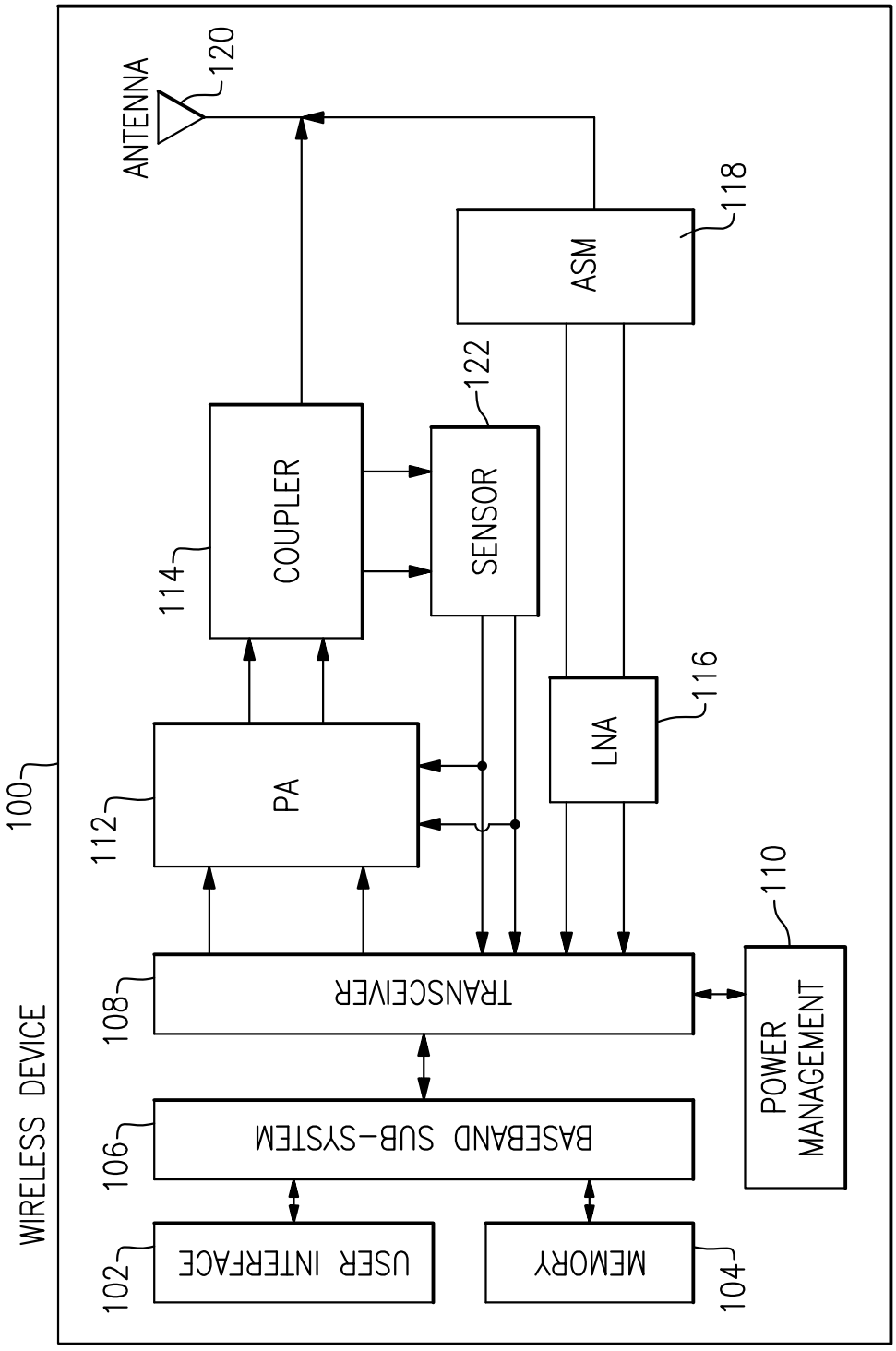

WIRELESS DEVICE
100
ANTENNA
120
ASM
118
COUPLER
114
SENSOR
122
PA
112
LNA
116
TRANSCEIVER
108
POWER MANAGEMENT
110
BASEBAND SUB-SYSTEM
106
USER INTERFACE
102
MEMORY
104

FIG.1

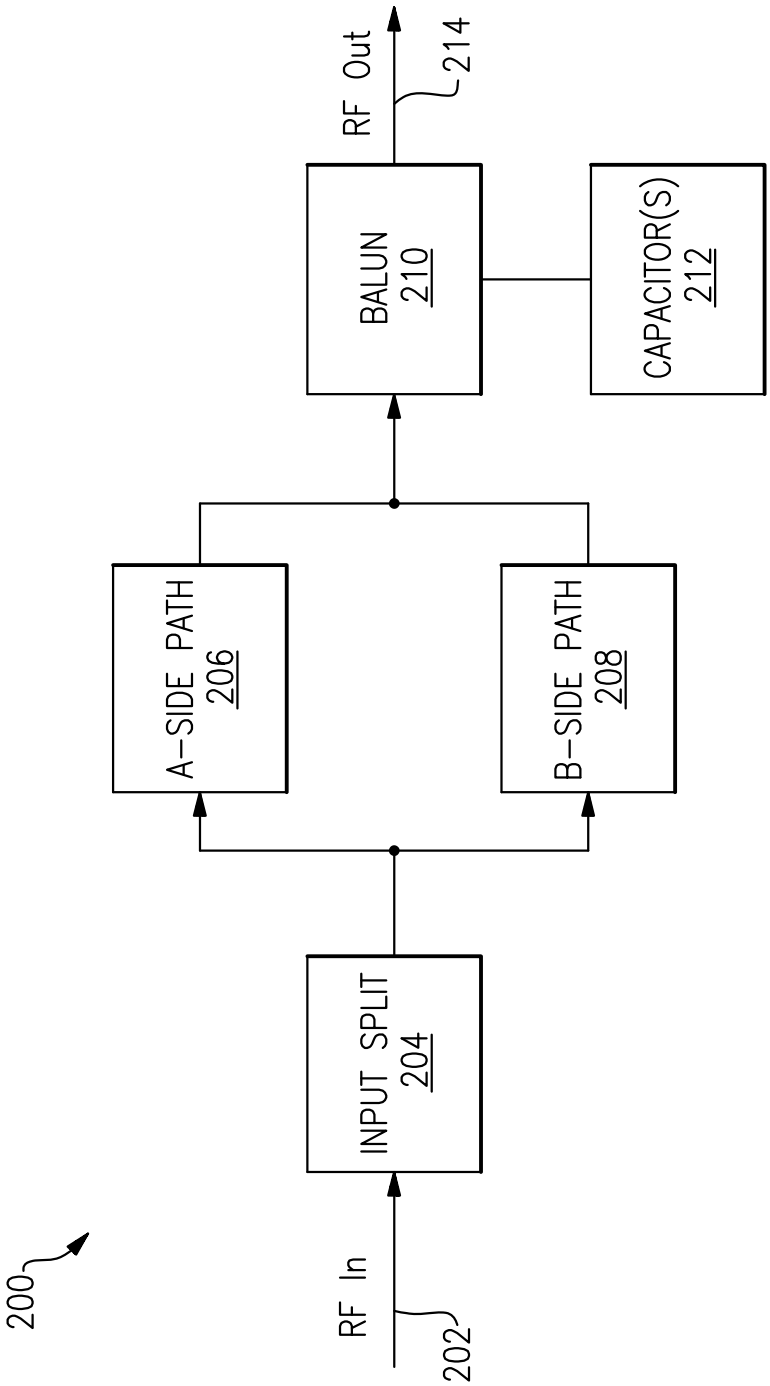

200
RF In
202
INPUT SPLIT
204
A-SIDE PATH
206
B-SIDE PATH
208
BALUN
210
CAPACITOR(S)
212
RF Out
214

FIG.2

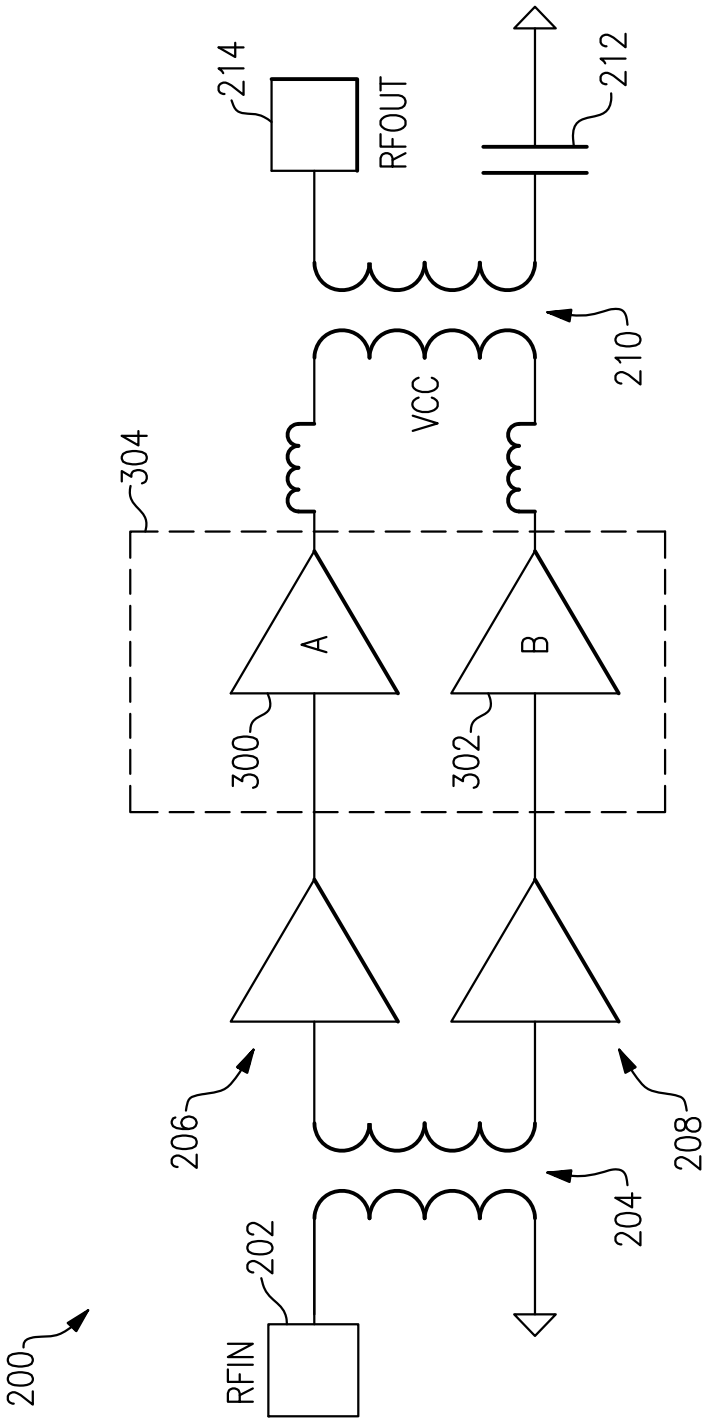


FIG.3

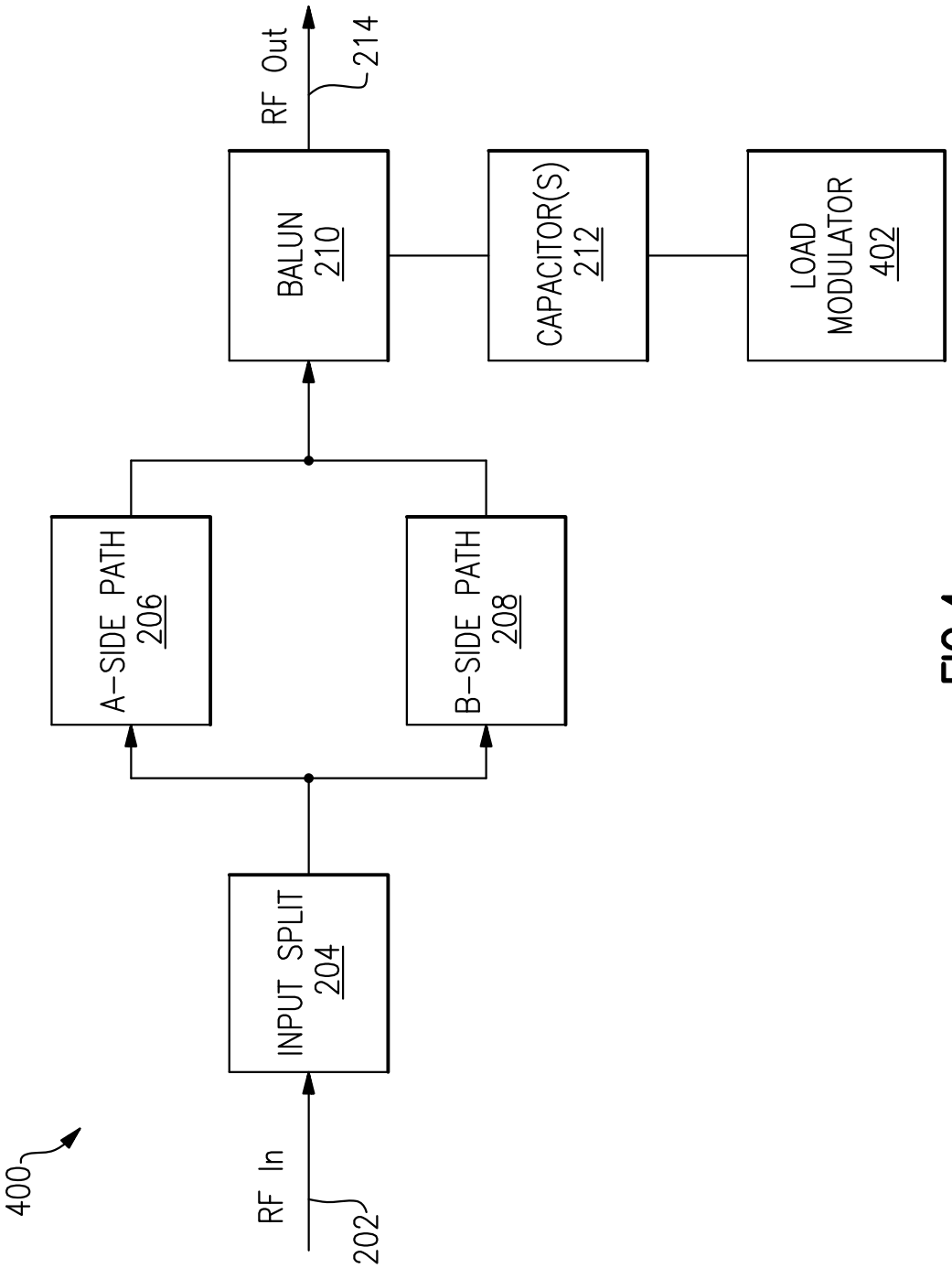

400
RF In
202
INPUT SPLIT
204
A-SIDE PATH
206
B-SIDE PATH
208
BALUN
210
CAPACITOR(S)
212
RF Out
214
LOAD
MODULATOR
402

FIG.4

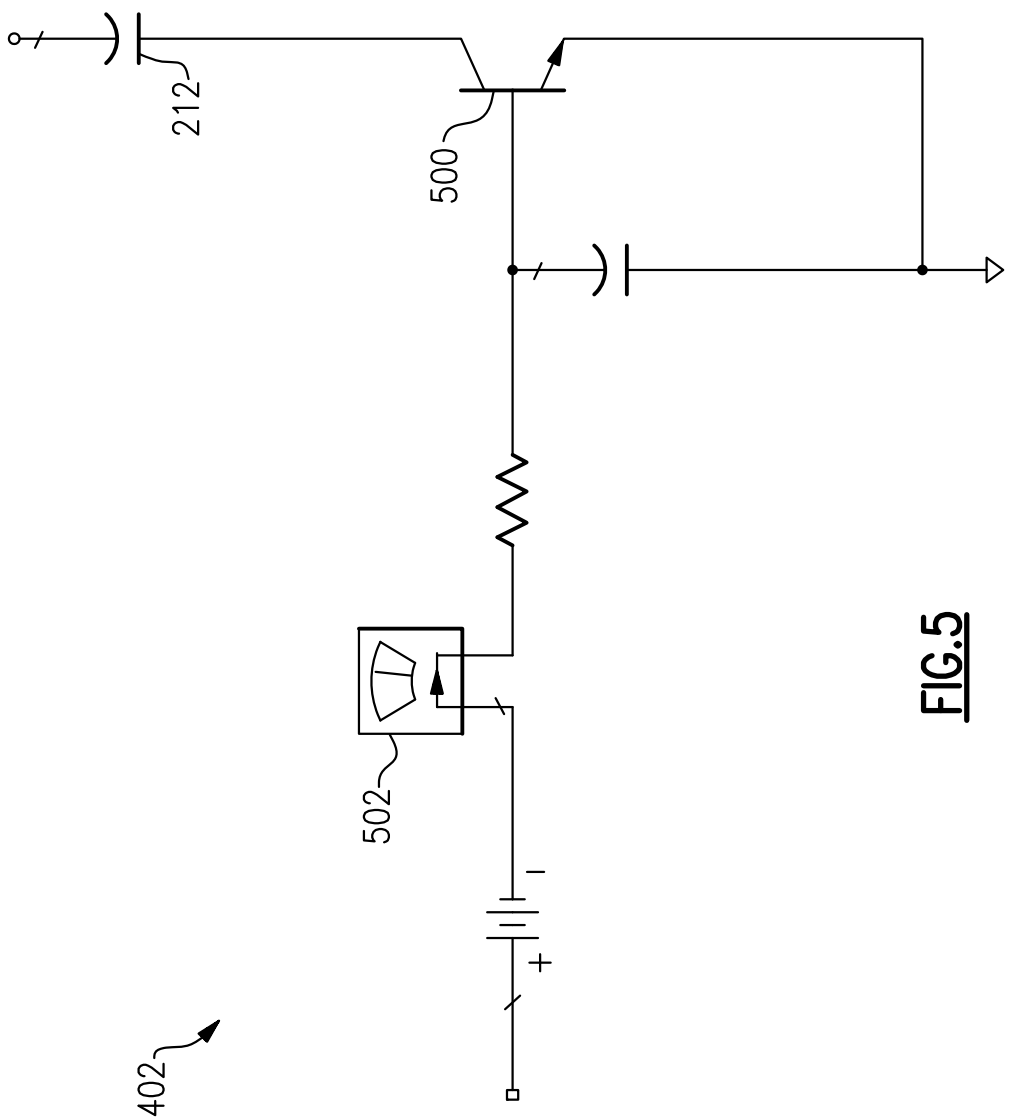


FIG.5

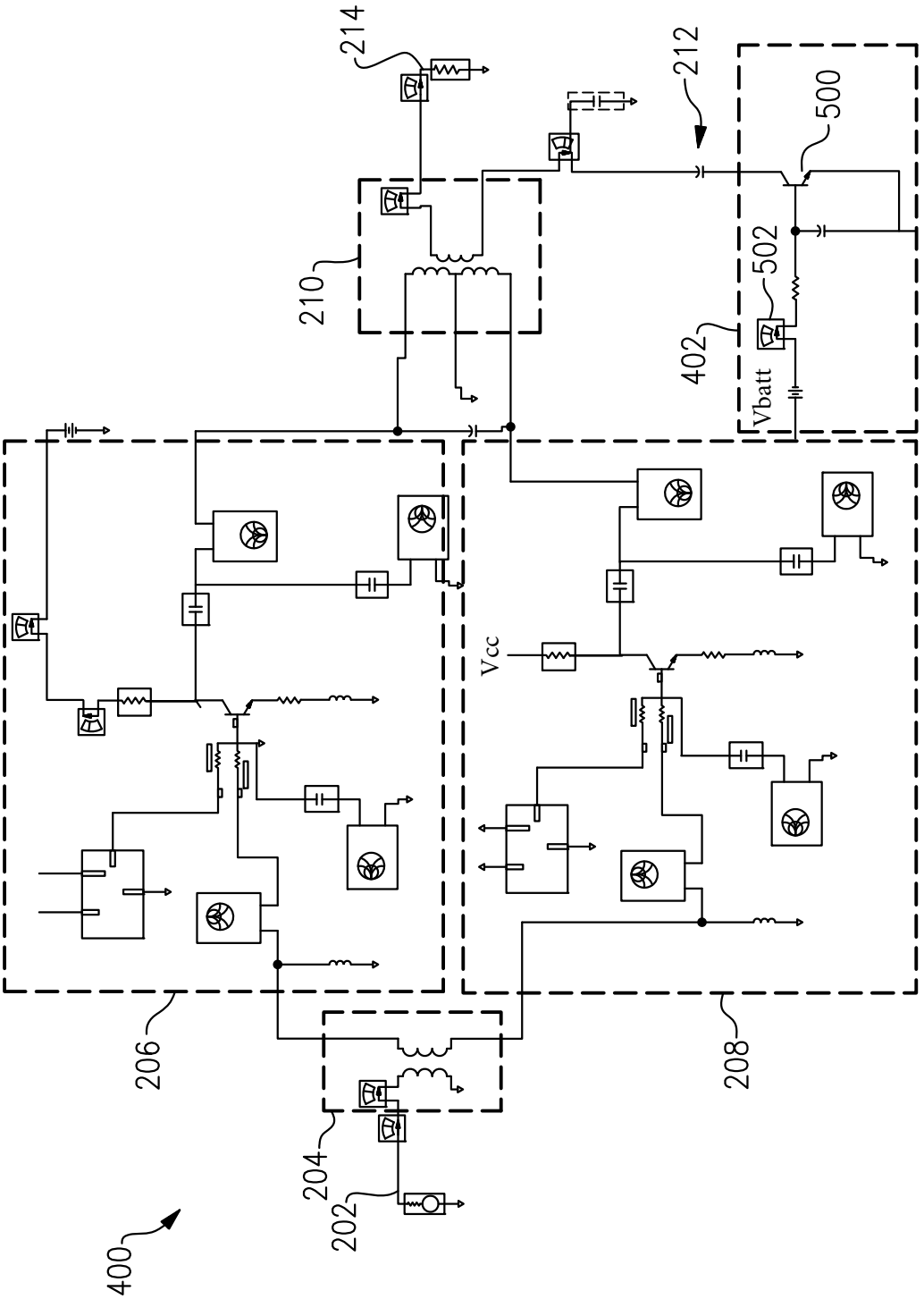


FIG.6

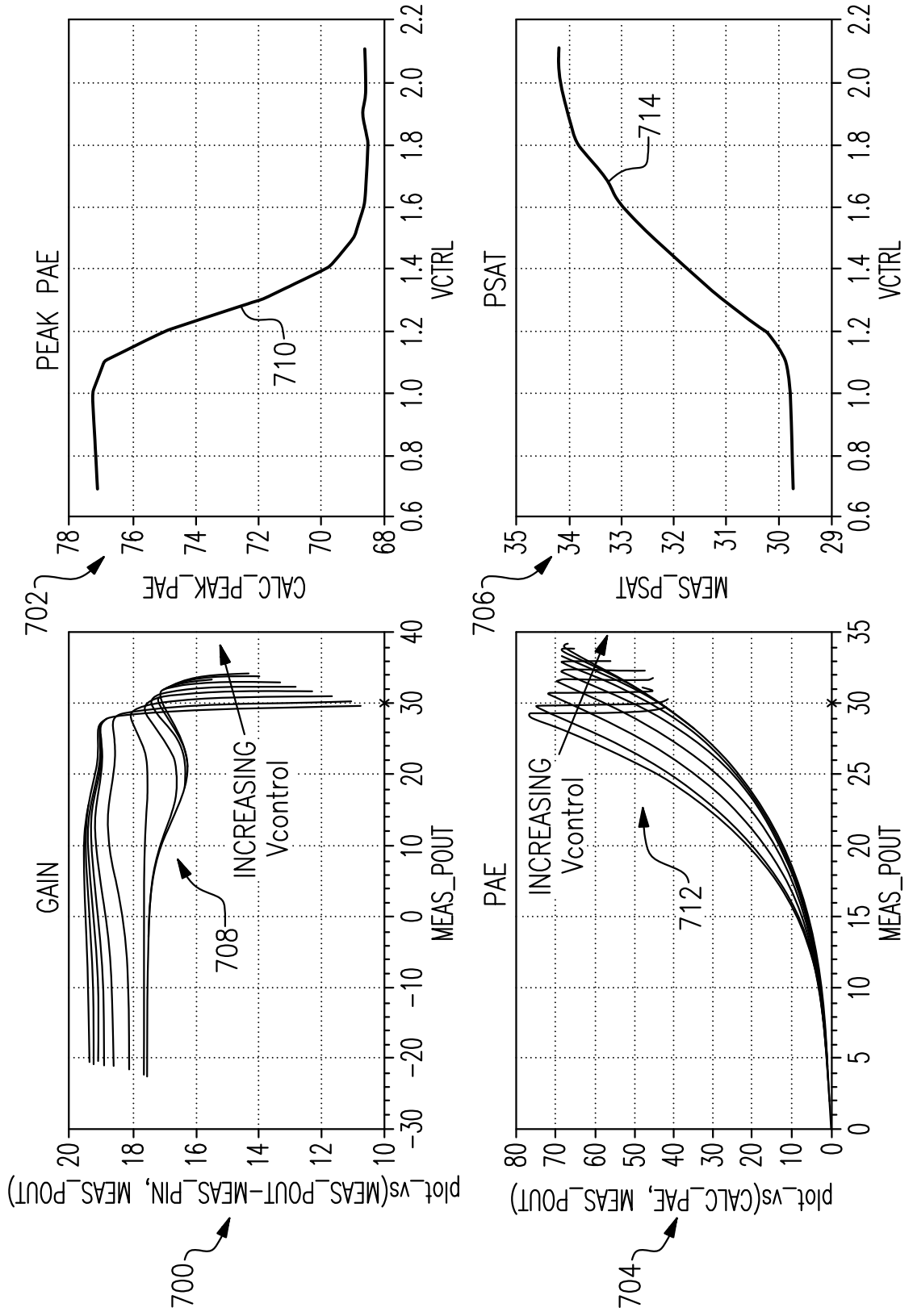

700
plot_vs(MEAS_POUT-MEAS_PIN, MEAS_POUT)
GAIN
INCREASING
Vcontrol
708
MEAS_POUT
702
CALC_PEAK_PAE
PEAK PAE
710
VCTRL
704
plot_vs(CALC_PAE, MEAS_POUT)
PAE
INCREASING
Vcontrol
712
MEAS_POUT
706
MEAS_PSAT
PSAT
714
VCTRL

FIG.7

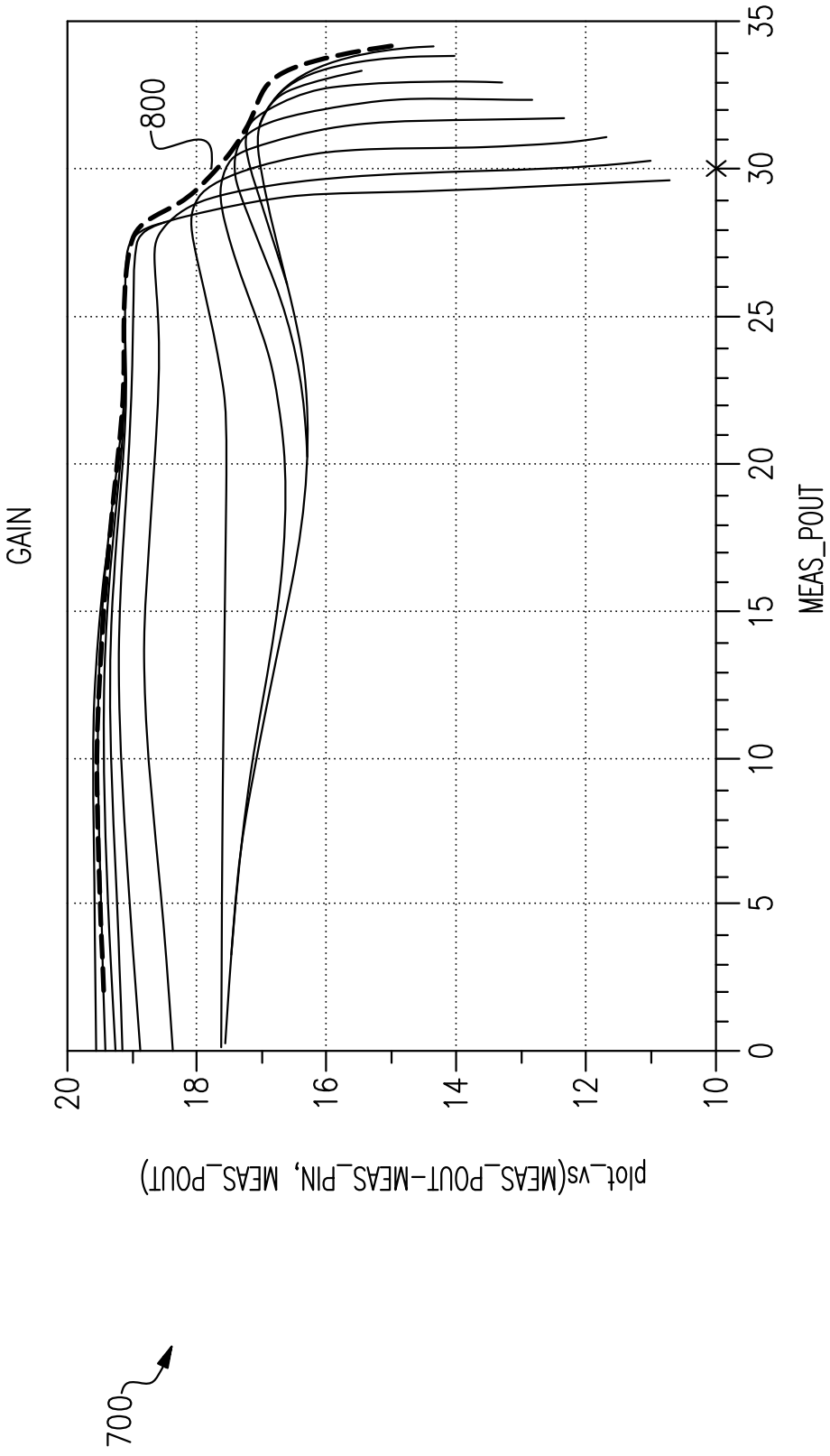

700
plot_vs(MEAS_POUT-MEAS_PIN, MEAS_POUT)
GAIN
MEAS_POUT
800
20
18
16
14
12
10
0
5
10
15
20
25
30
35

FIG.8

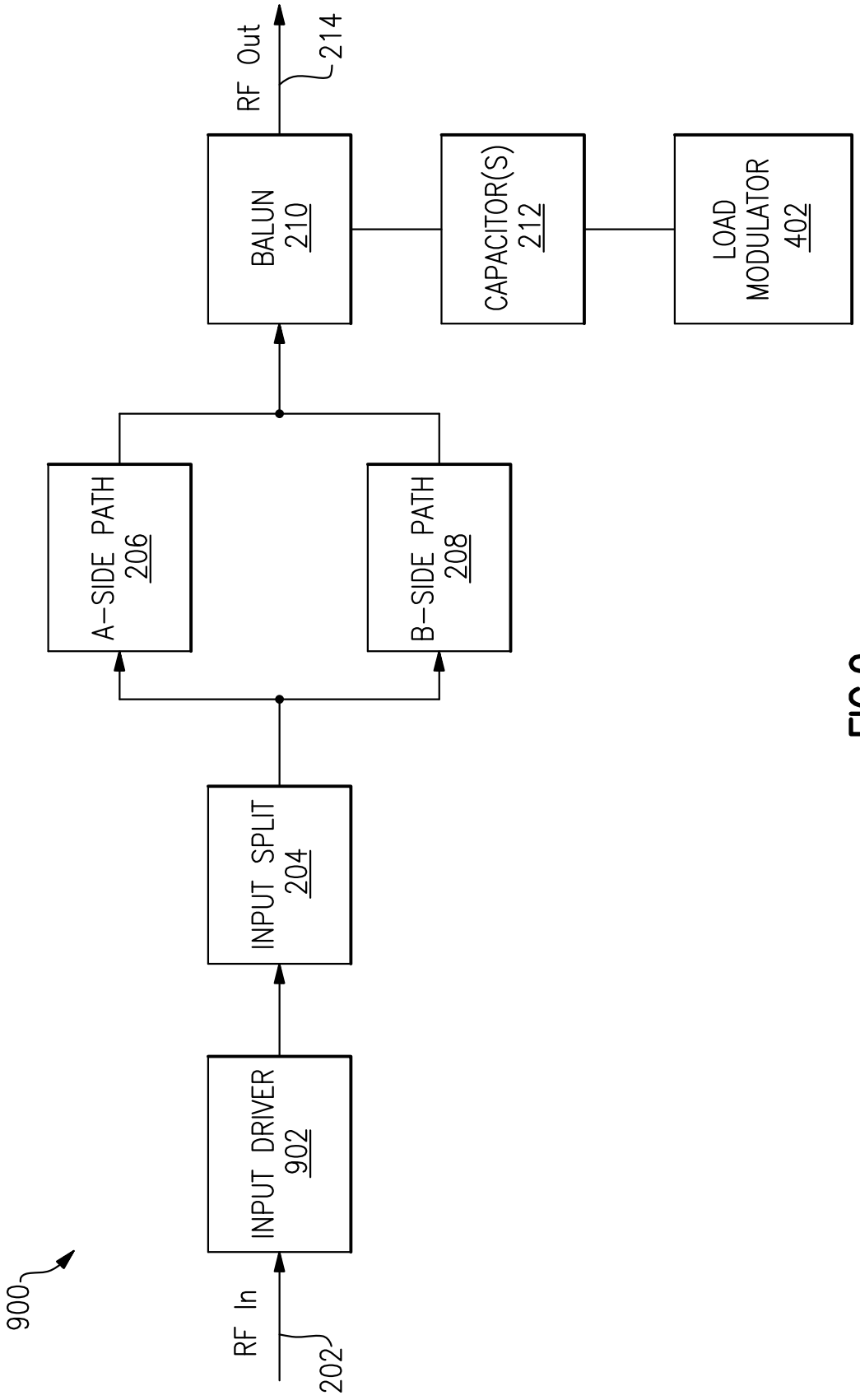

900
RF In
202
INPUT DRIVER
902
INPUT SPLIT
204
A-SIDE PATH
206
B-SIDE PATH
208
BALUN
210
CAPACITOR(S)
212
LOAD
MODULATOR
402
RF Out
214

FIG.9

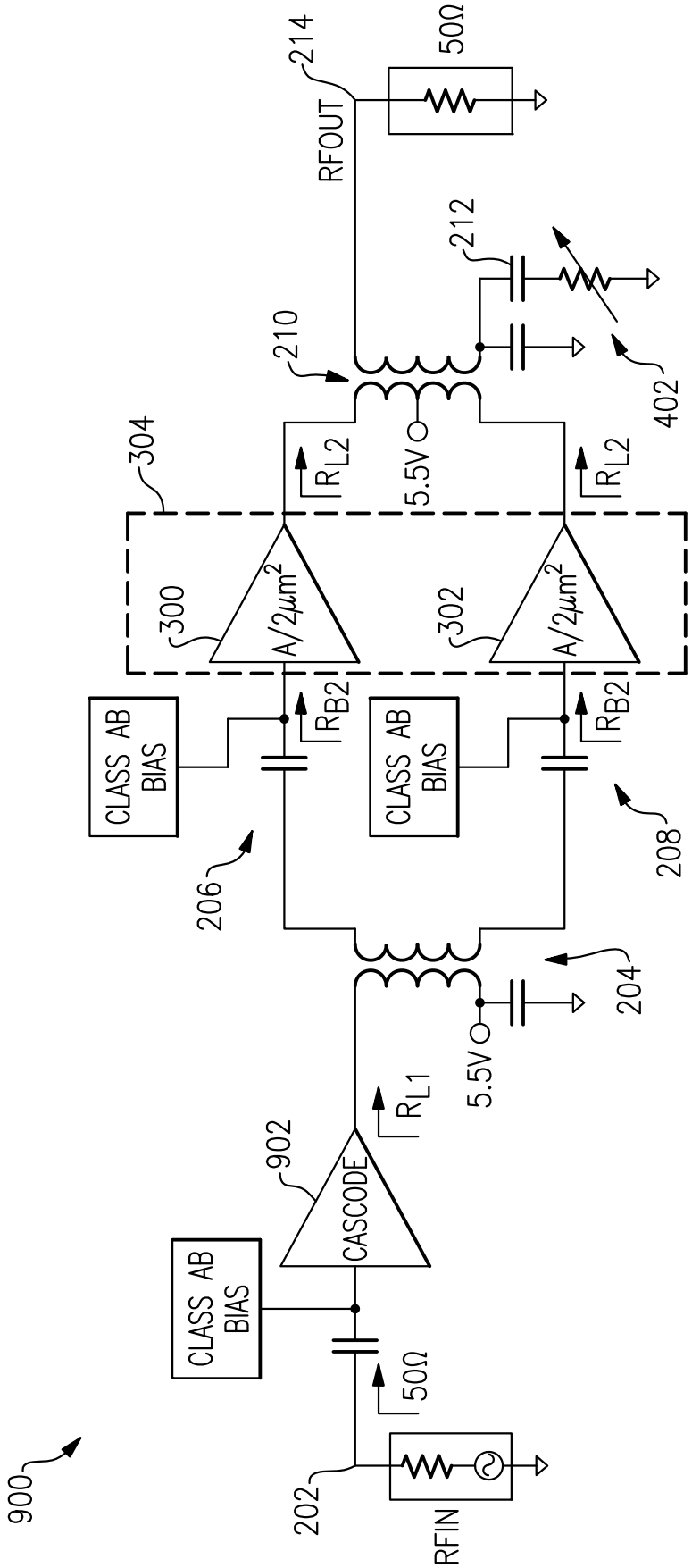

900
202
RFIN
50Ω
CLASS AB BIAS
CASCODE
902
R_{L1}
5.5V
204
206
208
CLASS AB BIAS
CLASS AB BIAS
R_{B2}
R_{B2}
300
$A/2\mu m^2$
302
$A/2\mu m^2$
304
R_{L2}
R_{L2}
5.5V
210
212
402
214
RFOUT
50Ω

FIG.10

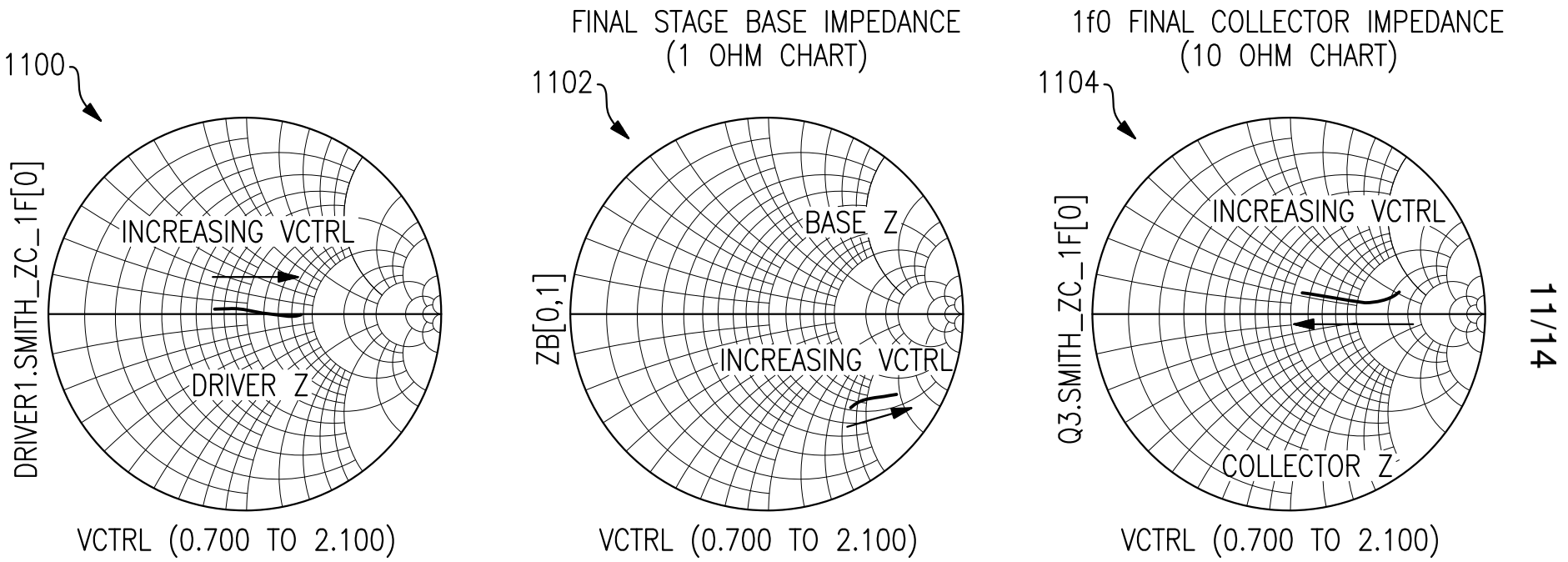

1100
DRIVER1.SMITH_ZC_1F[0]
INCREASING VCTRL
DRIVER Z
VCTRL (0.700 TO 2.100)
FINAL STAGE BASE IMPEDANCE
(1 OHM CHART)
1102
ZB[0,1]
BASE Z
INCREASING VCTRL
VCTRL (0.700 TO 2.100)
1f0 FINAL COLLECTOR IMPEDANCE
(10 OHM CHART)
1104
Q3.SMITH_ZC_1F[0]
INCREASING VCTRL
COLLECTOR Z
VCTRL (0.700 TO 2.100)

FIG.11

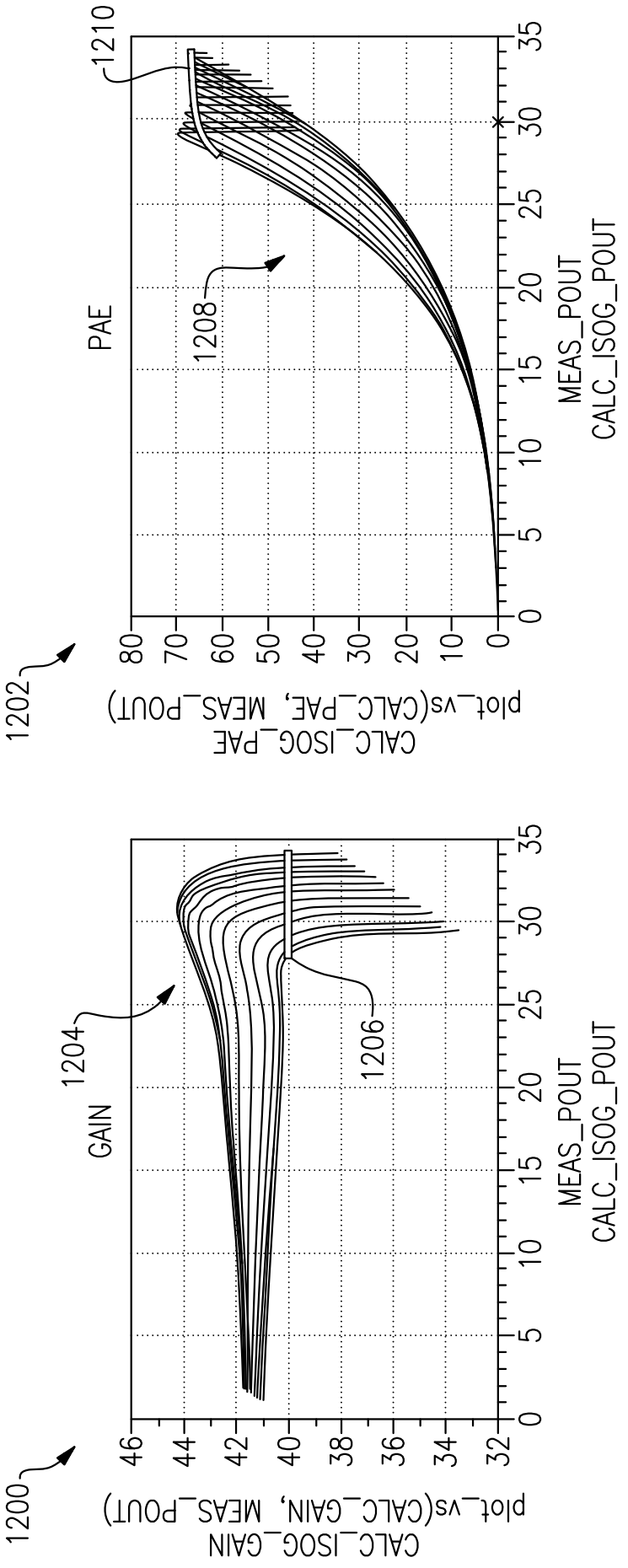

1200
plot_vs(CALC_GAIN, MEAS_POUT)
CALC_ISOG_GAIN
GAIN
1204
1206
MEAS_POUT
CALC_ISOG_POUT
1202
plot_vs(CALC_PAE, MEAS_POUT)
CALC_ISOG_PAE
PAE
1208
1210
MEAS_POUT
CALC_ISOG_POUT

FIG.12

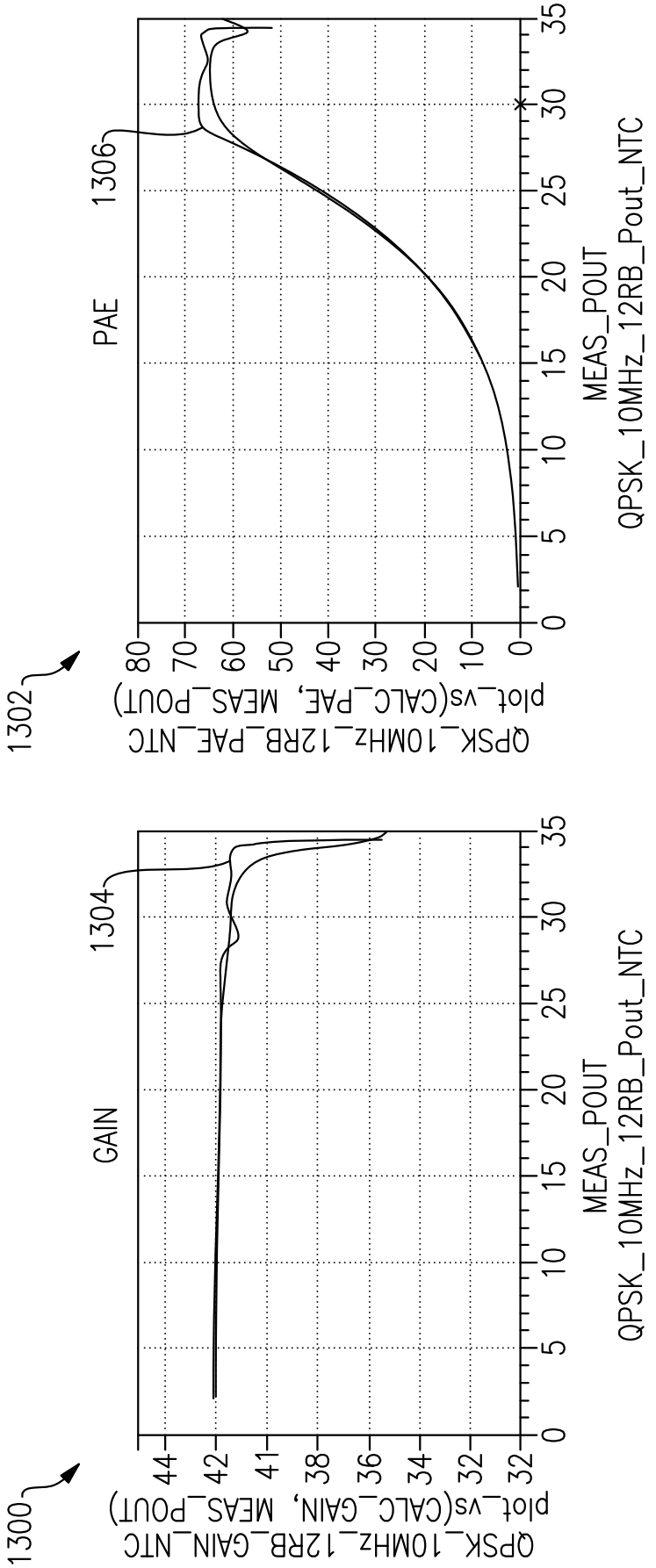

1300
QPSK_10MHz_12RB_GAIN_NTC
plot_vs(CALC_GAIN, MEAS_POUT)
GAIN
1304
MEAS_POUT
QPSK_10MHz_12RB_Pout_NTC
1302
QPSK_10MHz_12RB_PAE_NTC
plot_vs(CALC_PAE, MEAS_POUT)
PAE
1306
MEAS_POUT
QPSK_10MHz_12RB_Pout_NTC

FIG.13

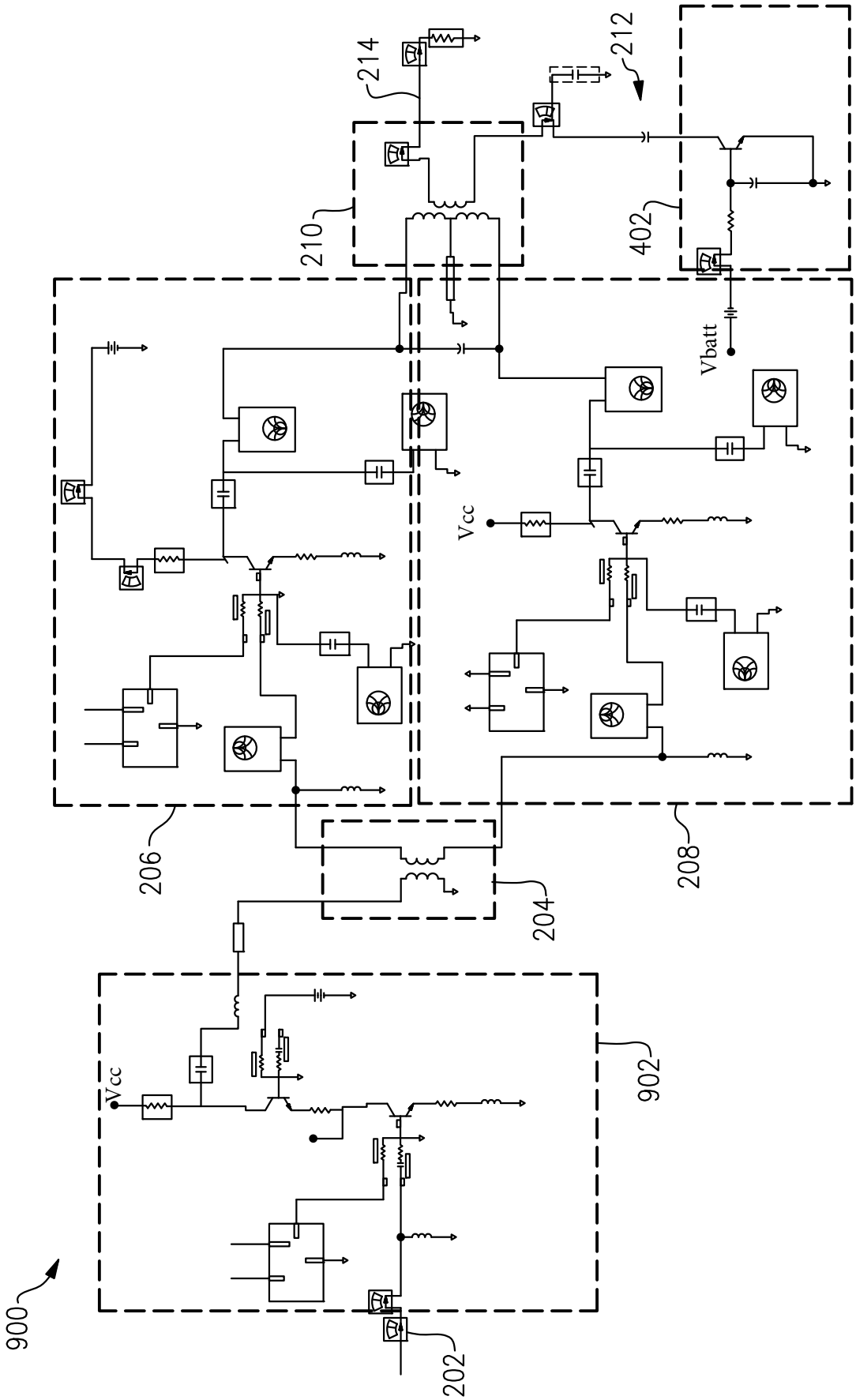


FIG.14