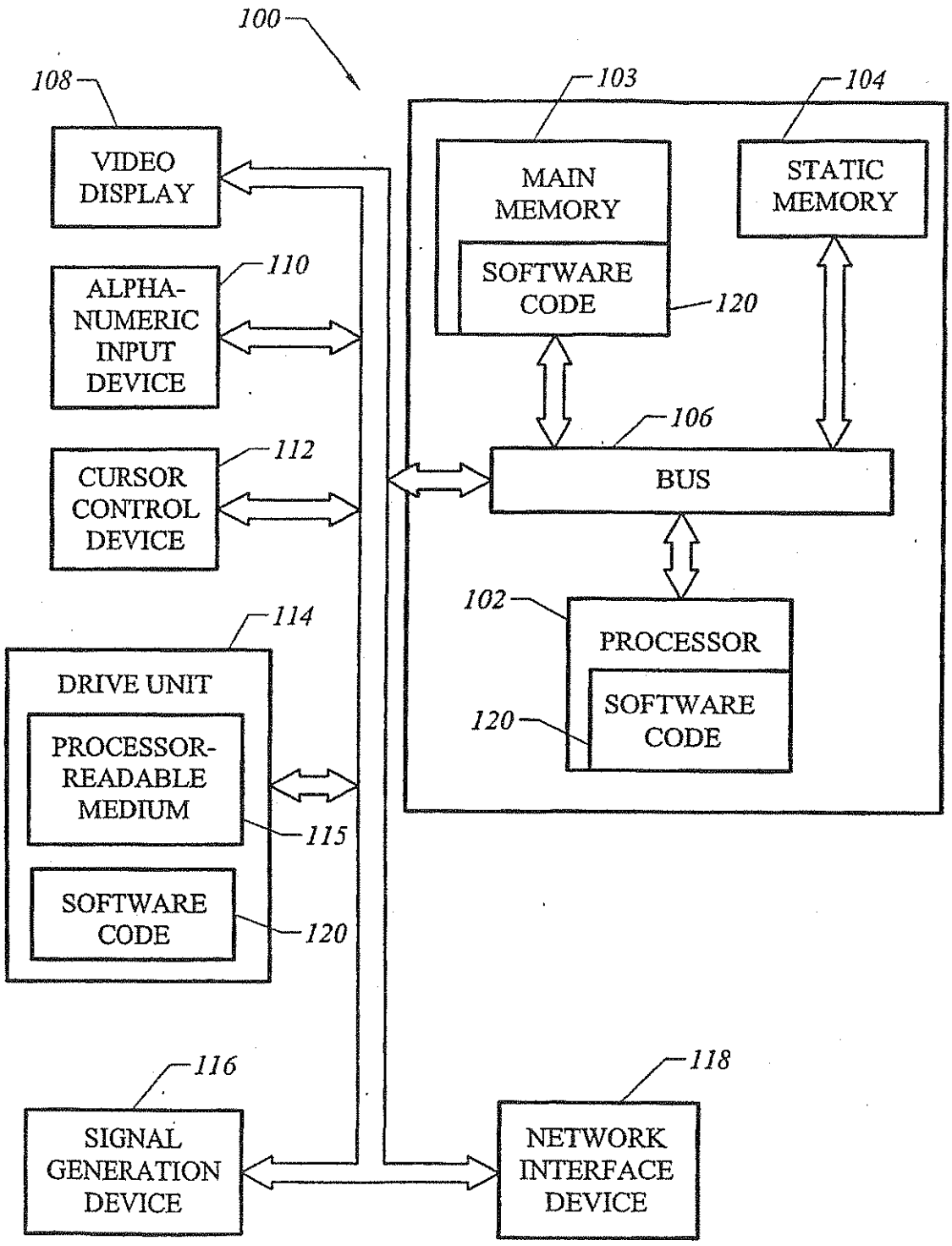

100
108
VIDEO DISPLAY
103
MAIN MEMORY
SOFTWARE CODE
120
104
STATIC MEMORY
110
ALPHA-NUMERIC INPUT DEVICE
106
BUS
112
CURSOR CONTROL DEVICE
102
PROCESSOR
120
SOFTWARE CODE
114
DRIVE UNIT
PROCESSOR-READABLE MEDIUM
115
SOFTWARE CODE
120
116
SIGNAL GENERATION DEVICE
118
NETWORK INTERFACE DEVICE

FIG. 1

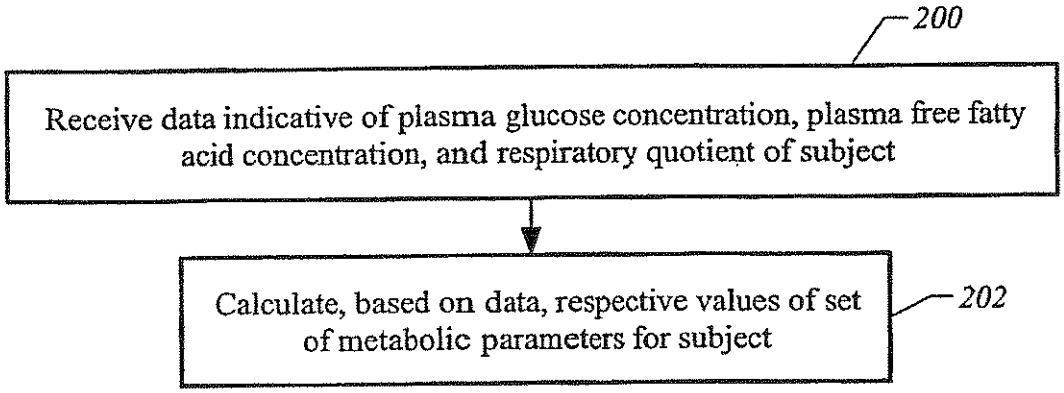

200
Receive data indicative of plasma glucose concentration, plasma free fatty acid concentration, and respiratory quotient of subject
Calculate, based on data, respective values of set of metabolic parameters for subject
202

FIG. 2

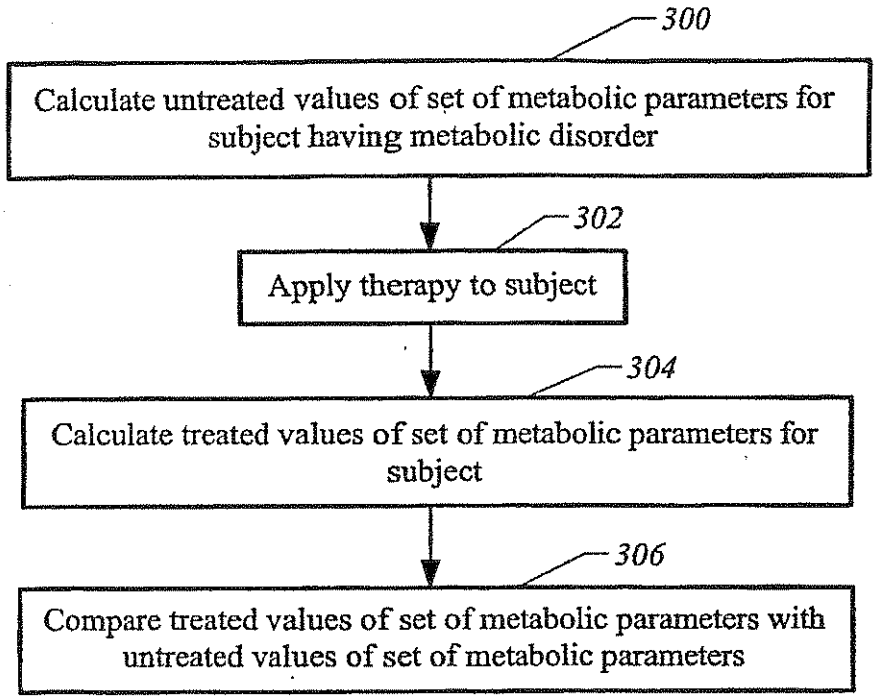

300
Calculate untreated values of set of metabolic parameters for subject having metabolic disorder
302
Apply therapy to subject
304
Calculate treated values of set of metabolic parameters for subject
306
Compare treated values of set of metabolic parameters with untreated values of set of metabolic parameters

FIG. 3

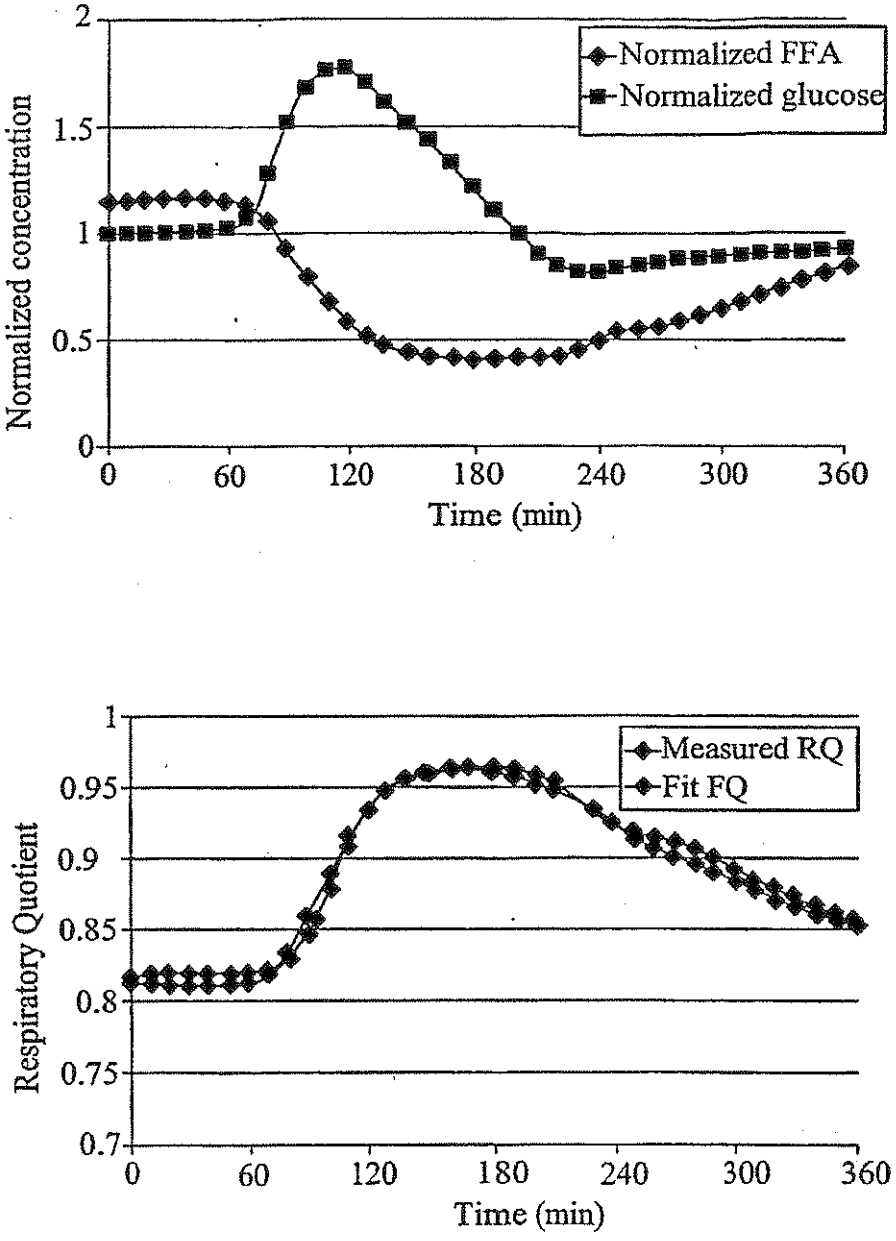

Normalized concentration
2
1.5
1
0.5
0
0
60
120
180
240
300
360
Time (min)
Normalized FFA
Normalized glucose
Respiratory Quotient
1
0.95
0.9
0.85
0.8
0.75
0.7
0
60
120
180
240
300
360
Time (min)
Measured RQ
Fit FQ

FIG. 4

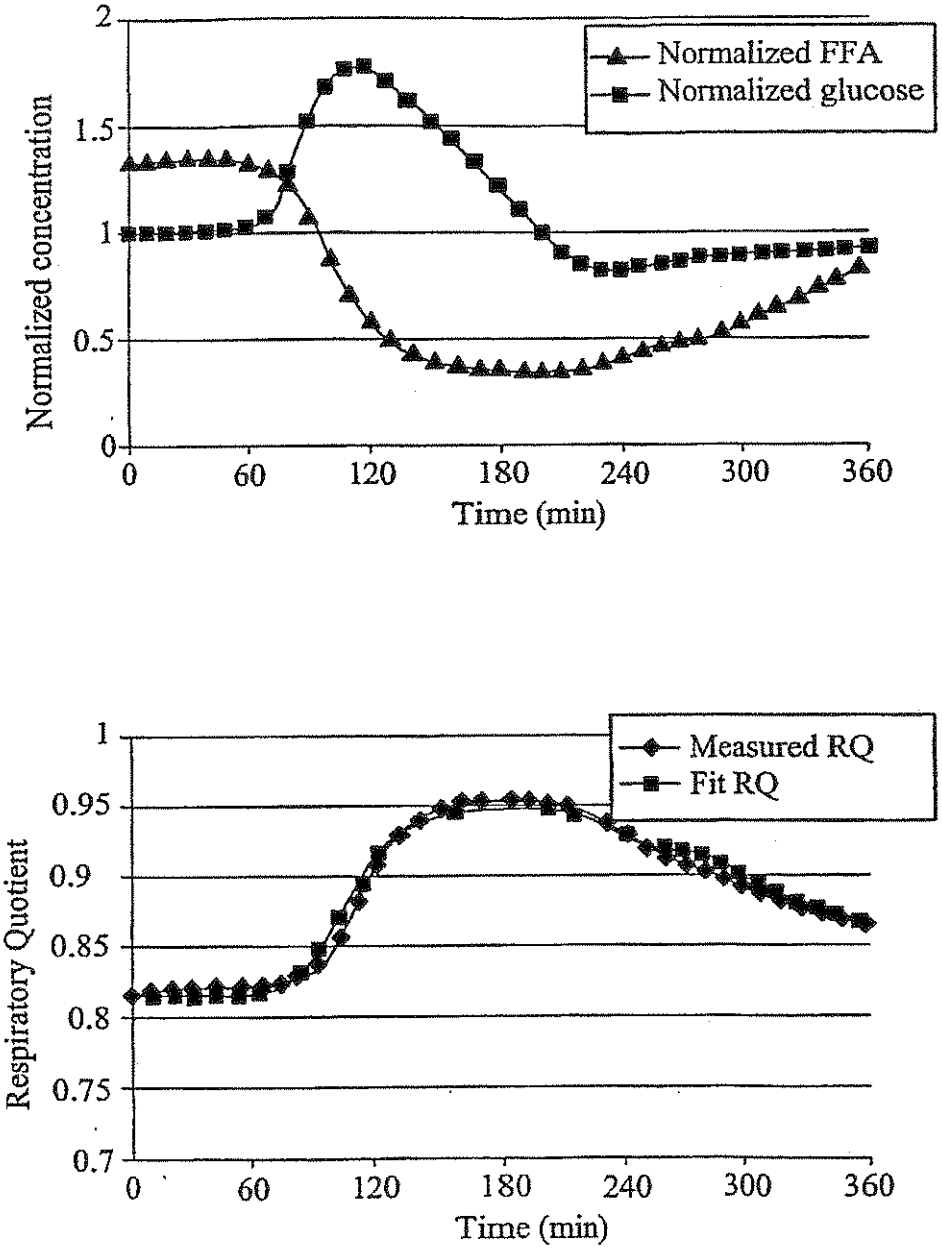

Normalized concentration
2
1.5
1
0.5
0
0
60
120
180
240
300
360
Time (min)
Normalized FFA
Normalized glucose
Respiratory Quotient
1
0.95
0.9
0.85
0.8
0.75
0.7
0
60
120
180
240
300
360
Time (min)
Measured RQ
Fit RQ

FIG. 5

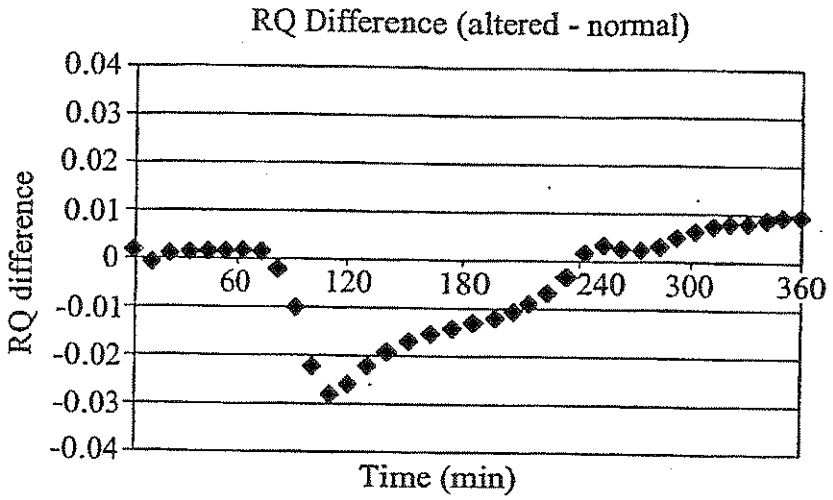

RQ Difference (altered - normal)
RQ difference
0.04
0.03
0.02
0.01
0
-0.01
-0.02
-0.03
-0.04
60
120
180
240
300
360
Time (min)

FIG. 6

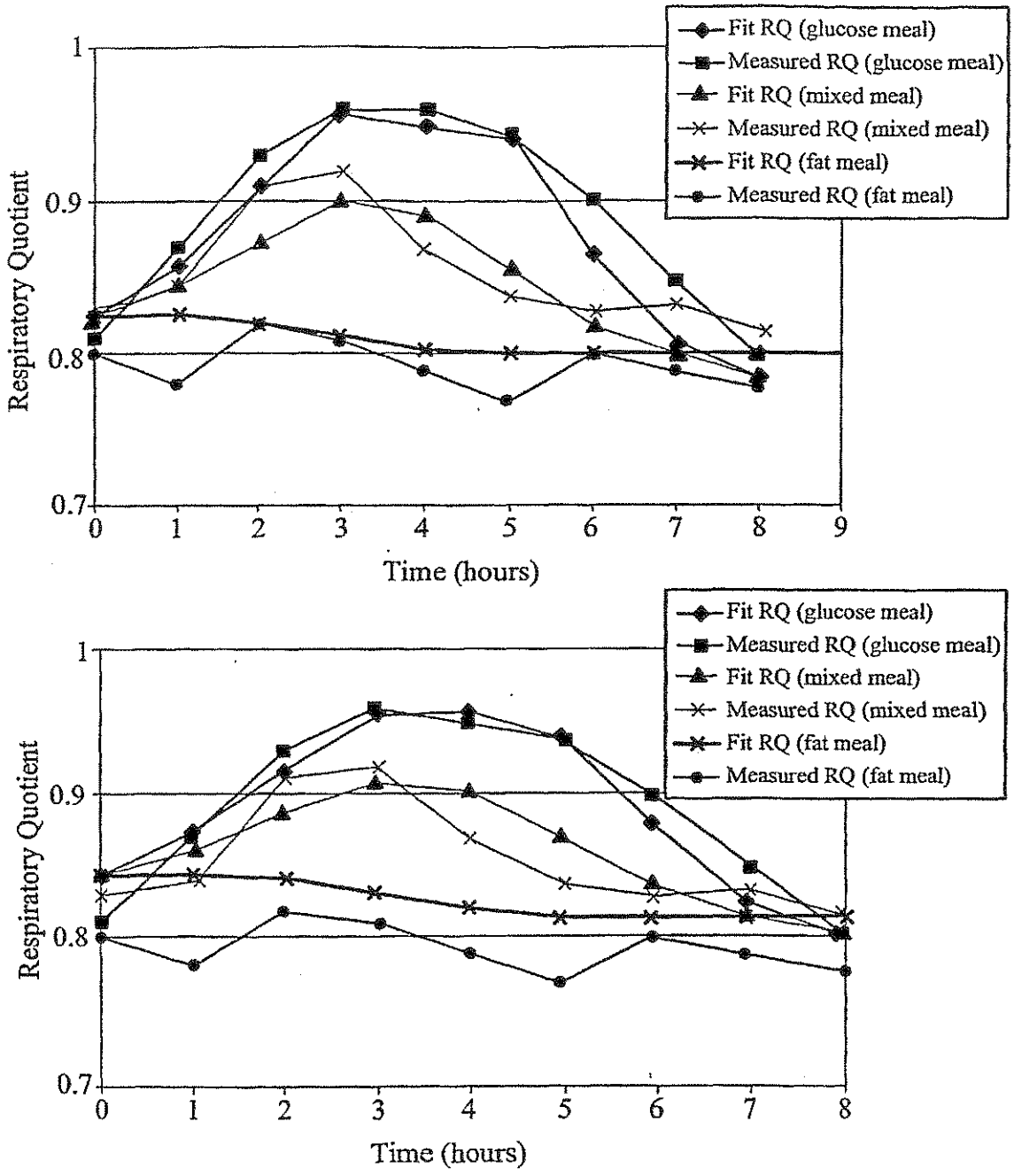

Fit RQ (glucose meal)
Measured RQ (glucose meal)
Fit RQ (mixed meal)
Measured RQ (mixed meal)
Fit RQ (fat meal)
Measured RQ (fat meal)
Respiratory Quotient
1
0.9
0.8
0.7
0 1 2 3 4 5 6 7 8 9
Time (hours)
Fit RQ (glucose meal)
Measured RQ (glucose meal)
Fit RQ (mixed meal)
Measured RQ (mixed meal)
Fit RQ (fat meal)
Measured RQ (fat meal)
Respiratory Quotient
1
0.9
0.8
0.7
0 1 2 3 4 5 6 7 8
Time (hours)

FIG. 7