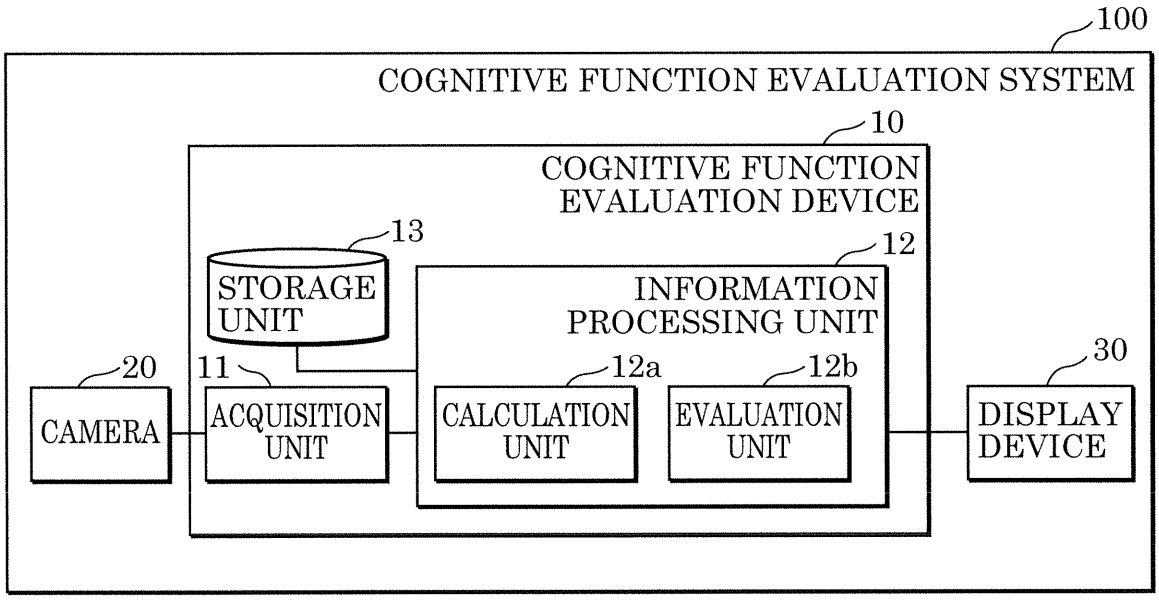

100
COGNITIVE FUNCTION EVALUATION SYSTEM
10
COGNITIVE FUNCTION EVALUATION DEVICE
13
STORAGE UNIT
12
INFORMATION PROCESSING UNIT
20
CAMERA
11
ACQUISITION UNIT
12a
CALCULATION UNIT
12b
EVALUATION UNIT
30
DISPLAY DEVICE

FIG. 3

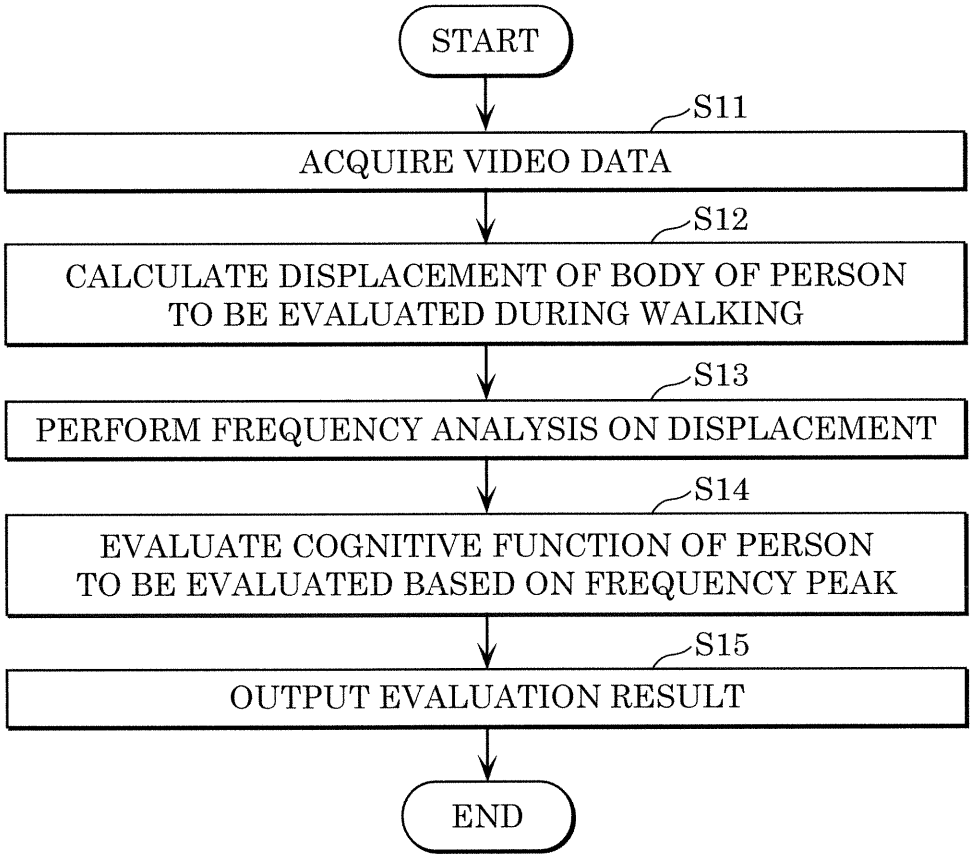

START
S11
ACQUIRE VIDEO DATA
S12
CALCULATE DISPLACEMENT OF BODY OF PERSON TO BE EVALUATED DURING WALKING
S13
PERFORM FREQUENCY ANALYSIS ON DISPLACEMENT
S14
EVALUATE COGNITIVE FUNCTION OF PERSON TO BE EVALUATED BASED ON FREQUENCY PEAK
S15
OUTPUT EVALUATION RESULT
END

FIG. 4

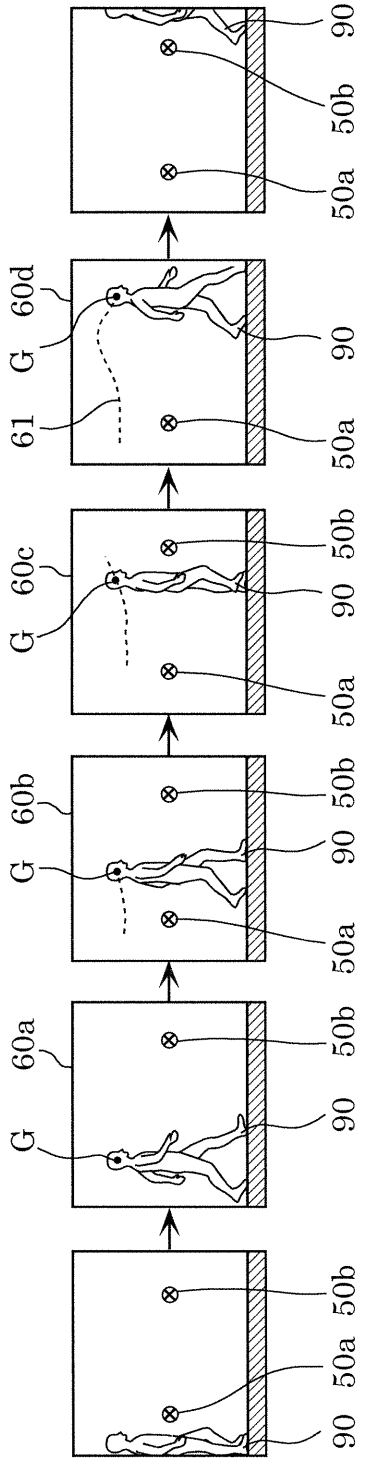

90
50b
50a
60d
G
61
90
50a
50b
60c
G
90
50a
50b
60b
G
90
50a
60a
G
50b
90
50b
50a
90

FIG. 5

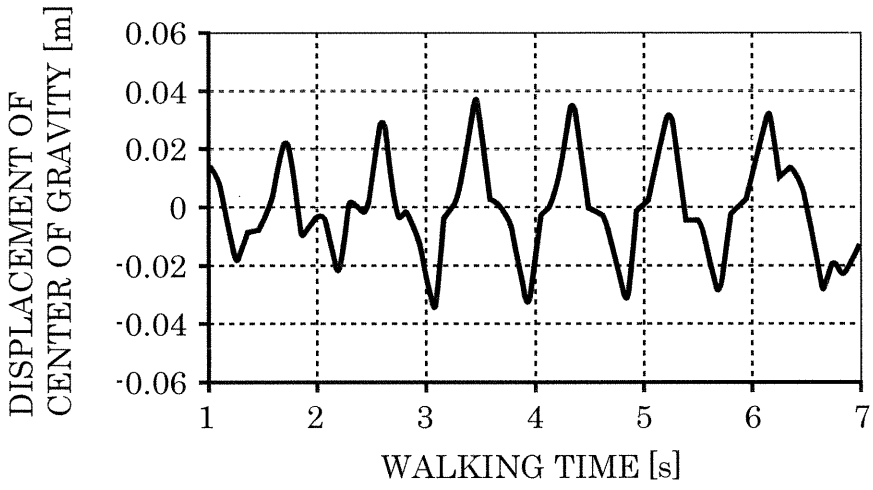

DISPLACEMENT OF CENTER OF GRAVITY [m]
0.06
0.04
0.02
0
-0.02
-0.04
-0.06
1
2
3
4
5
6
7
WALKING TIME [s]

FIG. 6

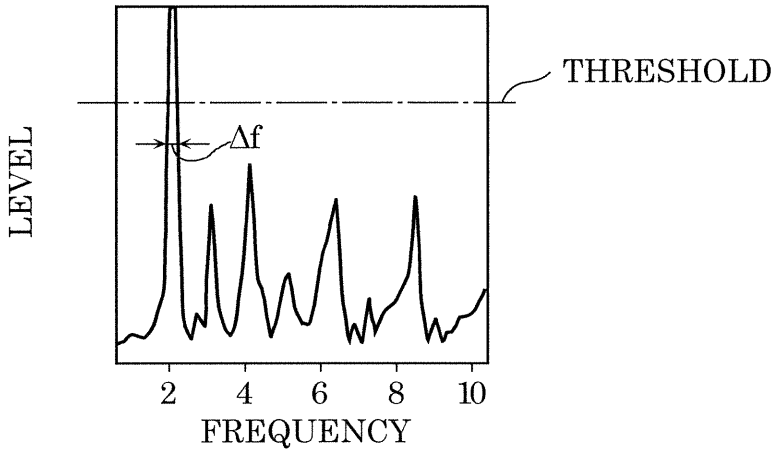

THRESHOLD
LEVEL
Δf
2
4
6
8
10
FREQUENCY

FIG. 7

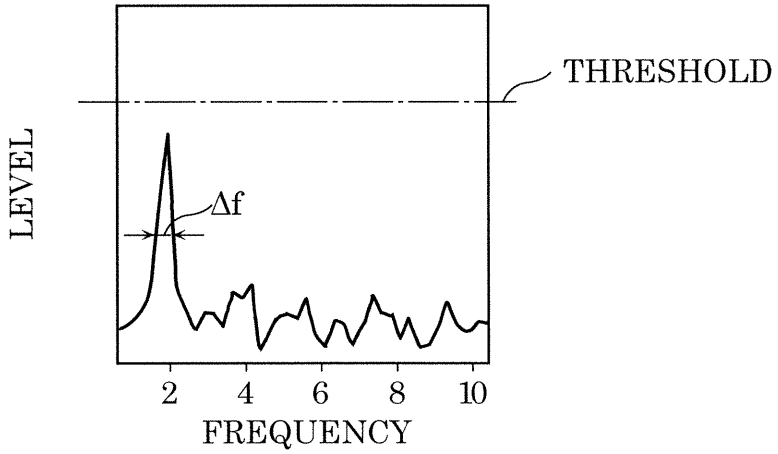

THRESHOLD
LEVEL
Δf
2
4
6
8
10
FREQUENCY

FIG. 8

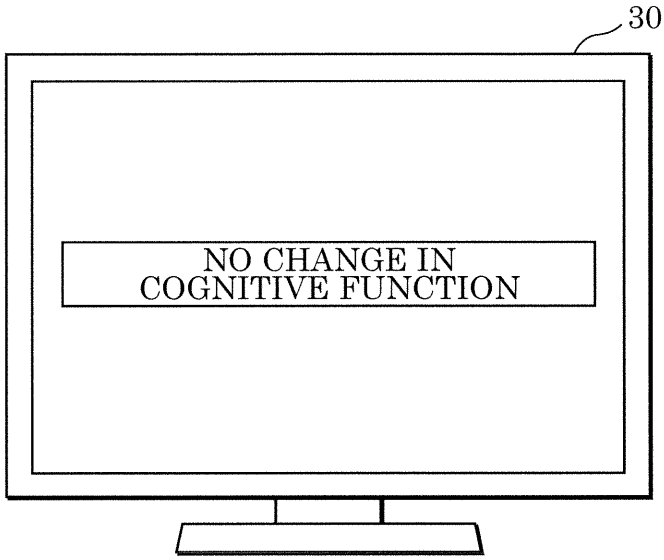


FIG. 9

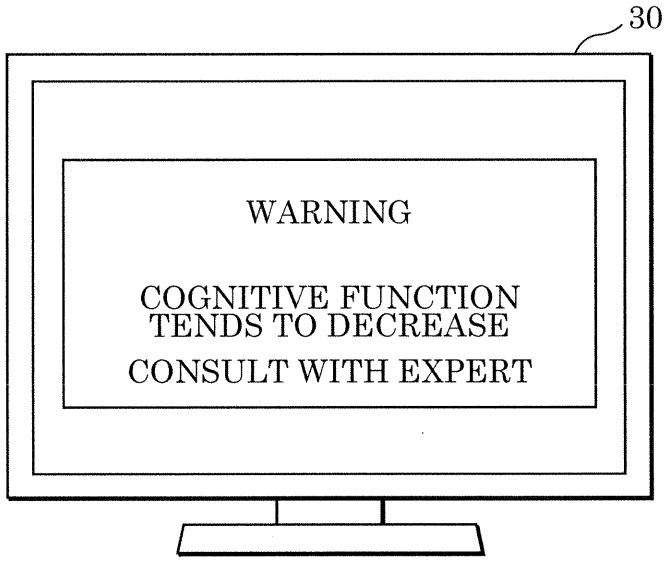


FIG. 10

PEAK LEVEL OF FREQUENCY PEAK	COGNITIVE FUNCTION
L2 OR HIGHER	NORMAL
HIGHER OR EQUAL TO L1 AND LOWER THAN L2	CAUTION (COGNITIVE FUNCTION TENDS TO DECREASE)
LOWER THAN L1	WARNING (COGNITIVE FUNCTION DECREASES)

FIG. 11

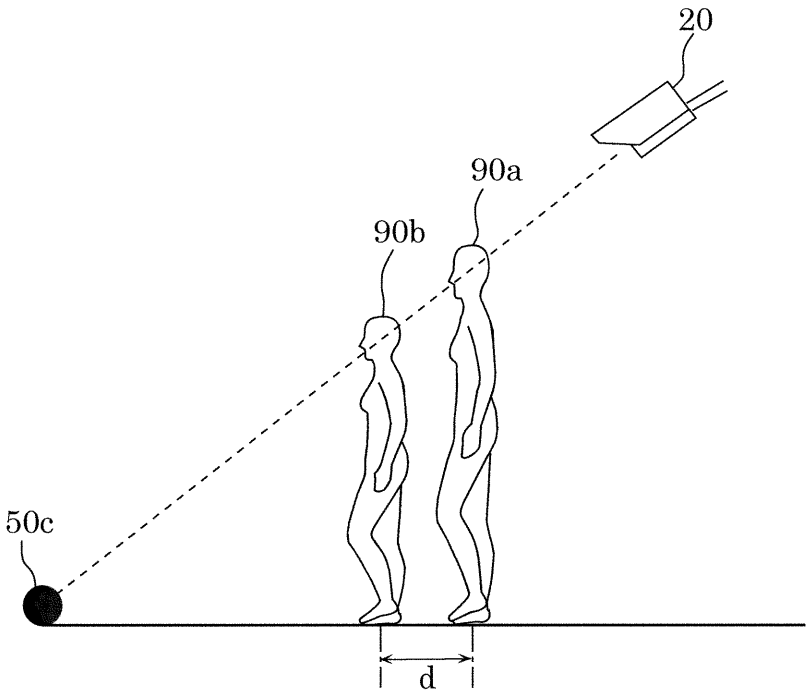

20
90a
90b
50c
d

FIG. 12

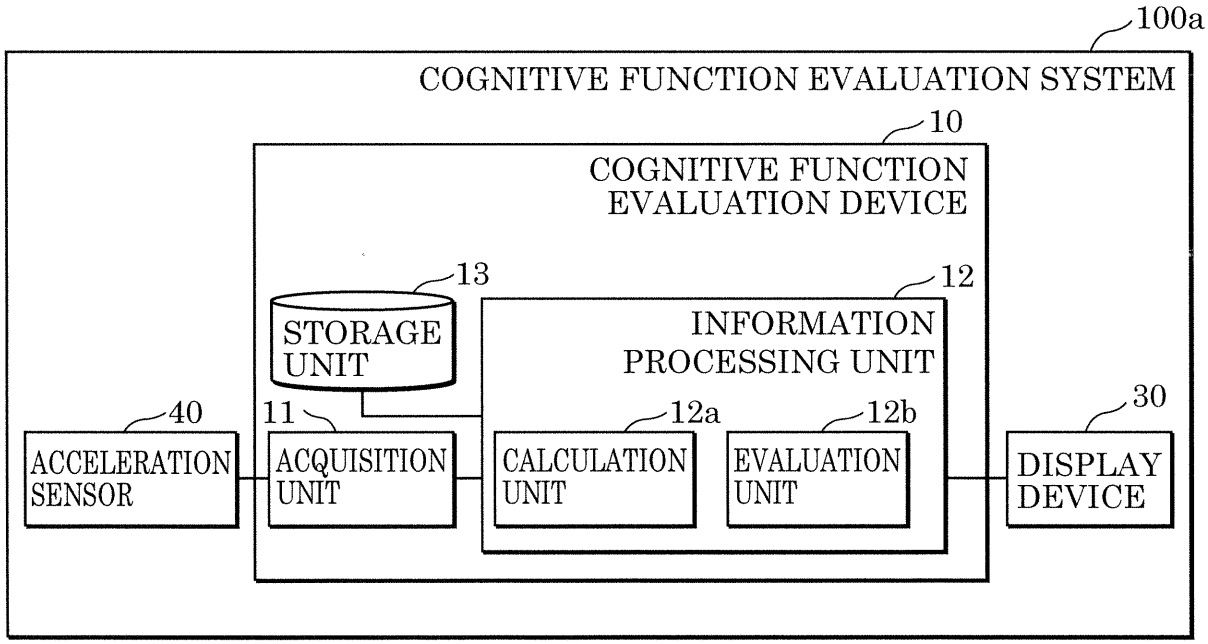

100a
COGNITIVE FUNCTION EVALUATION SYSTEM
10
COGNITIVE FUNCTION EVALUATION DEVICE
13
STORAGE UNIT
12
INFORMATION PROCESSING UNIT
40
11
12a
12b
30
ACCELERATION SENSOR
ACQUISITION UNIT
CALCULATION UNIT
EVALUATION UNIT
DISPLAY DEVICE

FIG. 13

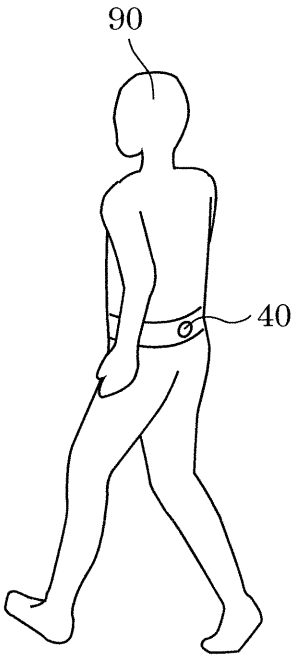

90
40

FIG. 14

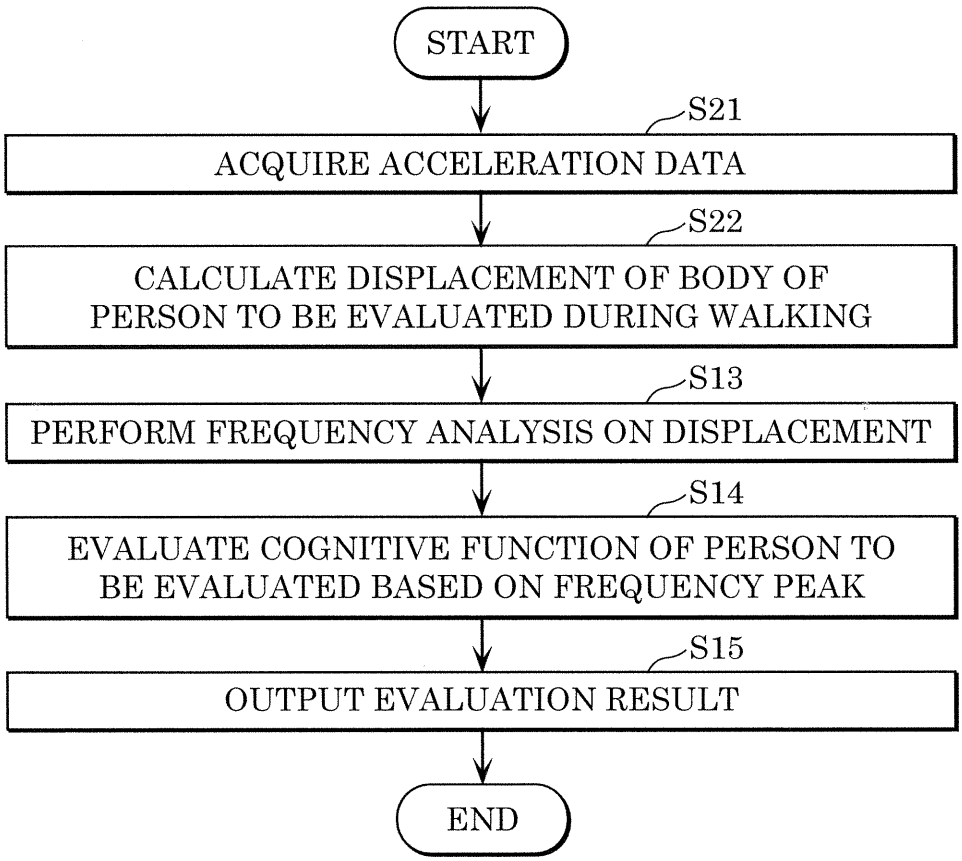

START
S21
ACQUIRE ACCELERATION DATA
S22
CALCULATE DISPLACEMENT OF BODY OF PERSON TO BE EVALUATED DURING WALKING
S13
PERFORM FREQUENCY ANALYSIS ON DISPLACEMENT
S14
EVALUATE COGNITIVE FUNCTION OF PERSON TO BE EVALUATED BASED ON FREQUENCY PEAK
S15
OUTPUT EVALUATION RESULT
END

FIG. 15

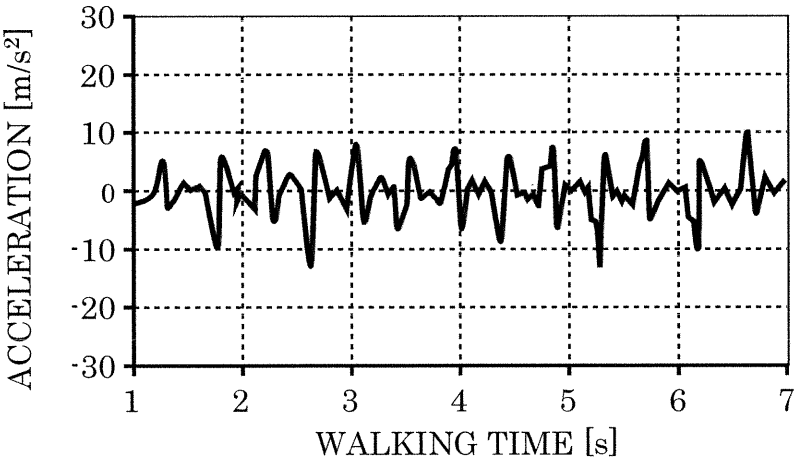
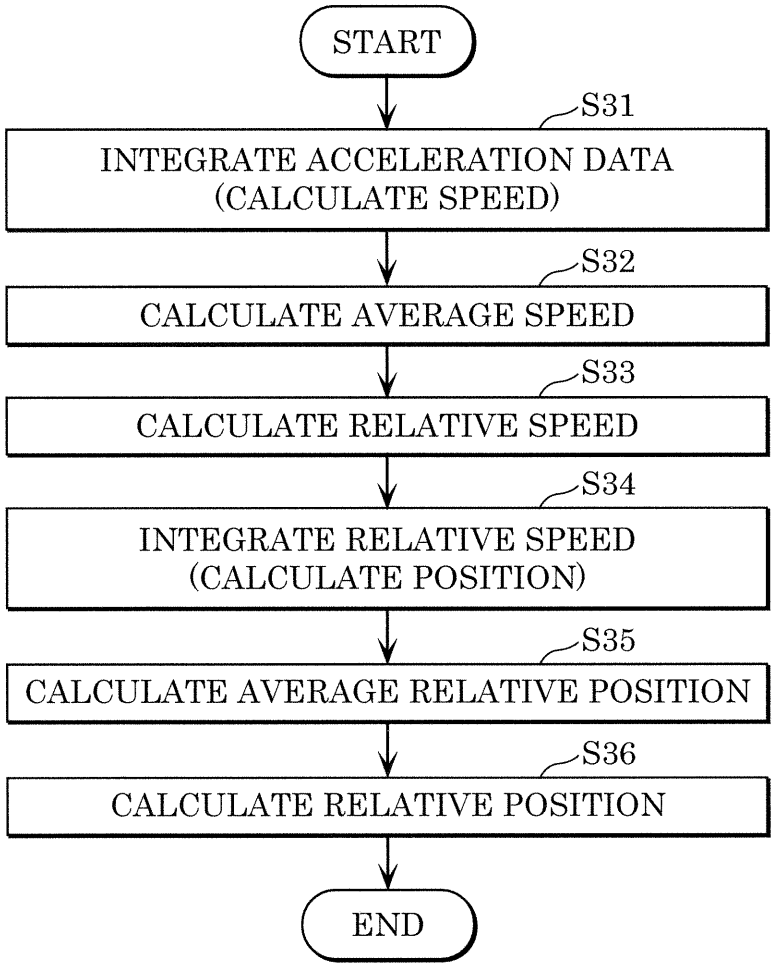


FIG. 16


START
S31
INTEGRATE ACCELERATION DATA (CALCULATE SPEED)
S32
CALCULATE AVERAGE SPEED
S33
CALCULATE RELATIVE SPEED
S34
INTEGRATE RELATIVE SPEED (CALCULATE POSITION)
S35
CALCULATE AVERAGE RELATIVE POSITION
S36
CALCULATE RELATIVE POSITION
END

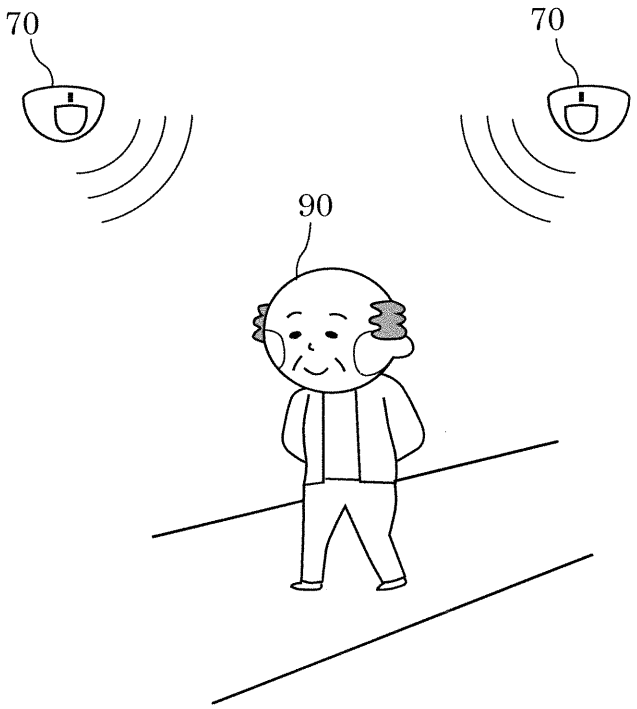



FIG. 17