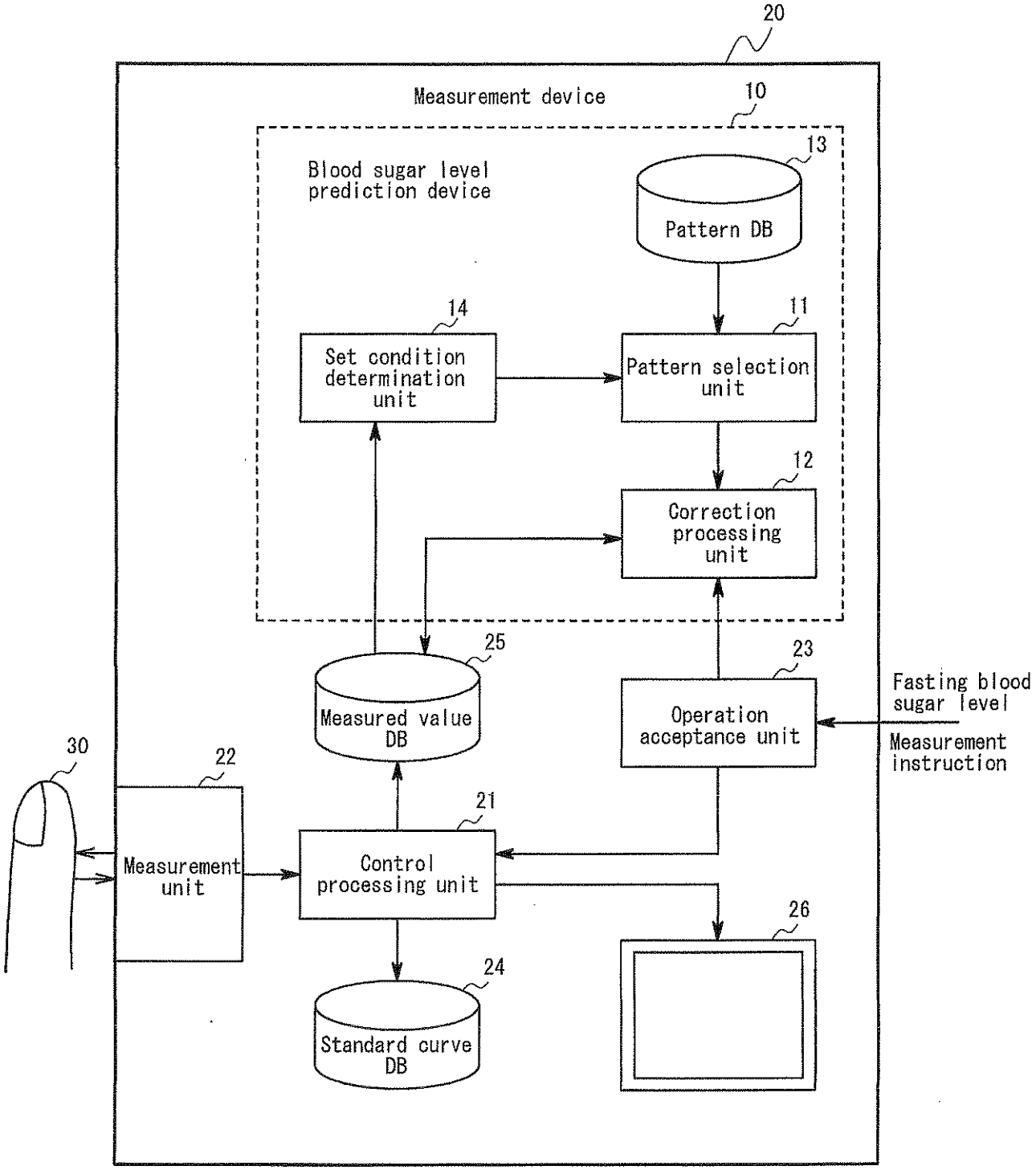
Fig. 1


20
Measurement device
10
Blood sugar level prediction device
13
Pattern DB
14
Set condition determination unit
11
Pattern selection unit
12
Correction processing unit
25
Measured value DB
23
Operation acceptance unit
Fasting blood sugar level
Measurement instruction
30
22
Measurement unit
21
Control processing unit
26
24
Standard curve DB

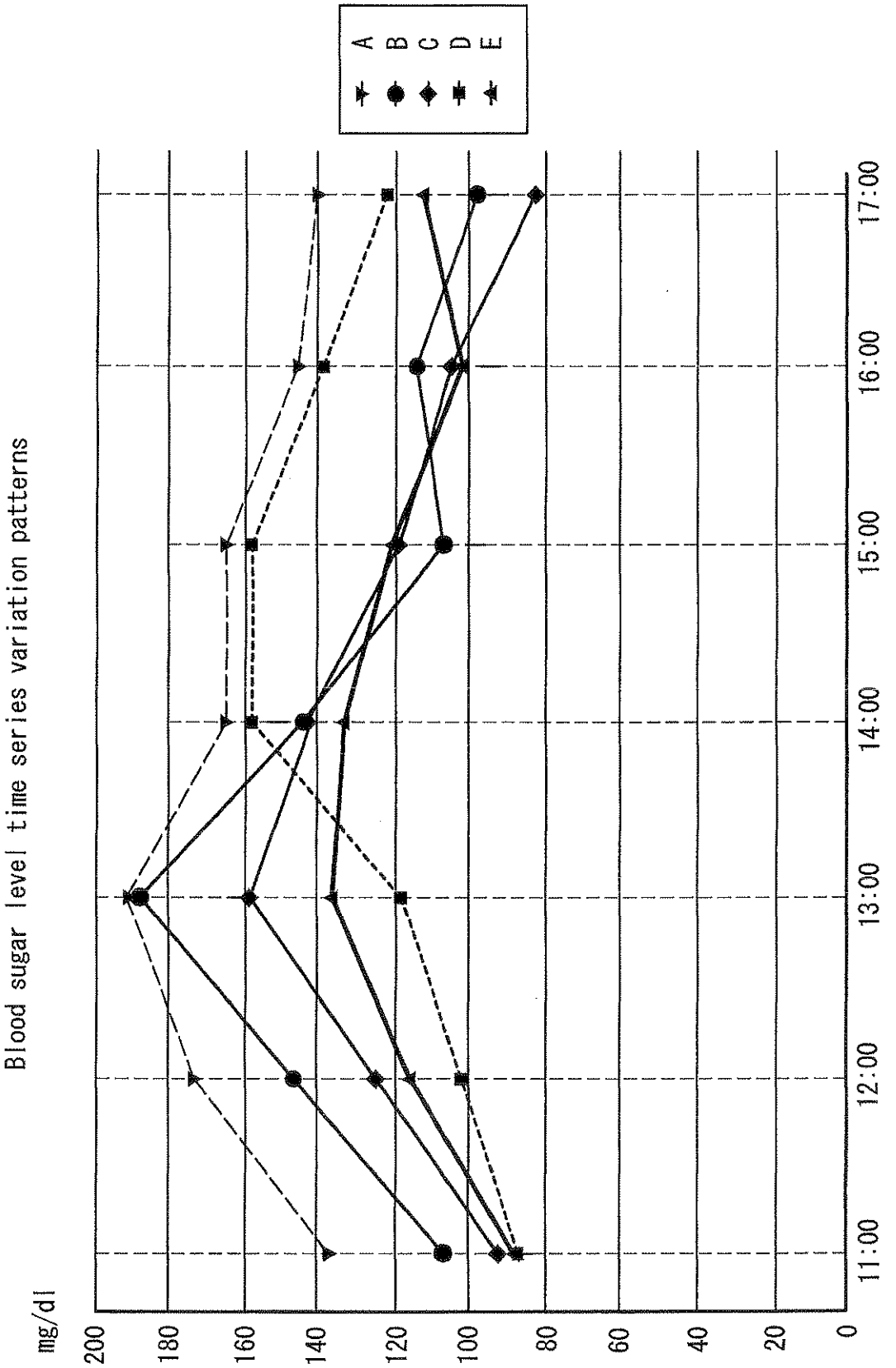

Blood sugar level time series variation patterns
mg/dl
200
180
160
140
120
100
80
60
40
20
0
11:00
12:00
13:00
14:00
15:00
16:00
17:00
Reference time
A
B
C
D
E

Fig. 2

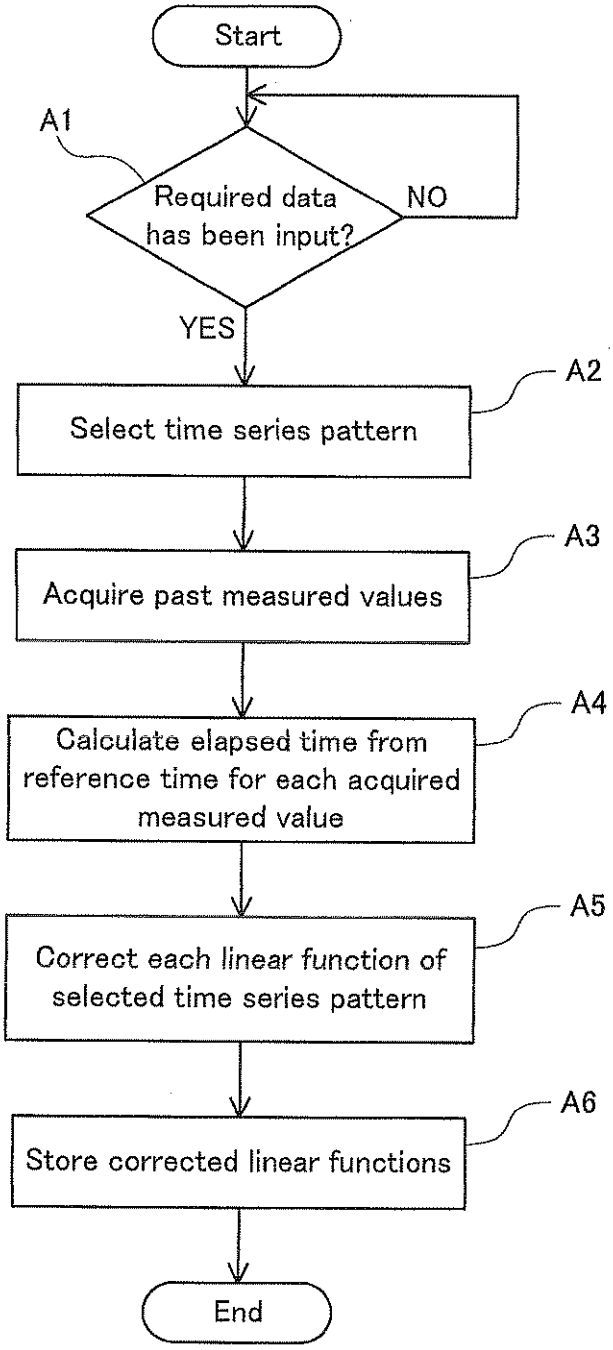

Start
A1
Required data has been input?
NO
YES
A2
Select time series pattern
A3
Acquire past measured values
A4
Calculate elapsed time from reference time for each acquired measured value
A5
Correct each linear function of selected time series pattern
A6
Store corrected linear functions
End

Fig.3

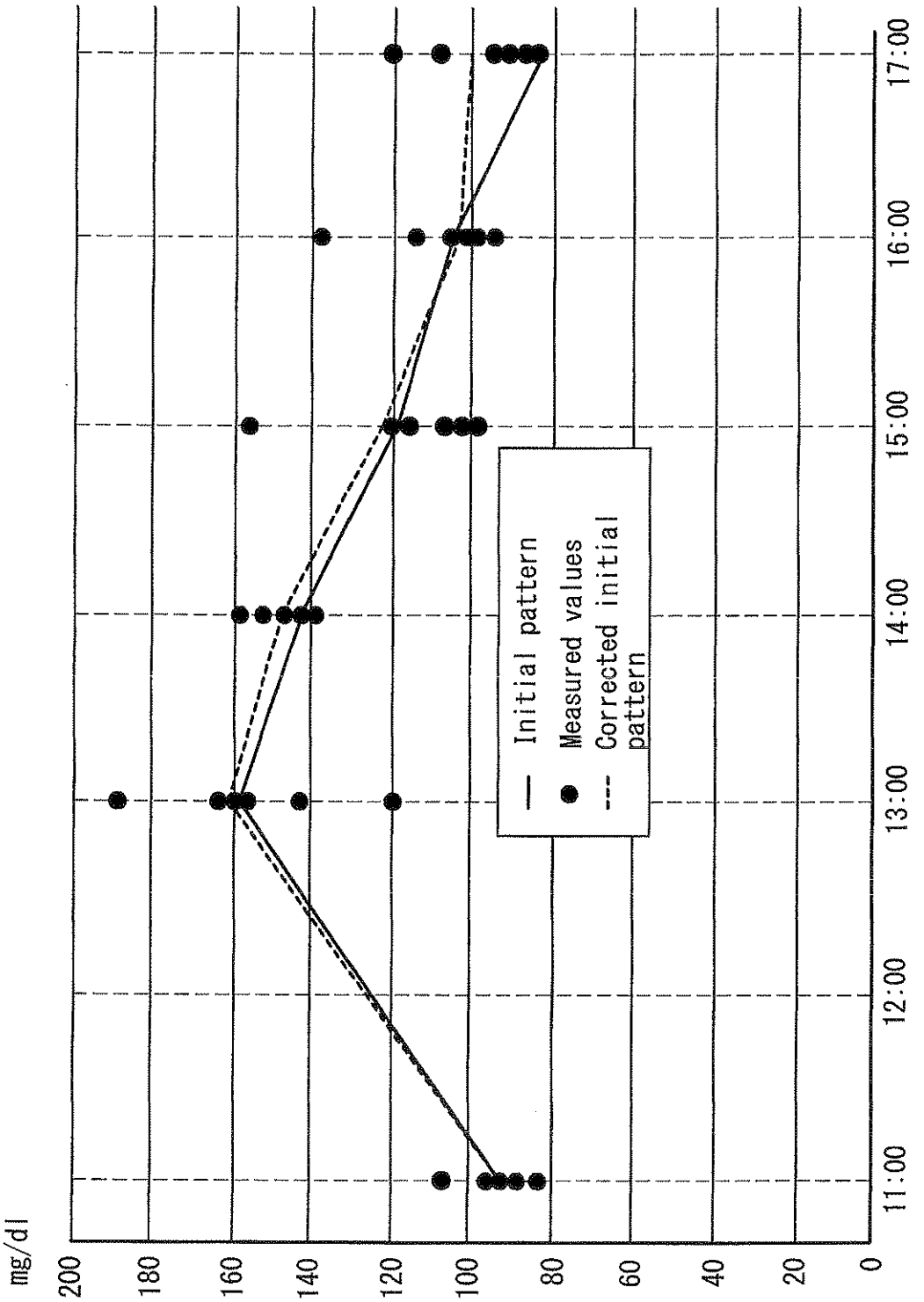

mg/dl
200
180
160
140
120
100
80
60
40
20
0
11:00
12:00
13:00
14:00
15:00
16:00
17:00
Reference time
Initial pattern
Measured values
Corrected initial pattern

Fig. 4

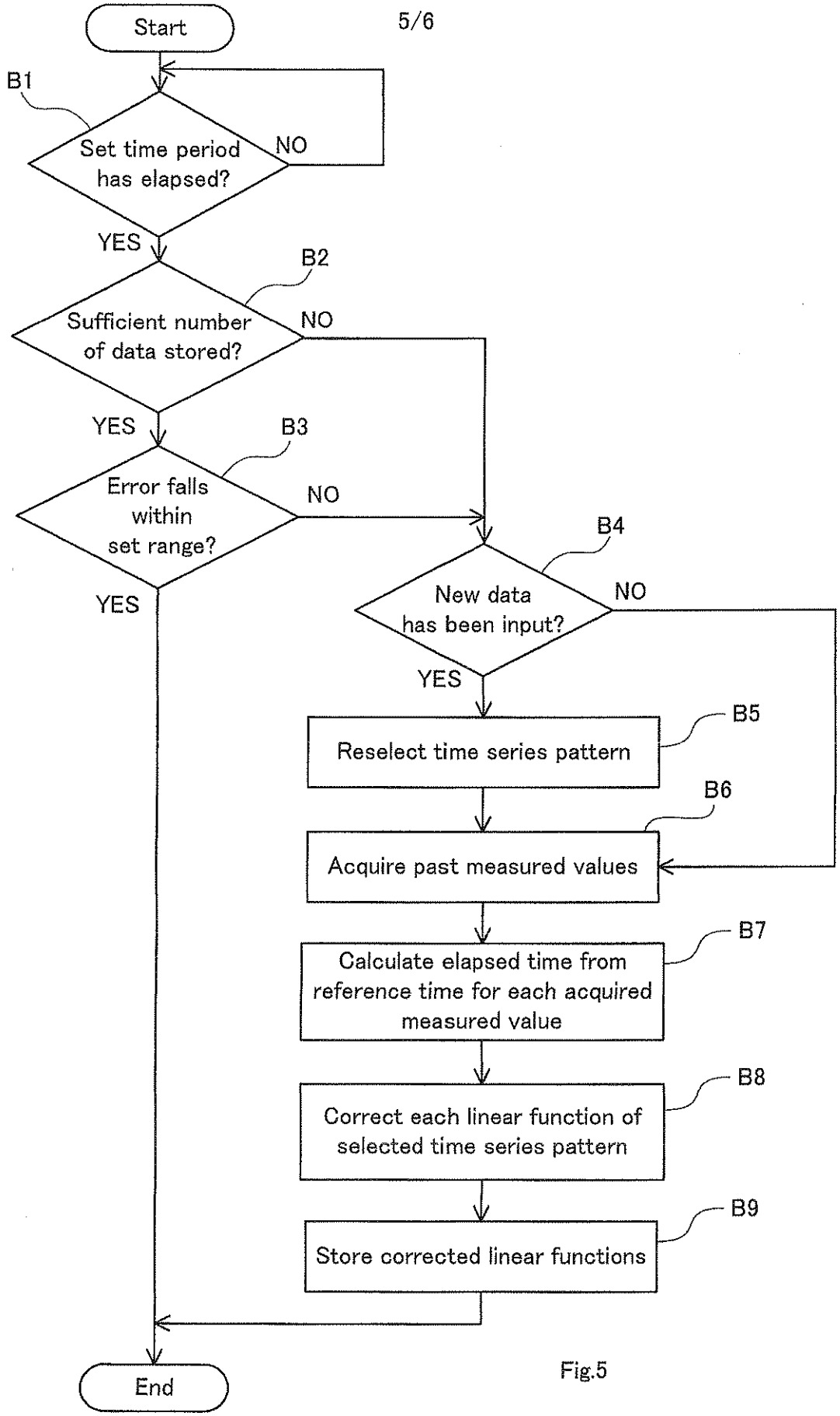

Start
B1
Set time period has elapsed?
NO
YES
B2
Sufficient number of data stored?
NO
YES
B3
Error falls within set range?
NO
YES
B4
New data has been input?
NO
YES
B5
Reselect time series pattern
B6
Acquire past measured values
B7
Calculate elapsed time from reference time for each acquired measured value
B8
Correct each linear function of selected time series pattern
B9
Store corrected linear functions
End

Fig.5

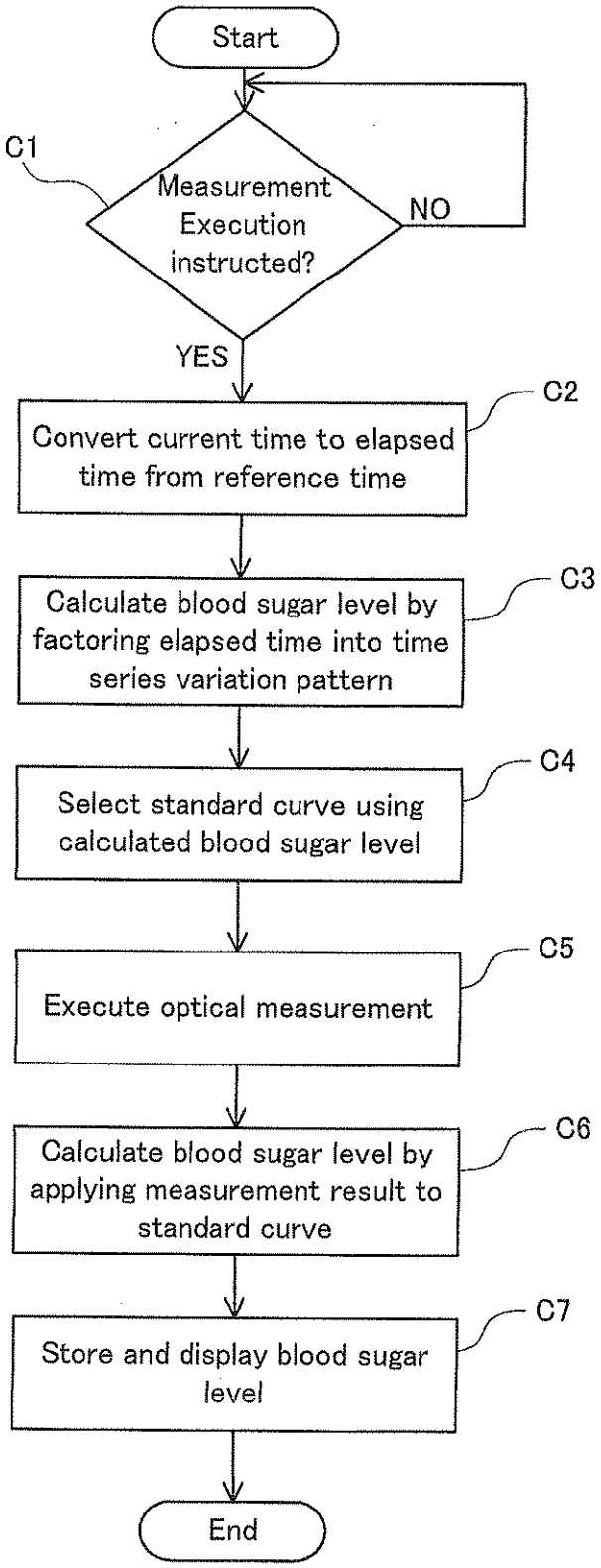

Start
C1
Measurement Execution instructed?
NO
YES
C2
Convert current time to elapsed time from reference time
C3
Calculate blood sugar level by factoring elapsed time into time series variation pattern
C4
Select standard curve using calculated blood sugar level
C5
Execute optical measurement
C6
Calculate blood sugar level by applying measurement result to standard curve
C7
Store and display blood sugar level
End

Fig.6