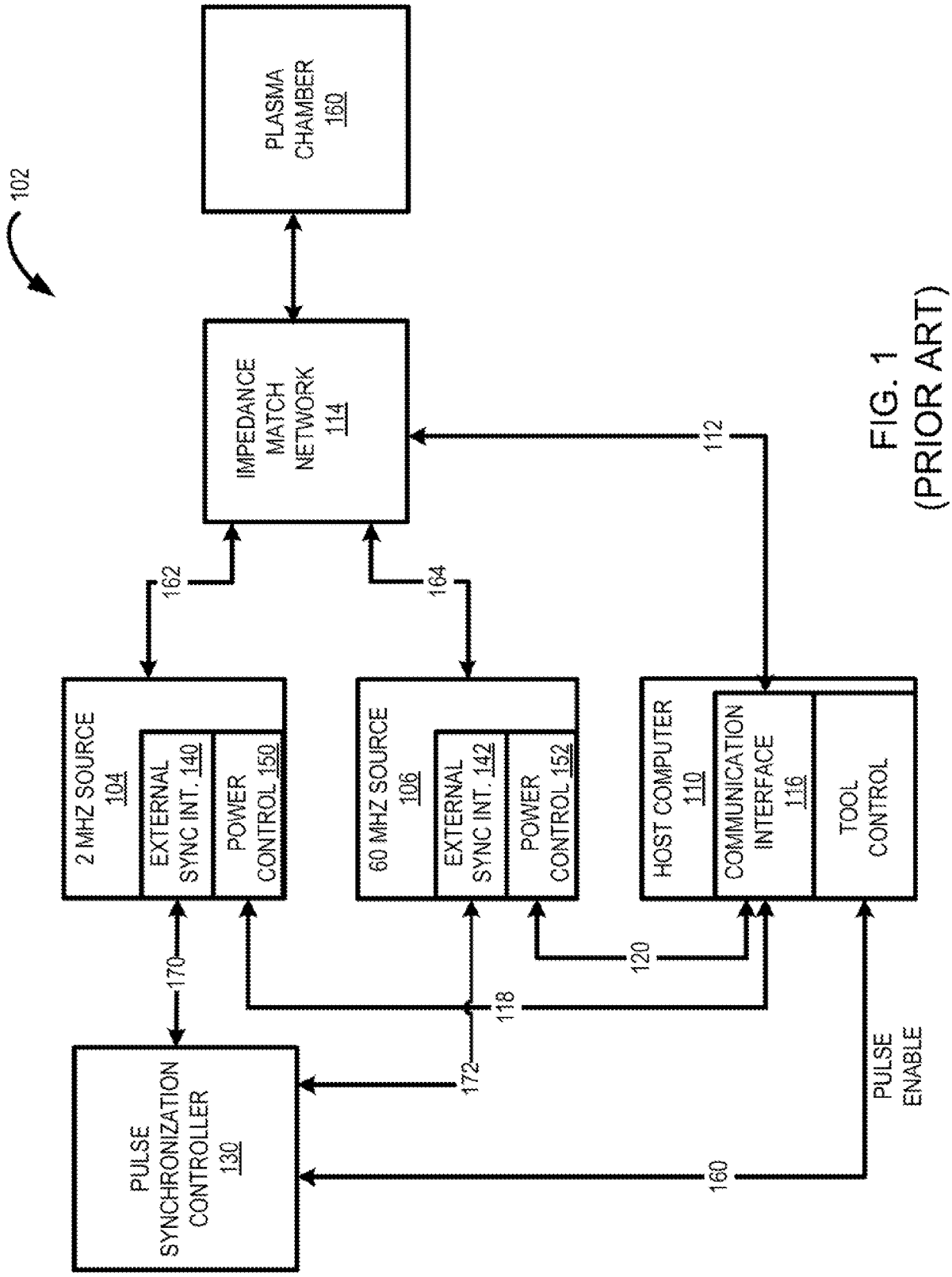


FIG. 1
(PRIOR ART)

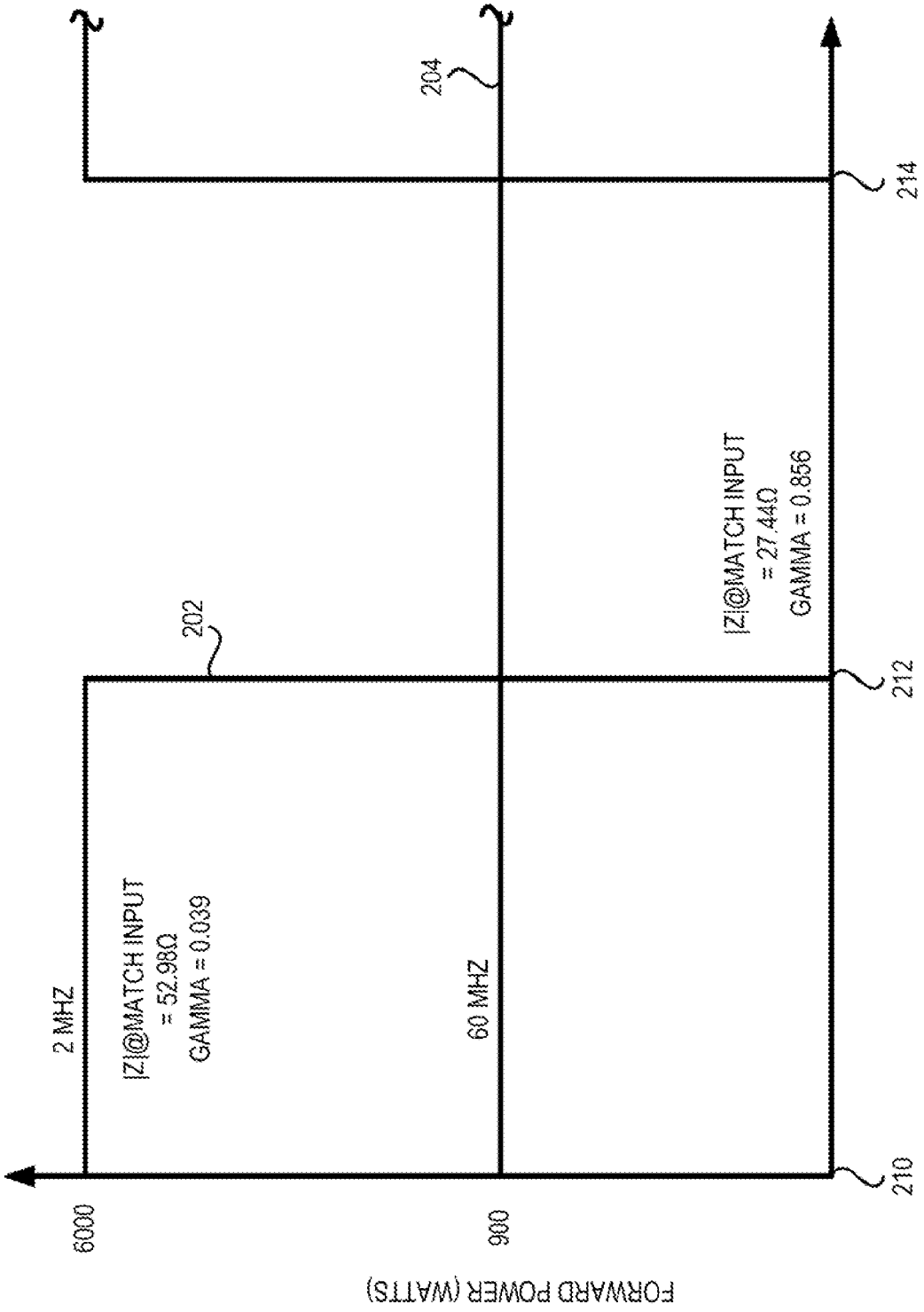

FORWARD POWER (WATTS)
6000
900
TIME
210
212
214
202
204
2 MHZ
60 MHZ
|Z|@MATCH INPUT
= 52.98Ω
GAMMA = 0.039
|Z|@MATCH INPUT
= 27.44Ω
GAMMA = 0.856

FIG. 2

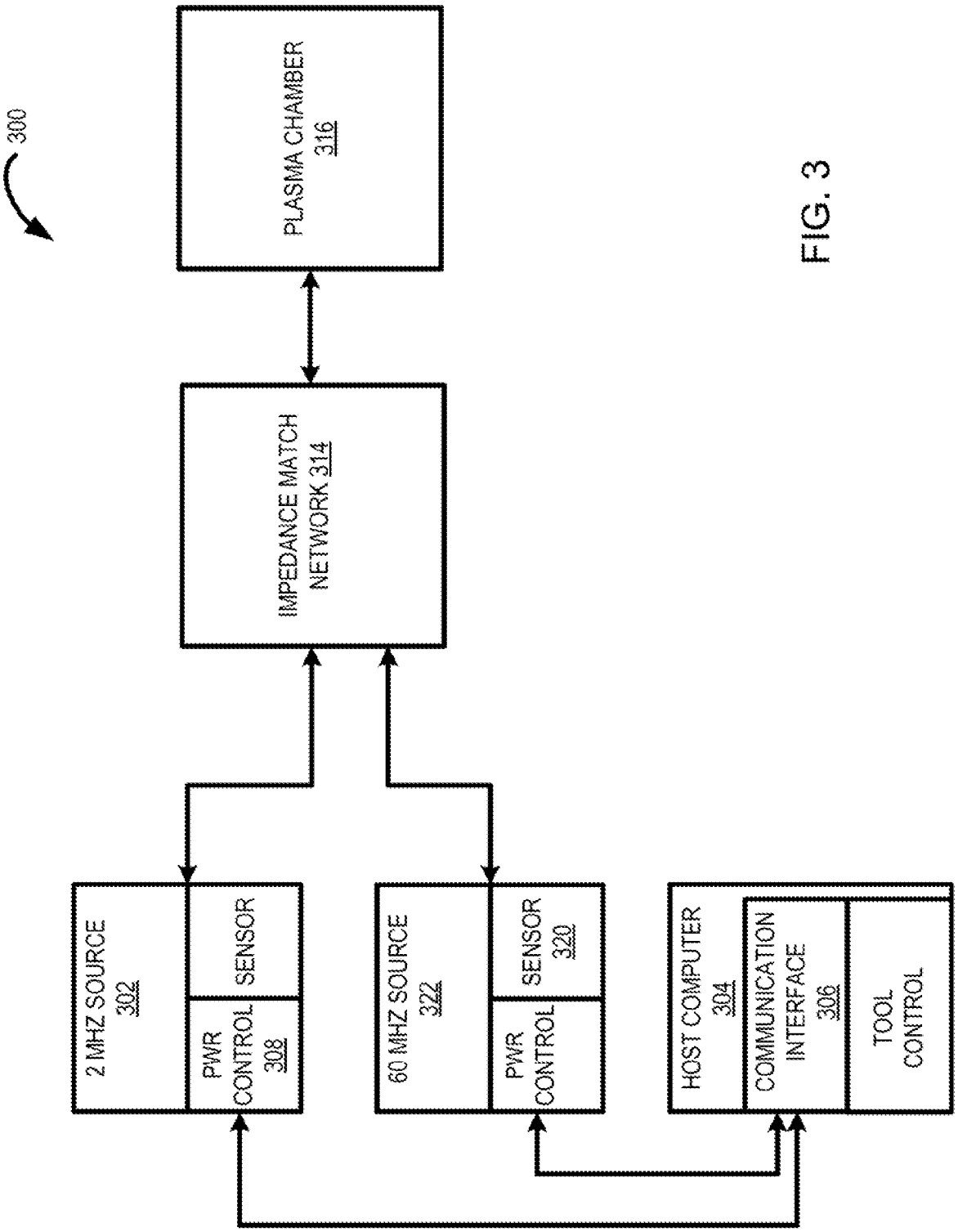

300
PLASMA CHAMBER 316
IMPEDANCE MATCH NETWORK 314
2 MHZ SOURCE 302
PWR CONTROL 308
SENSOR
60 MHZ SOURCE 322
PWR CONTROL
SENSOR 320
HOST COMPUTER 304
COMMUNICATION INTERFACE 306
TOOL CONTROL

FIG. 3

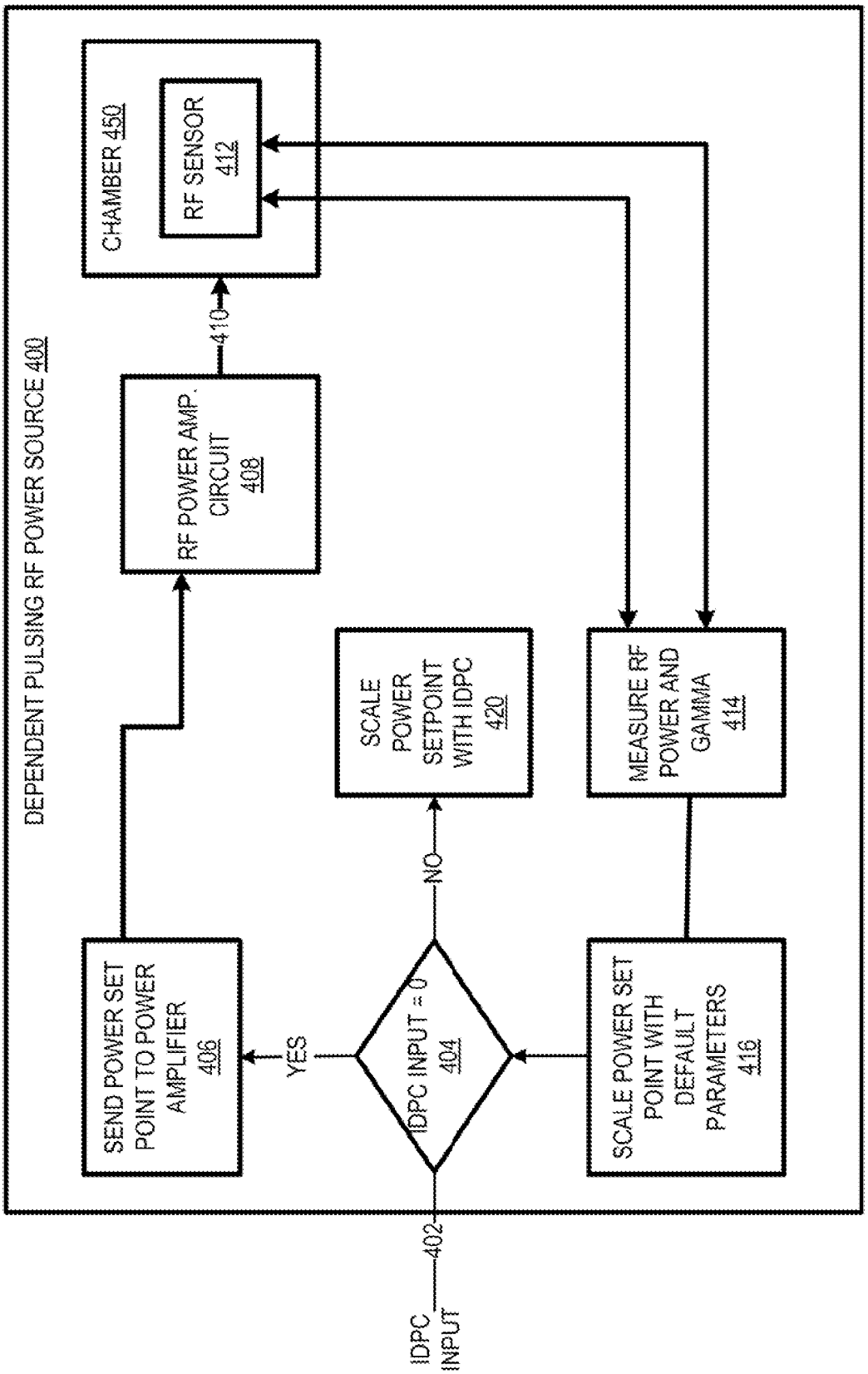

DEPENDENT PULSING RF POWER SOURCE 400
CHAMBER 450
RF SENSOR 412
410
RF POWER AMP. CIRCUIT 408
SCALE POWER SETPOINT WITH IDPC 420
MEASURE RF POWER AND GAMMA 414
SEND POWER SET POINT TO POWER AMPLIFIER 406
YES
IDPC INPUT = 0 404
NO
SCALE POWER SET POINT WITH DEFAULT PARAMETERS 416
IDPC INPUT
402

FIG. 4