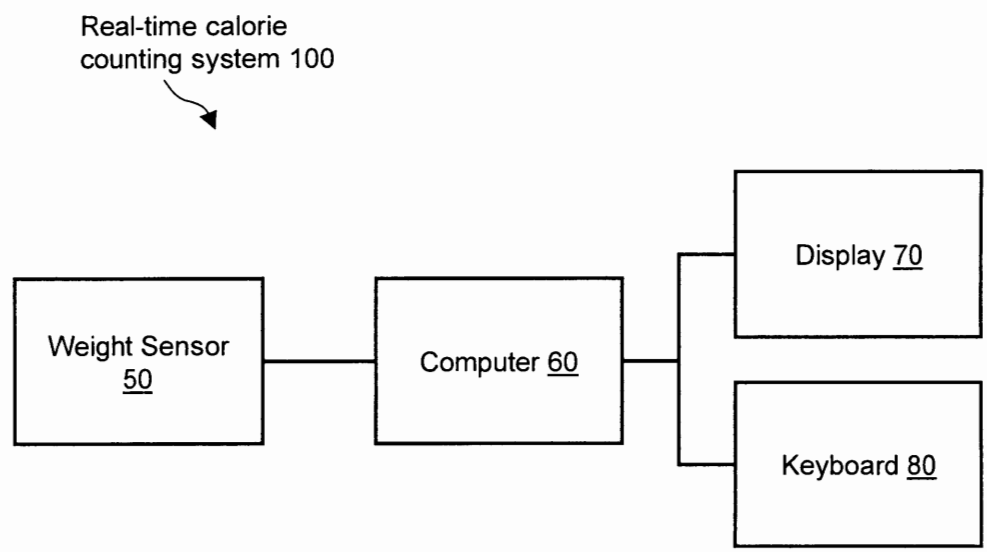

Real-time calorie
counting system 100
Weight Sensor
50
Computer 60
Display 70
Keyboard 80

FIG. 1

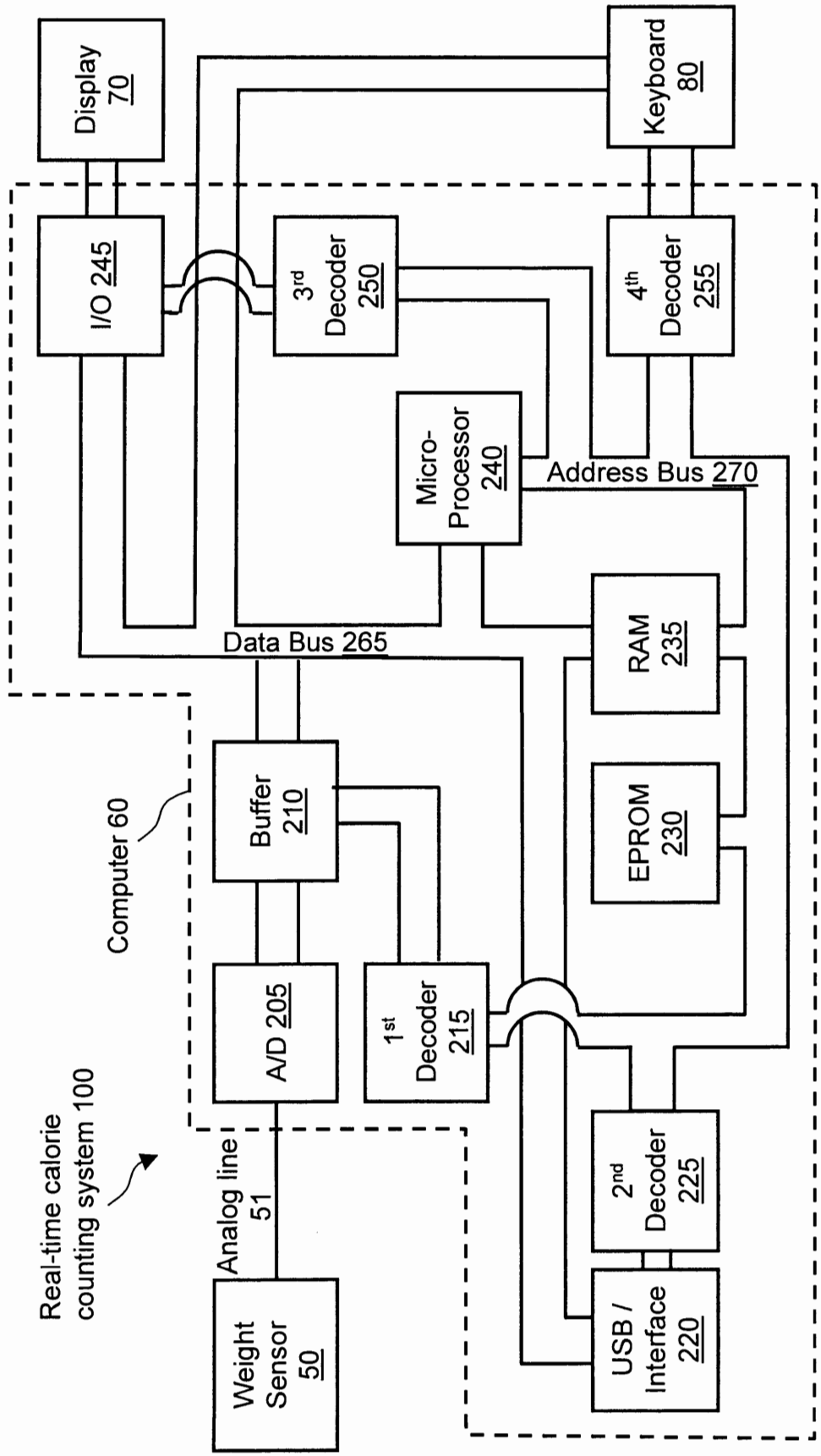

Display 70
Keyboard 80
I/O 245
3rd Decoder 250
4th Decoder 255
Micro-Processor 240
Address Bus 270
Data Bus 265
RAM 235
EPROM 230
Buffer 210
Computer 60
A/D 205
1st Decoder 215
2nd Decoder 225
USB / Interface 220
Analog line 51
Weight Sensor 50
Real-time calorie counting system 100

FIG. 2A

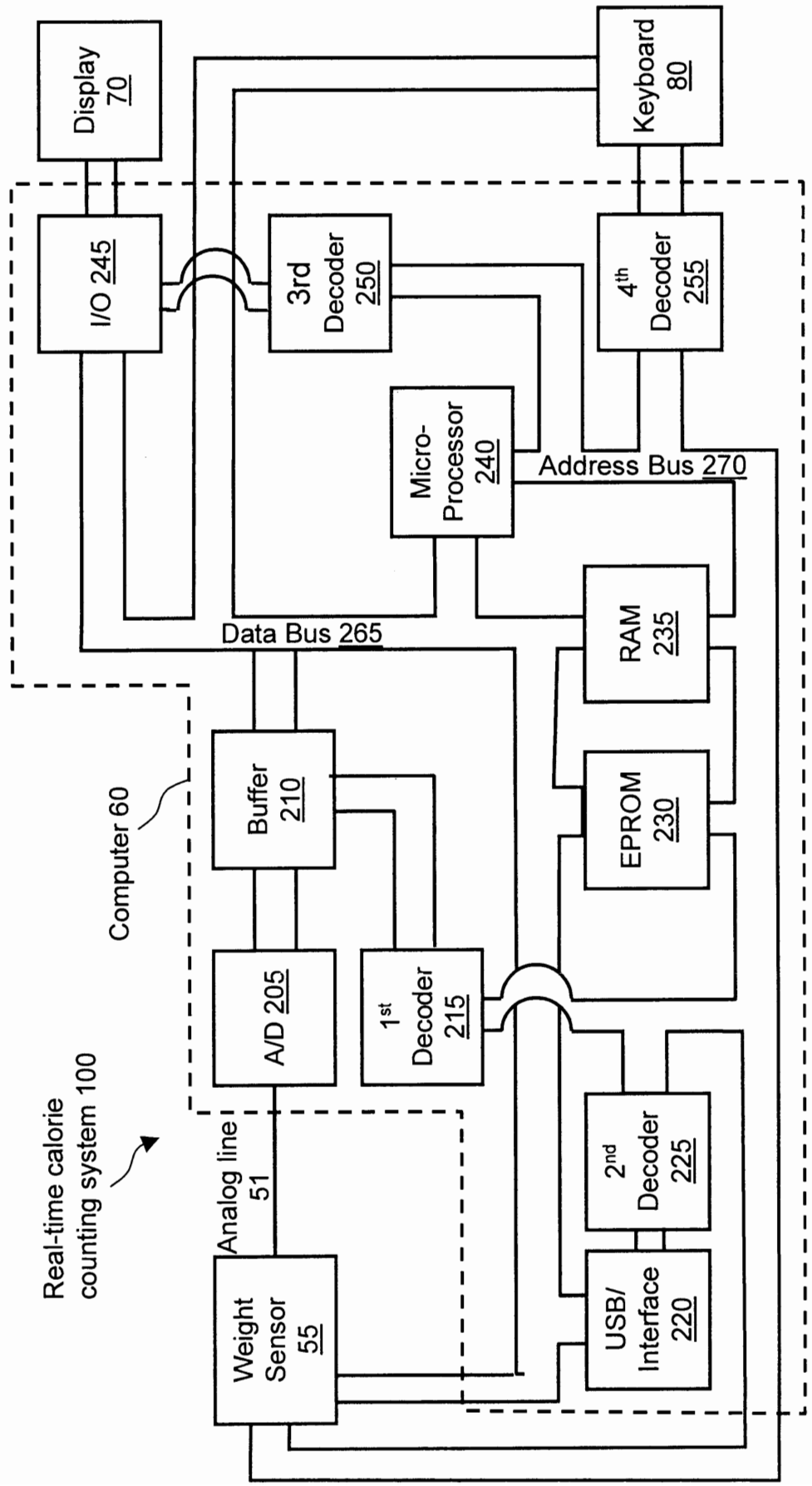

Display 70
Keyboard 80
I/O 245
3rd Decoder 250
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Micro-Processor 240
Address Bus 270
Data Bus 265
RAM 235
EPROM 230
Buffer 210
Computer 60
A/D 205
1st Decoder 215
2nd Decoder 225
USB/ Interface 220
Analog line 51
Weight Sensor 55
Real-time calorie counting system 100

FIG. 2B

Weight sensor subsystem **50**

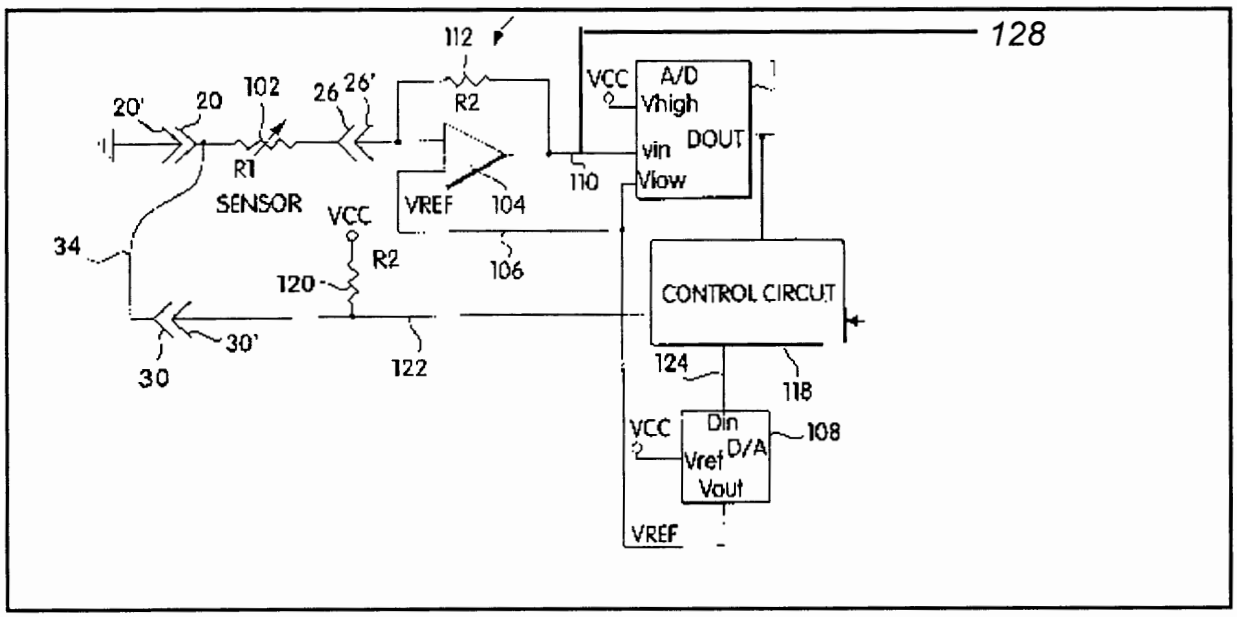


FIG. 3A

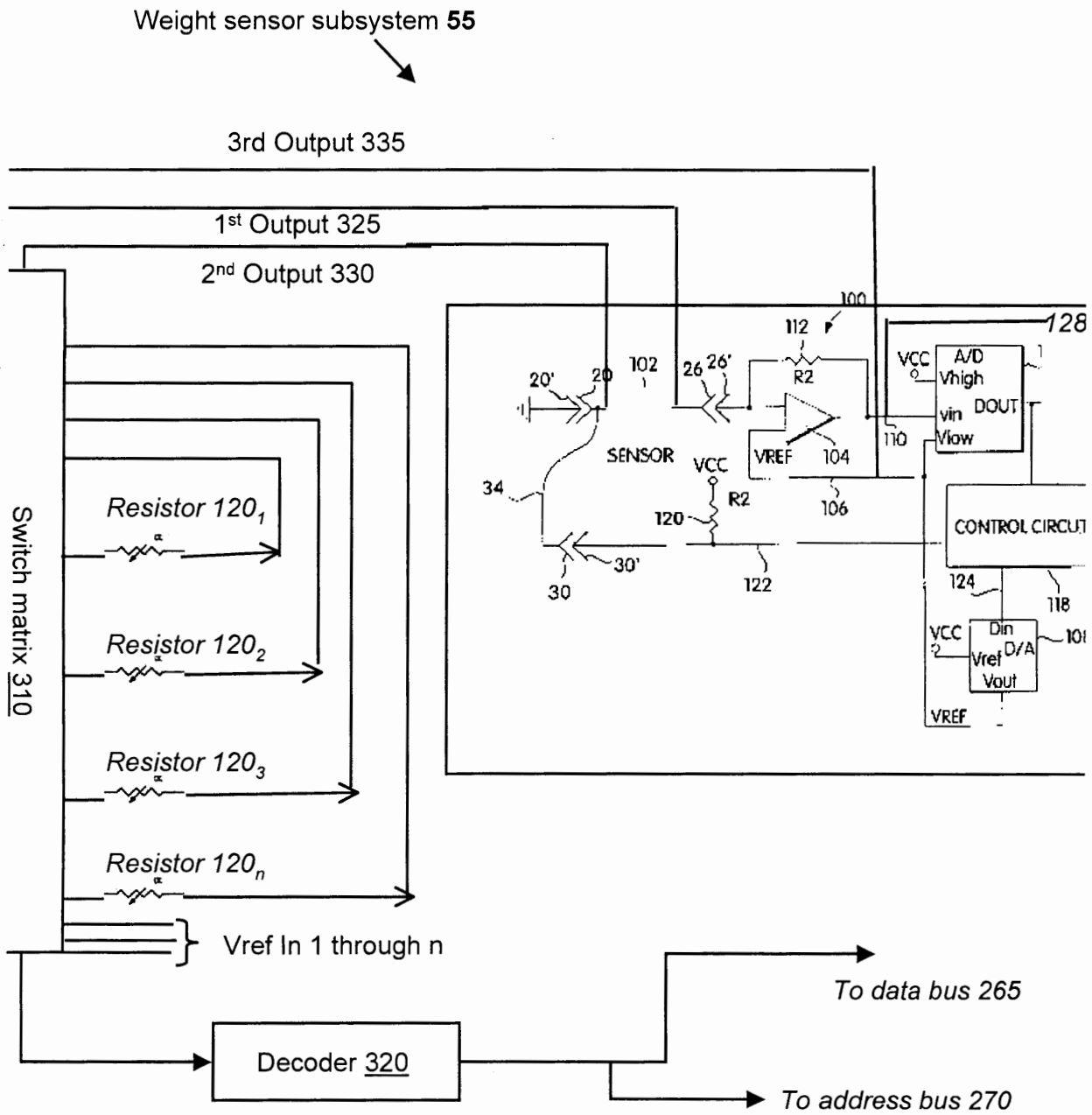

Weight sensor subsystem 55
3rd Output 335
1st Output 325
2nd Output 330
Switch matrix 310
Resistor 120$_1$
Resistor 120$_2$
Resistor 120$_3$
Resistor 120$_n$
Vref In 1 through n
Decoder 320
To data bus 265
To address bus 270
100
112
R2
102
20'
20
26
26'
SENSOR
VCC
VREF
104
106
110
34
120
R2
30
30'
122
A/D
Vhigh
vin
Vlow
DOUT
CONTROL CIRCUIT
124
118
Din
Vref
D/A
Vout
VREF

FIG. 3B

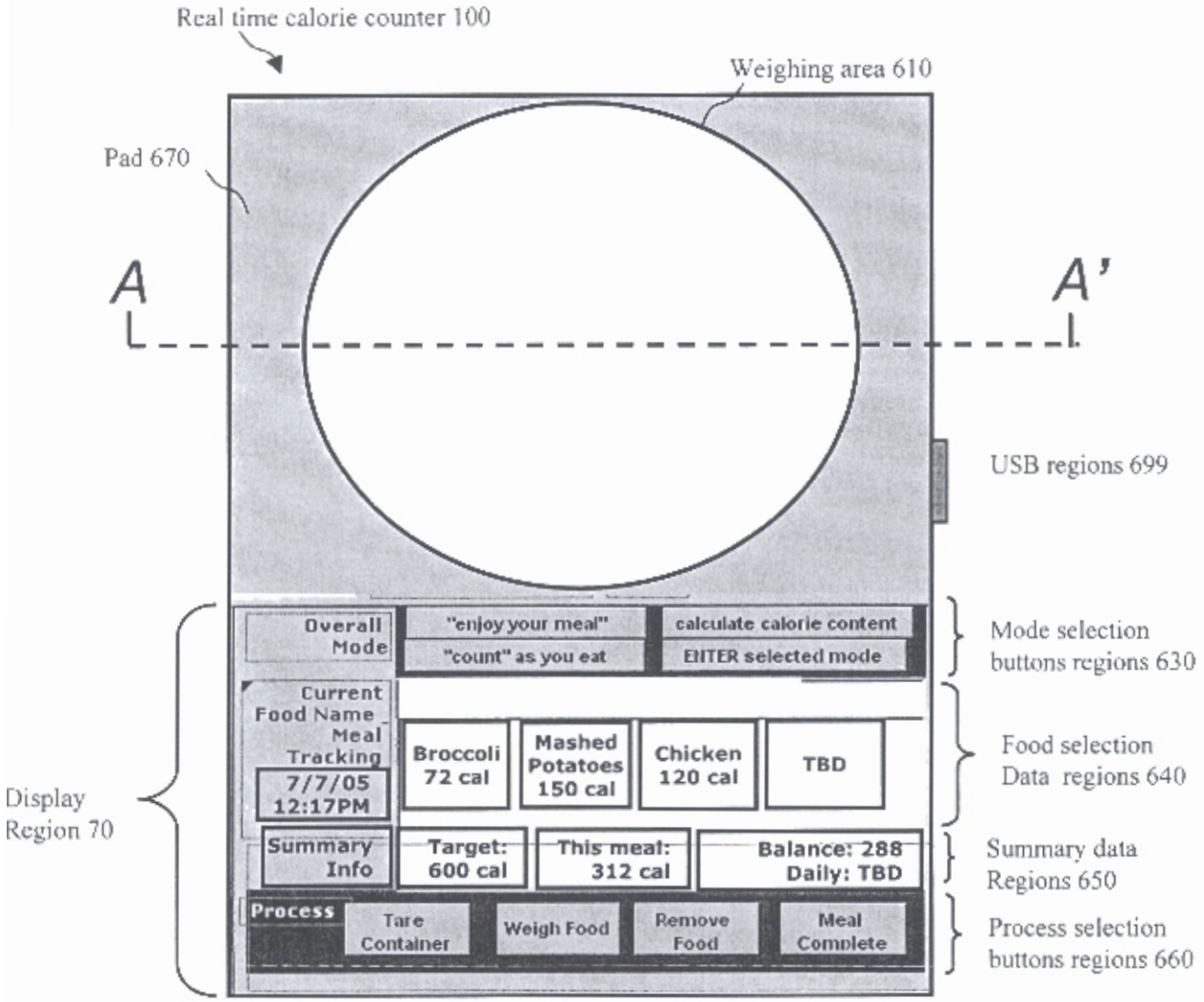

Real time calorie counter 100
Weighing area 610
Pad 670
A
A'
USB regions 699
Overall Mode
"enjoy your meal"
"count" as you eat
calculate calorie content
ENTER selected mode
Mode selection buttons regions 630
Current Food Name
Meal Tracking
7/7/05 12:17PM
Broccoli 72 cal
Mashed Potatoes 150 cal
Chicken 120 cal
TBD
Food selection Data regions 640
Display Region 70
Summary Info
Target: 600 cal
This meal: 312 cal
Balance: 288
Daily: TBD
Summary data Regions 650
Process
Tare Container
Weigh Food
Remove Food
Meal Complete
Process selection buttons regions 660

FIG. 3C

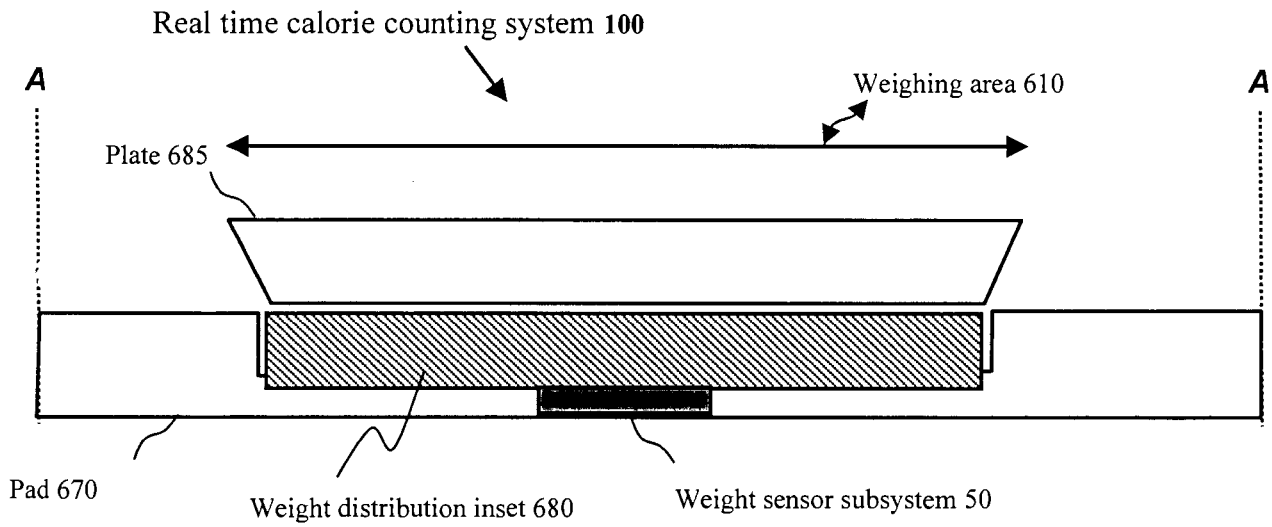

Real time calorie counting system 100
A
A'
Weighing area 610
Plate 685
Pad 670
Weight distribution inset 680
Weight sensor subsystem 50

FIG. 3D

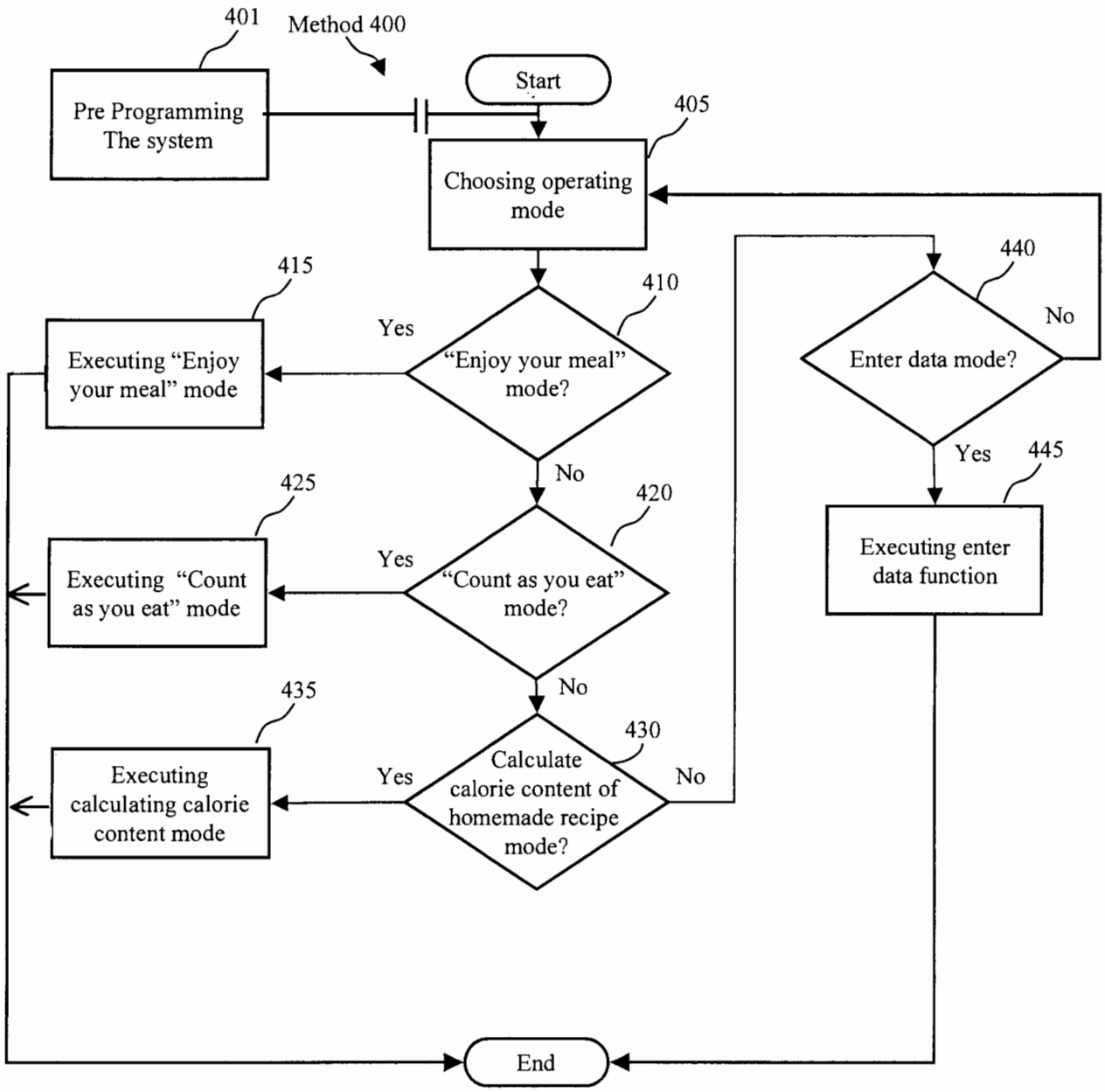

401
Method 400
Pre Programming The system
Start
405
Choosing operating mode
415
410
Yes
Executing "Enjoy your meal" mode
"Enjoy your meal" mode?
440
No
Enter data mode?
No
Yes
445
425
420
Executing "Count as you eat" mode
Yes
"Count as you eat" mode?
Executing enter data function
No
435
430
Executing calculating calorie content mode
Yes
Calculate calorie content of homemade recipe mode?
No
End

FIG. 4

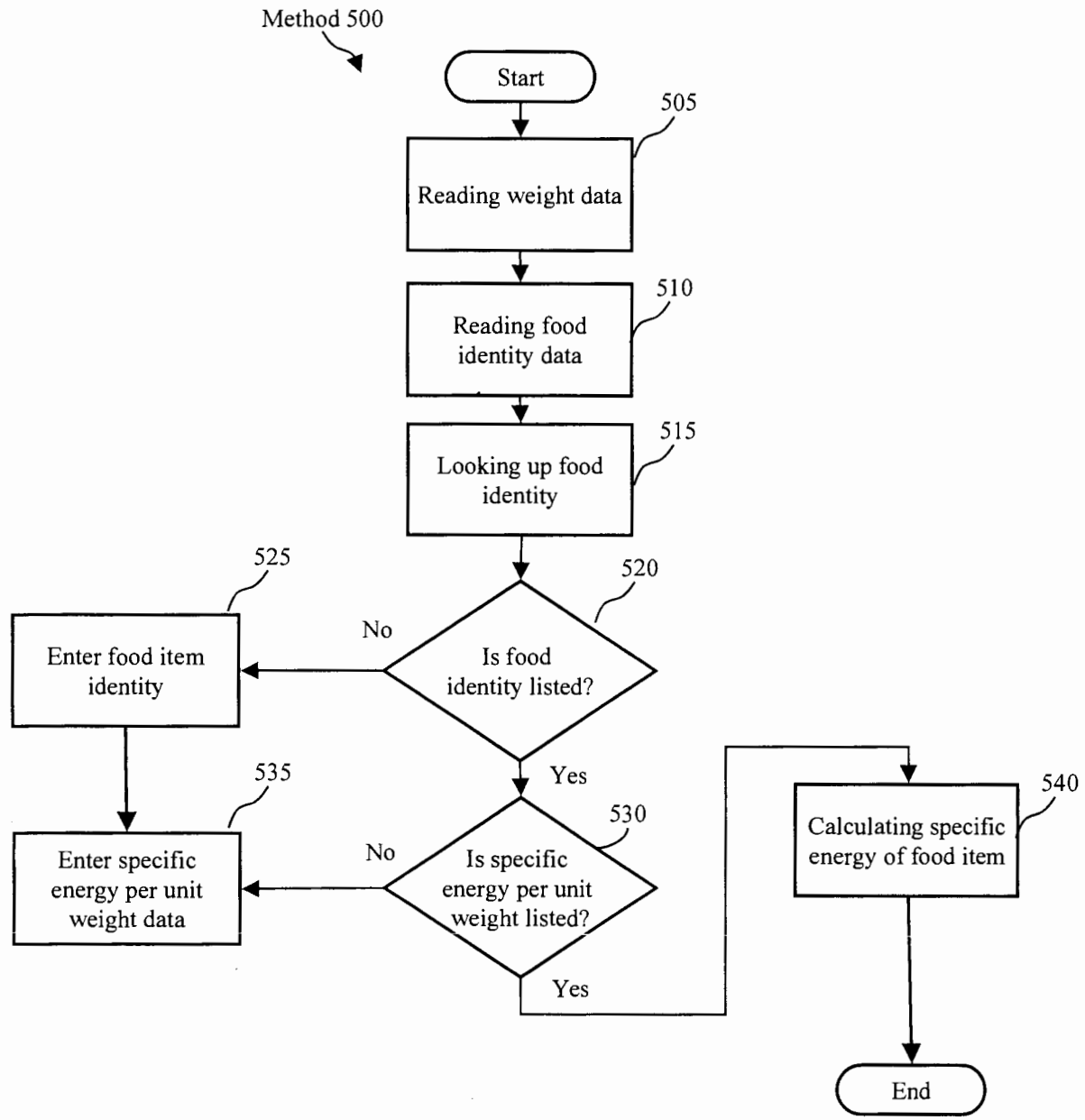

Method 500
Start
505
Reading weight data
510
Reading food identity data
515
Looking up food identity
520
Is food identity listed?
No
525
Enter food item identity
Yes
530
Is specific energy per unit weight listed?
No
535
Enter specific energy per unit weight data
Yes
540
Calculating specific energy of food item
End

FIG. 5

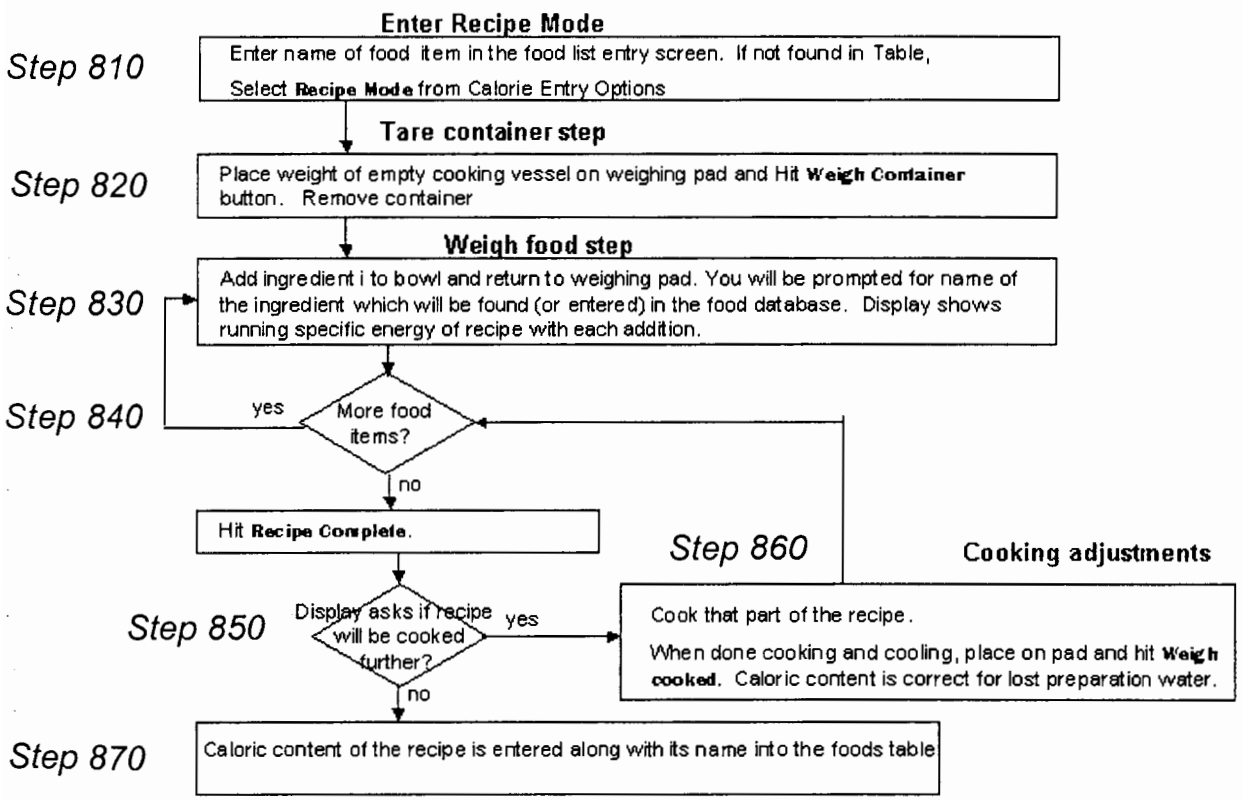

Enter Recipe Mode
Step 810
Enter name of food item in the food list entry screen. If not found in Table, Select Recipe Mode from Calorie Entry Options
Tare container step
Step 820
Place weight of empty cooking vessel on weighing pad and Hit Weigh Container button. Remove container
Weigh food step
Step 830
Add ingredient i to bowl and return to weighing pad. You will be prompted for name of the ingredient which will be found (or entered) in the food database. Display shows running specific energy of recipe with each addition.
Step 840
yes
More food items?
no
Hit Recipe Complete.
Step 860
Cooking adjustments
Step 850
Display asks if recipe will be cooked further?
yes
Cook that part of the recipe.
When done cooking and cooling, place on pad and hit Weigh cooked. Caloric content is correct for lost preparation water.
no
Step 870
Caloric content of the recipe is entered along with its name into the foods table

FIG. 6