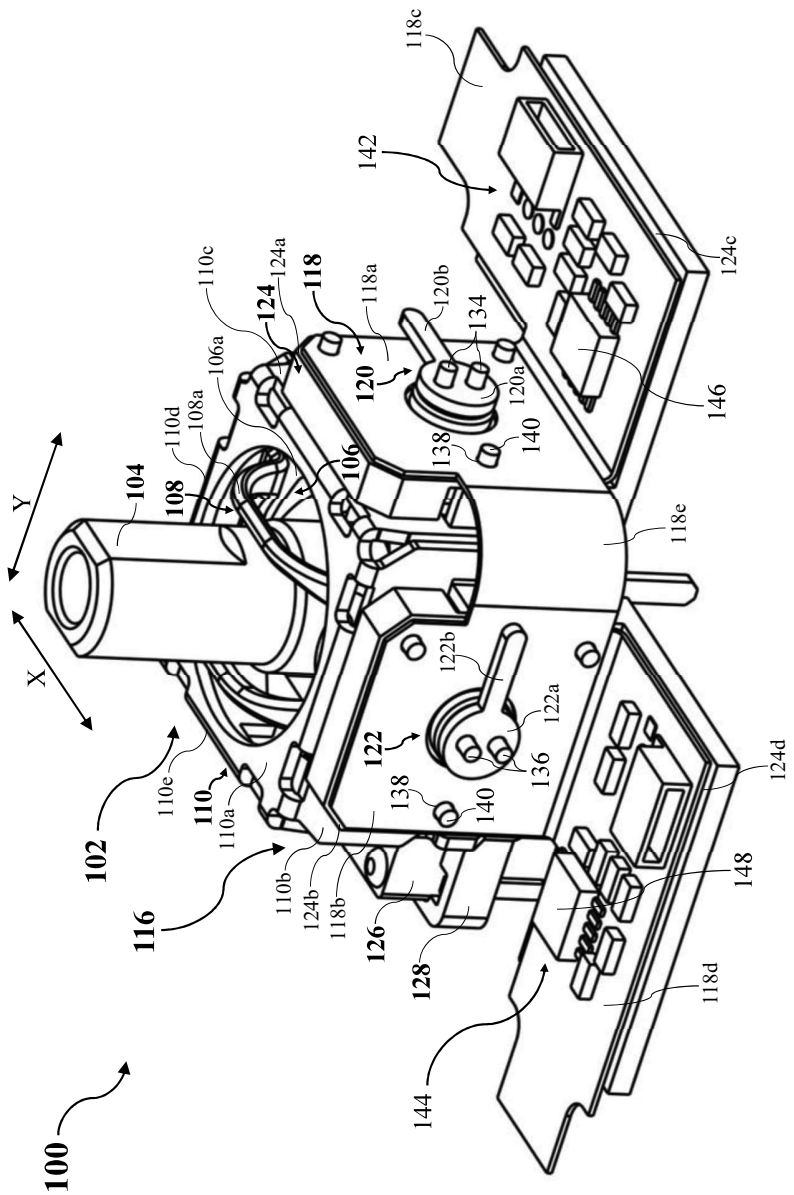

100
102
104
106
108
110
110a
110b
110c
110d
110e
116
118
118a
118b
118c
118d
118e
120
120a
120b
122
122a
122b
124
124a
124b
124c
124d
126
128
134
136
138
140
142
144
146
148
X
Y

FIG. 1A

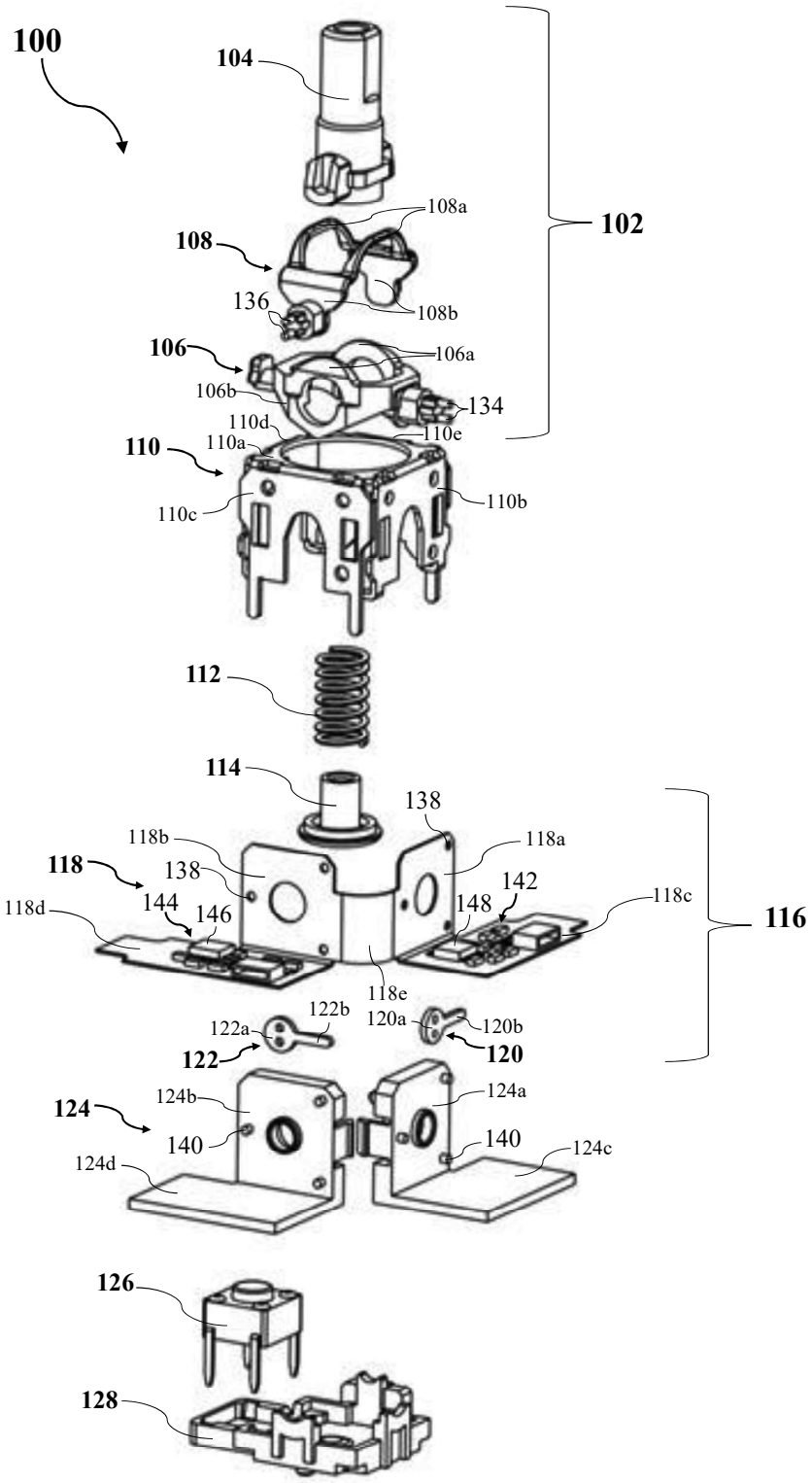

100
104
102
108a
108
136
108b
106
106a
106b
134
110d
110e
110a
110
110c
110b
112
114
138
118b
118a
118
138
142
144
146
148
118c
118d
116
118e
122b
120a
122a
120b
122
120
124b
124a
124
140
140
124c
124d
126
128

FIG. 1B

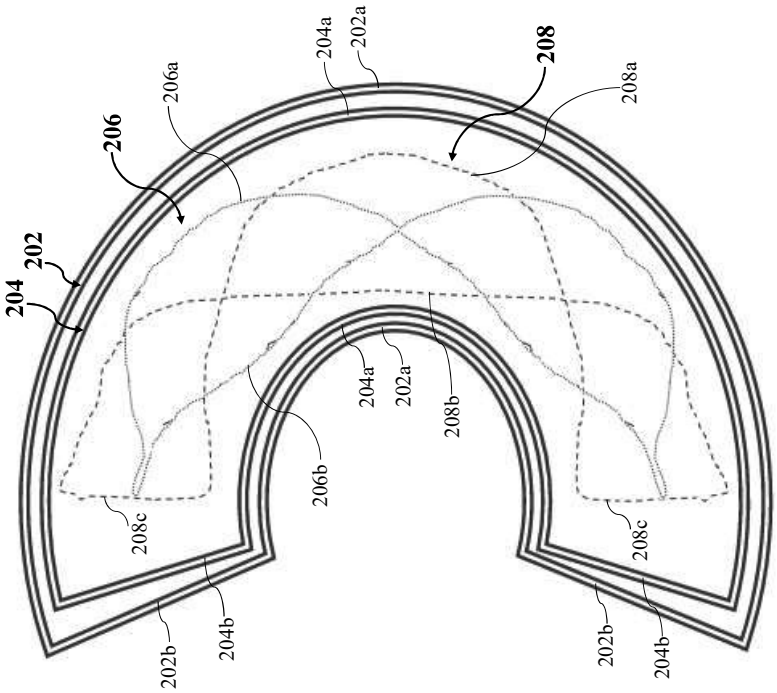

204
202
206
208
206a
204a
202a
208a
208c
206b
204a
202a
208b
208c
202b
204b
202b
204b

FIG. 2A

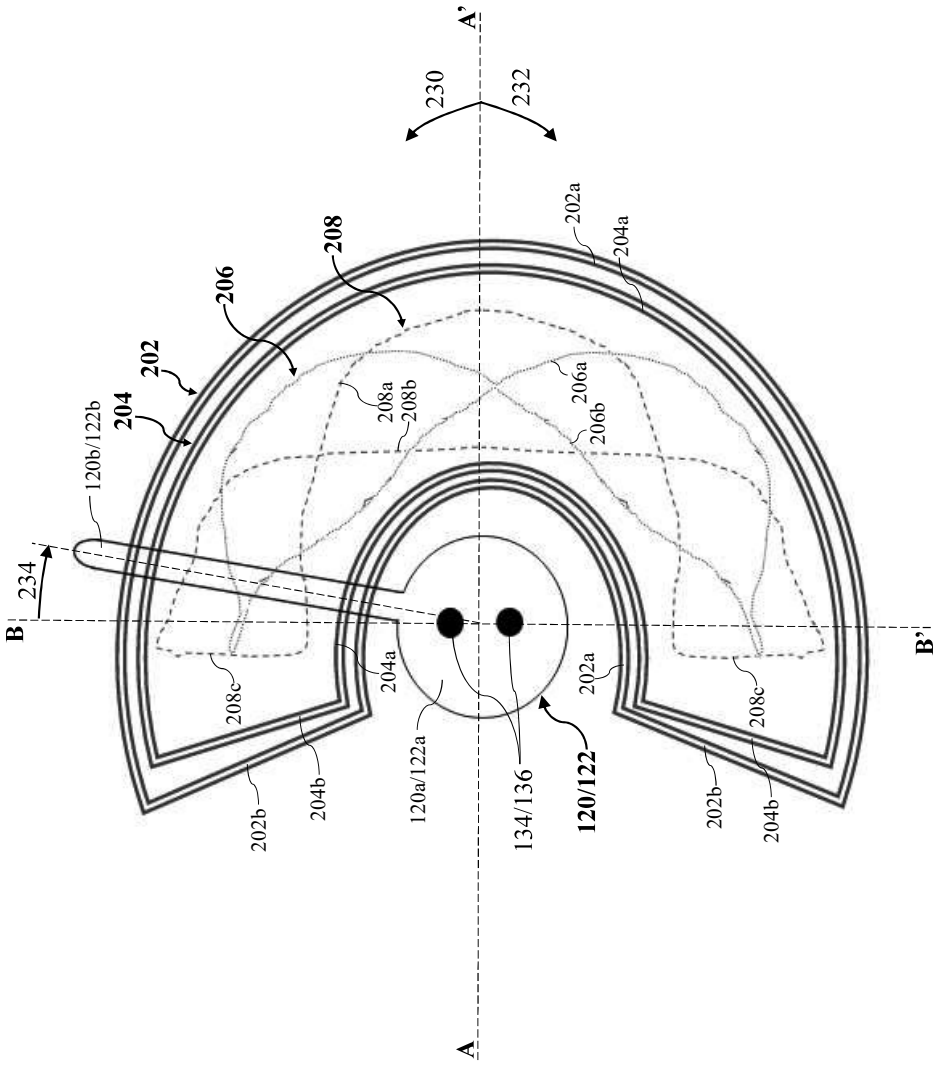

A'
230
232
202a
204a
208
206
202
204
120b/122b
208a
208b
206a
206b
234
B
B'
208c
204a
202a
208c
202b
204b
120a/122a
134/136
120/122
202b
204b
A

FIG. 2B

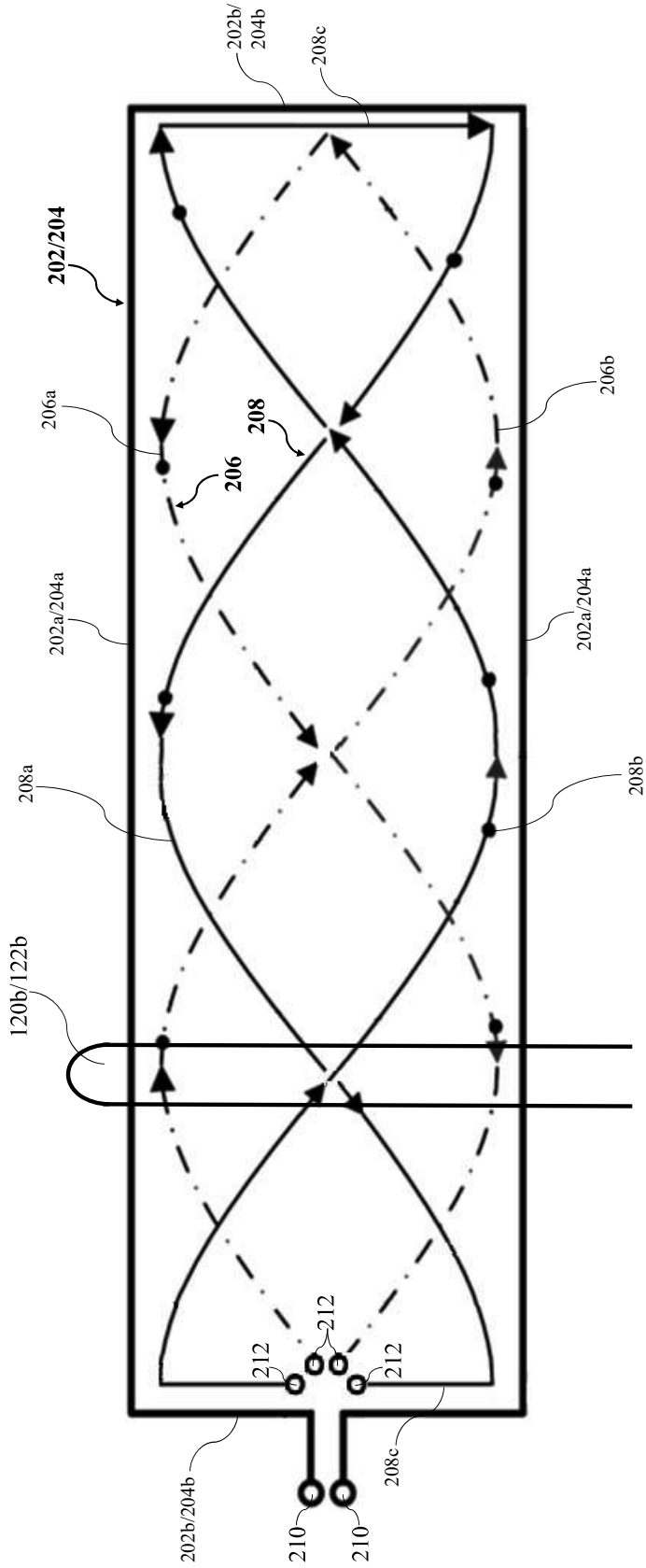

202b/
204b
208c
202/204
206a
208
206
206b
202a/204a
202a/204a
208a
208b
120b/122b
212
212
212
202b/204b
210
210
208c

FIG. 2C

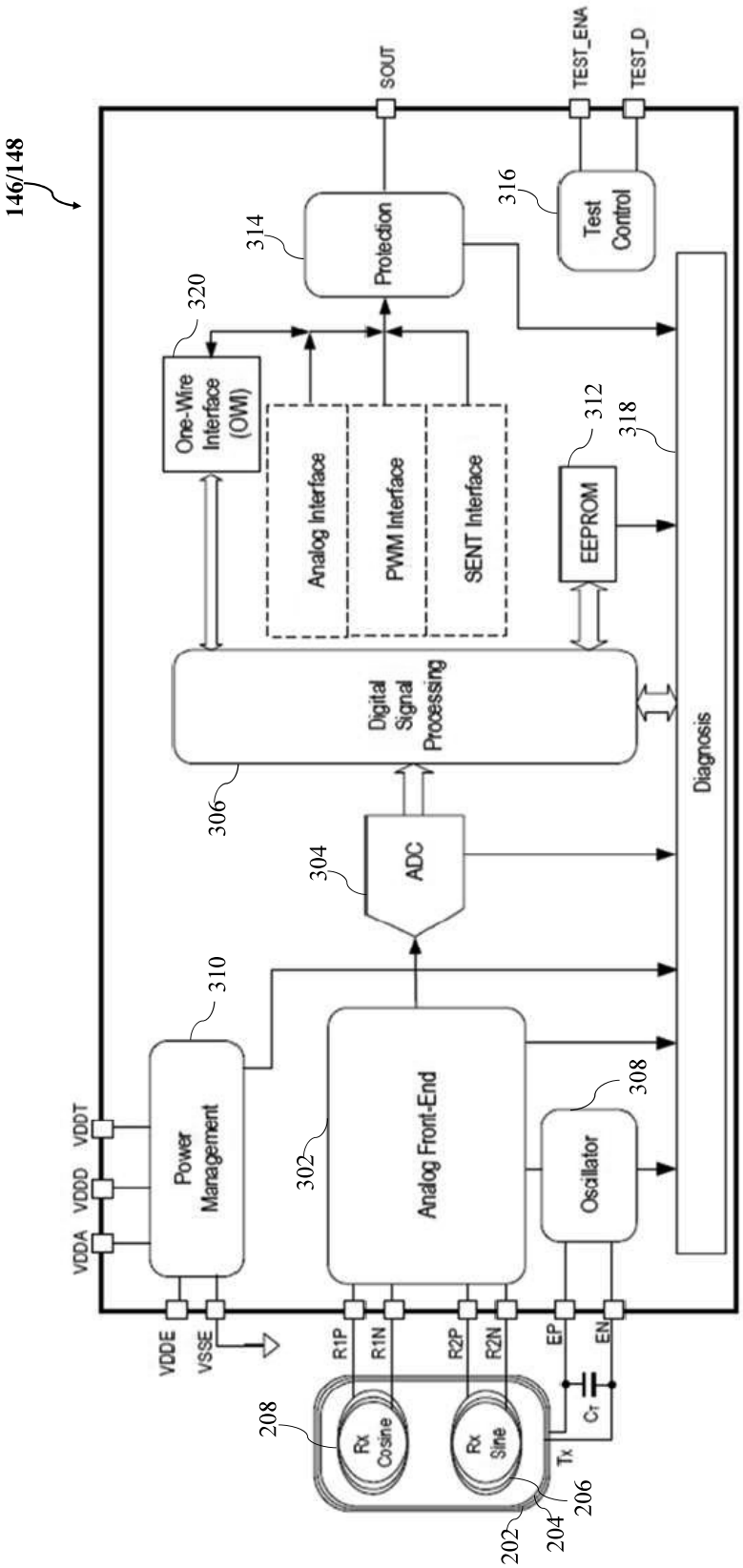

146/148
SOUT
TEST_ENA
TEST_D
314
Protection
316
Test Control
320
One-Wire Interface (OWI)
Analog Interface
PWM Interface
SENT Interface
312
318
EEPROM
Digital Signal Processing
306
304
ADC
Diagnosis
310
Power Management
302
Analog Front-End
308
Oscillator
VDDA
VDDD
VDDT
VDDE
VSSE
R1P
R1N
R2P
R2N
EP
EN
208
Rx Cosine
Rx Sine
Tx
C_T
206
202
204

FIG. 3

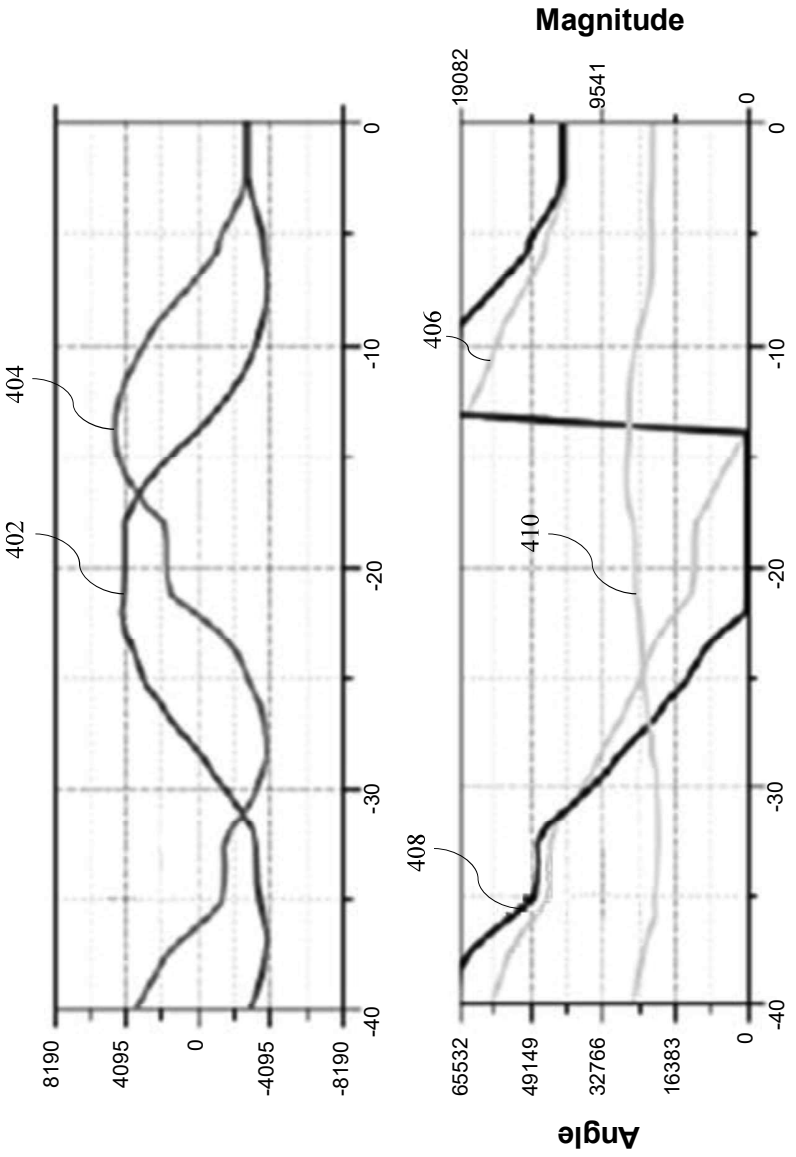

Magnitude
19082
9541
0
0
-10
-20
-30
-40
406
410
408
65532
49149
32766
16383
0
Angle
404
402
8190
4095
0
-4095
-8190

FIG. 4

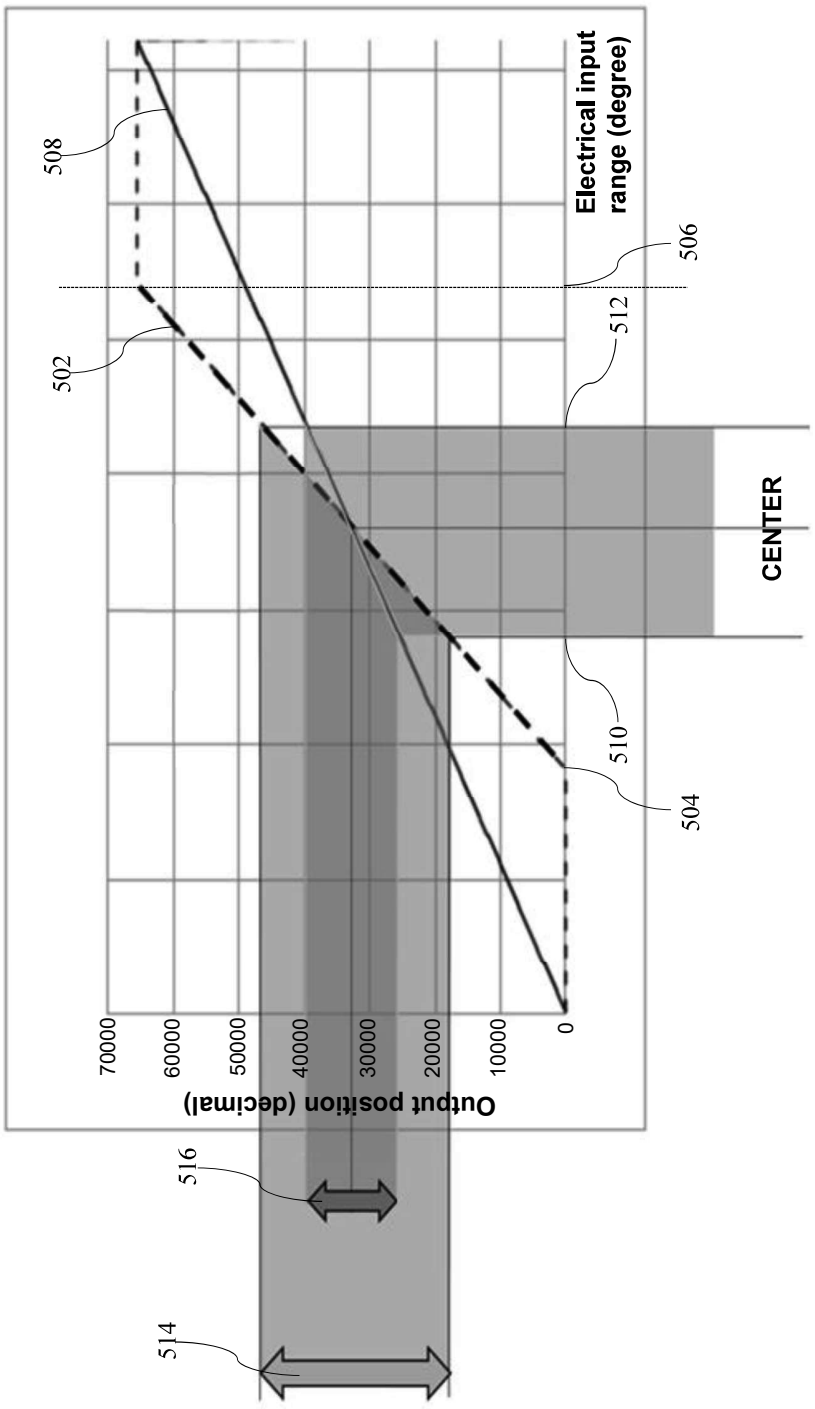

Electrical input range (degree)
CENTER
Output position (decimal)
70000
60000
50000
40000
30000
20000
10000
0
502
504
506
508
510
512
514
516

FIG. 5