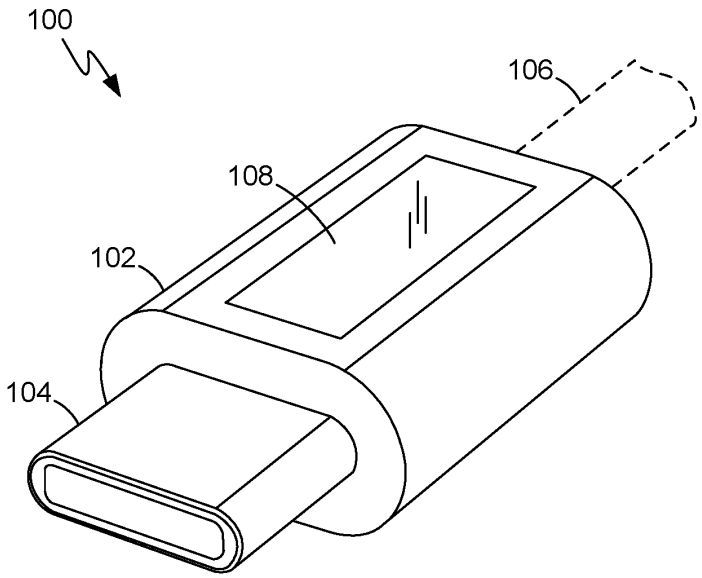


FIG. 1

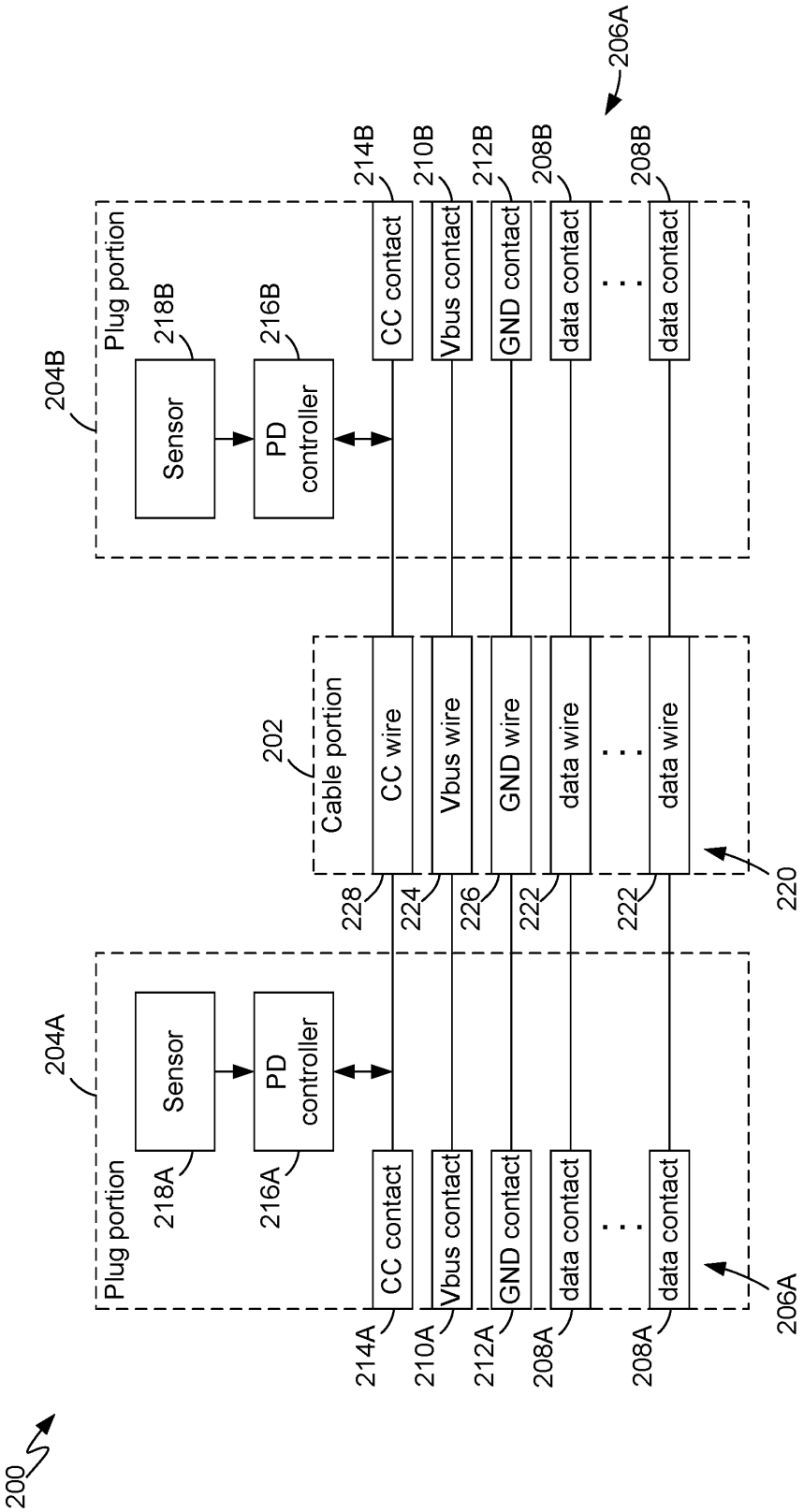

200
204A
Plug portion
Sensor
218A
PD controller
216A
CC contact
Vbus contact
GND contact
data contact
data contact
214A
210A
212A
208A
208A
206A
202
Cable portion
CC wire
Vbus wire
GND wire
data wire
data wire
228
224
226
222
222
220
204B
Plug portion
Sensor
218B
PD controller
216B
CC contact
Vbus contact
GND contact
data contact
data contact
214B
210B
212B
208B
208B
206A

FIG. 2

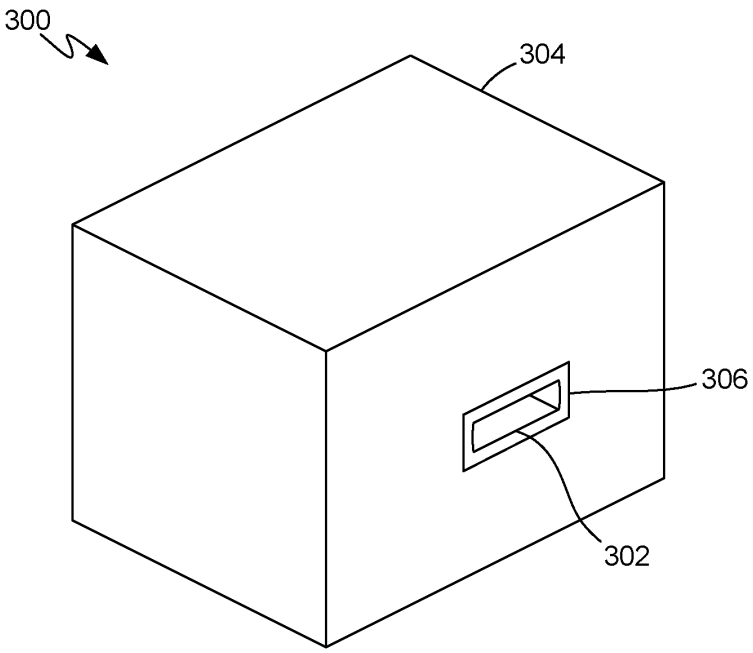


FIG. 3

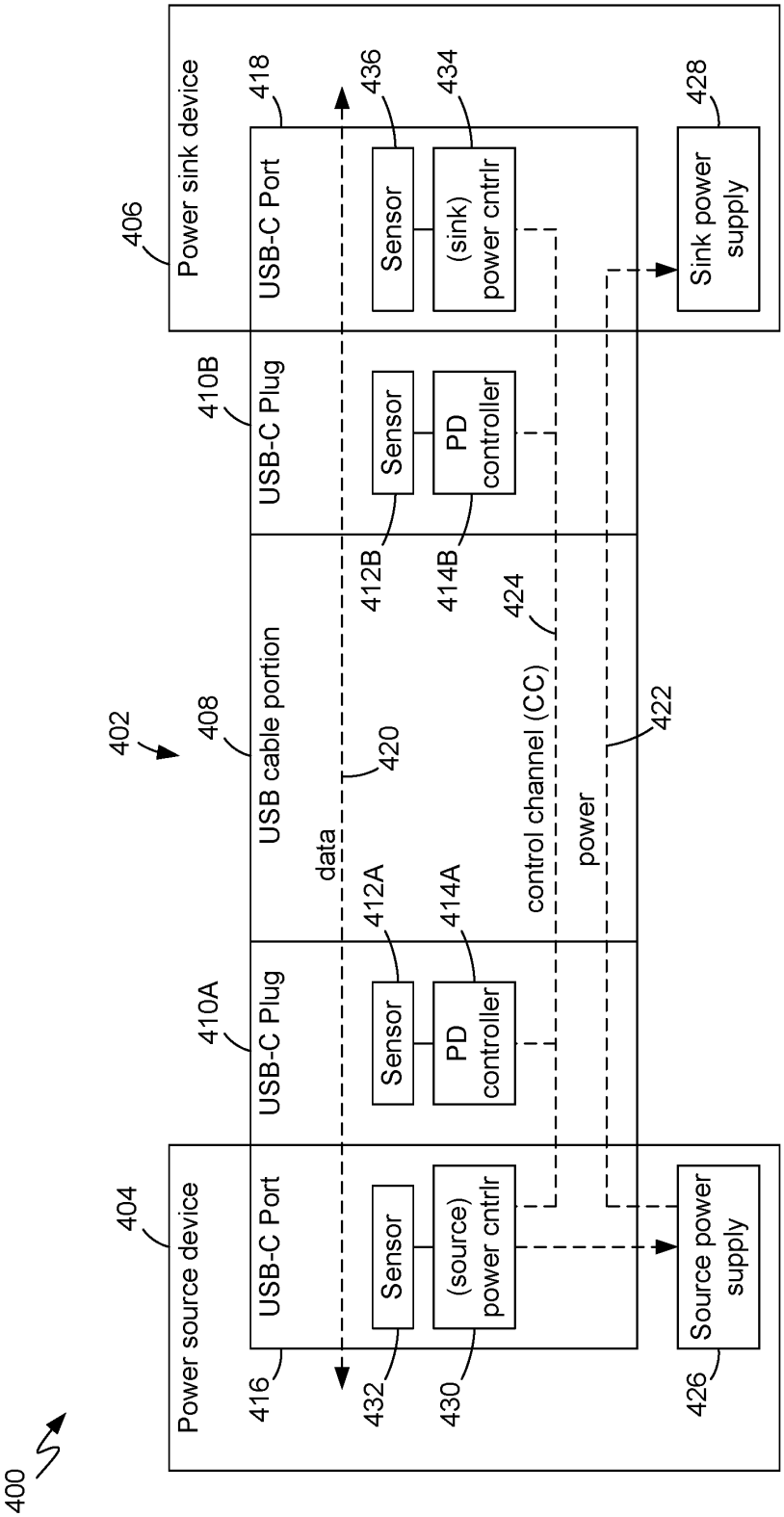

400
402
404
Power source device
406
Power sink device
408
USB cable portion
410A
USB-C Plug
410B
USB-C Plug
416
USB-C Port
418
USB-C Port
420
data
422
power
424
control channel (CC)
426
Source power supply
428
Sink power supply
430
(source) power cntrlr
432
Sensor
434
(sink) power cntrlr
436
Sensor
412A
Sensor
412B
Sensor
414A
PD controller
414B
PD controller

FIG. 4

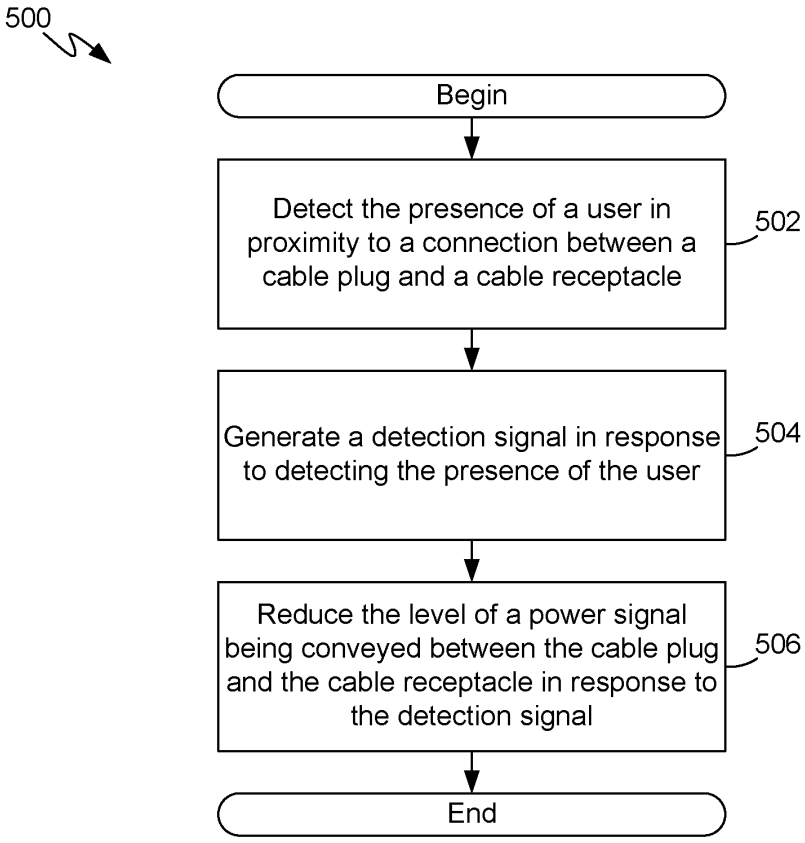

500
Begin
Detect the presence of a user in proximity to a connection between a cable plug and a cable receptacle
502
Generate a detection signal in response to detecting the presence of the user
504
Reduce the level of a power signal being conveyed between the cable plug and the cable receptacle in response to the detection signal
506
End

FIG. 5

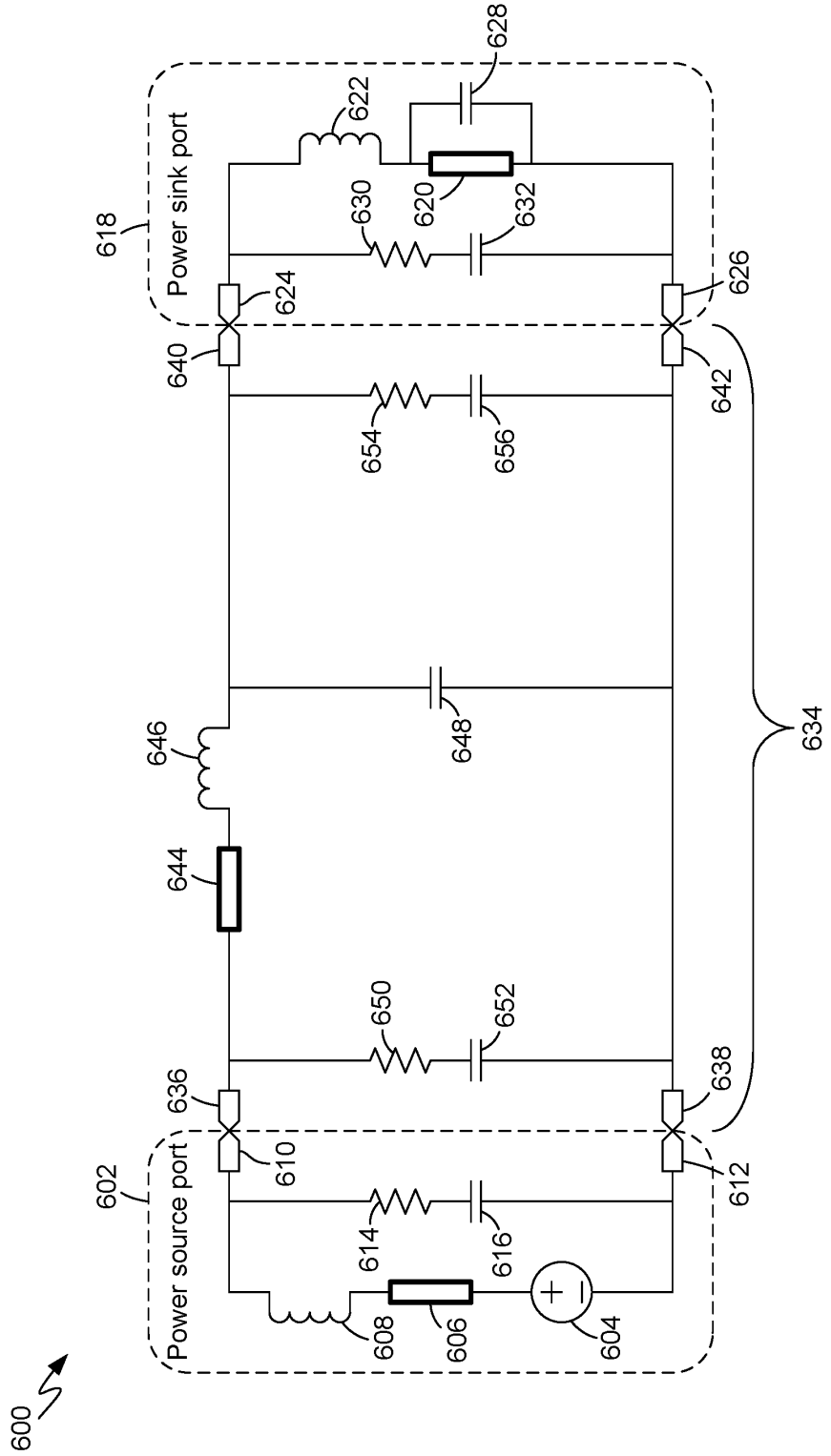

600
602
Power source port
604
606
608
610
612
614
616
618
Power sink port
620
622
624
626
628
630
632
634
636
638
640
642
644
646
648
650
652
654
656

FIG. 6

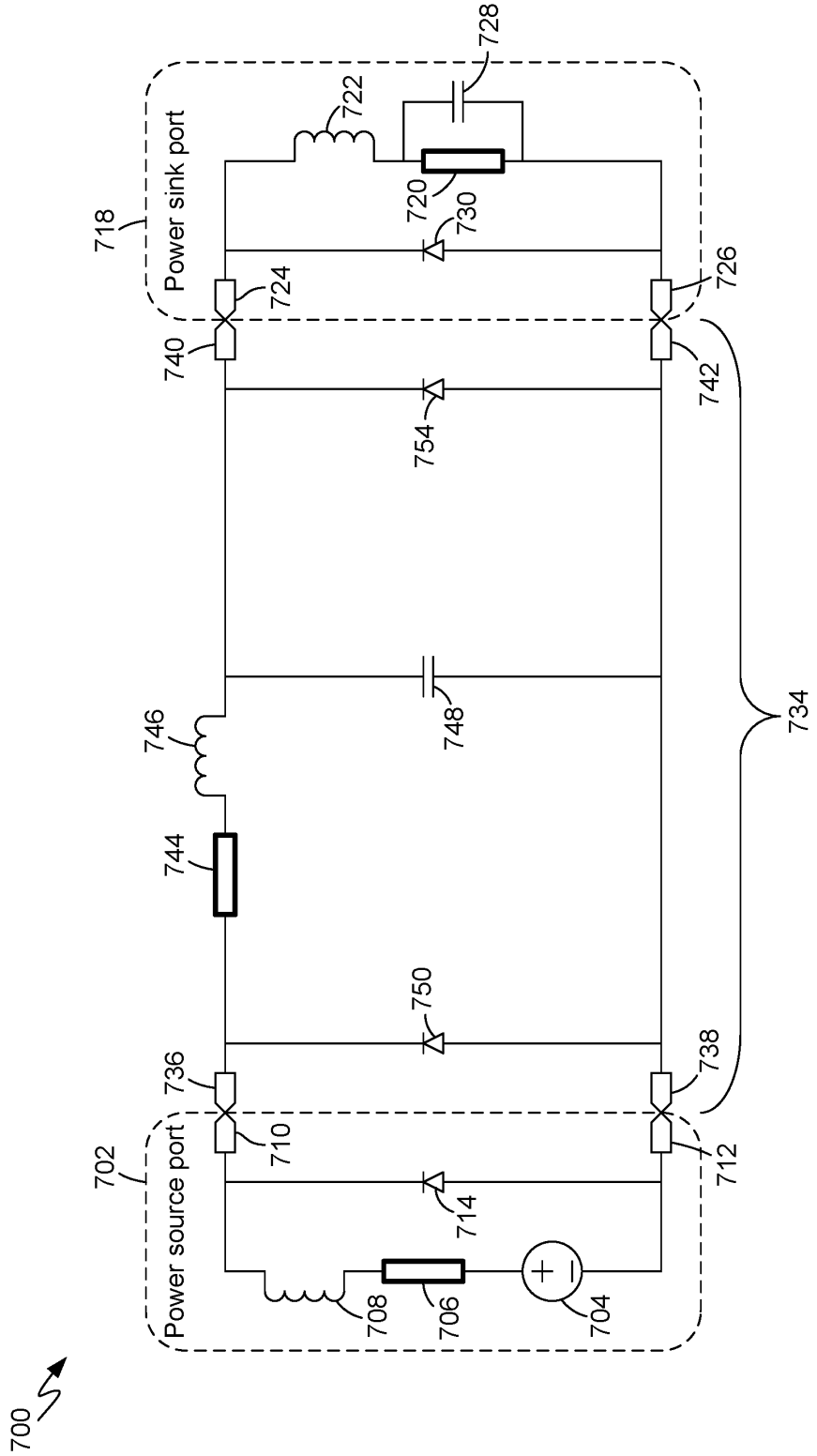

700
Power source port
702
Power sink port
718
704
706
708
710
712
714
720
722
724
726
728
730
734
736
738
740
742
744
746
748
750
754

FIG. 7

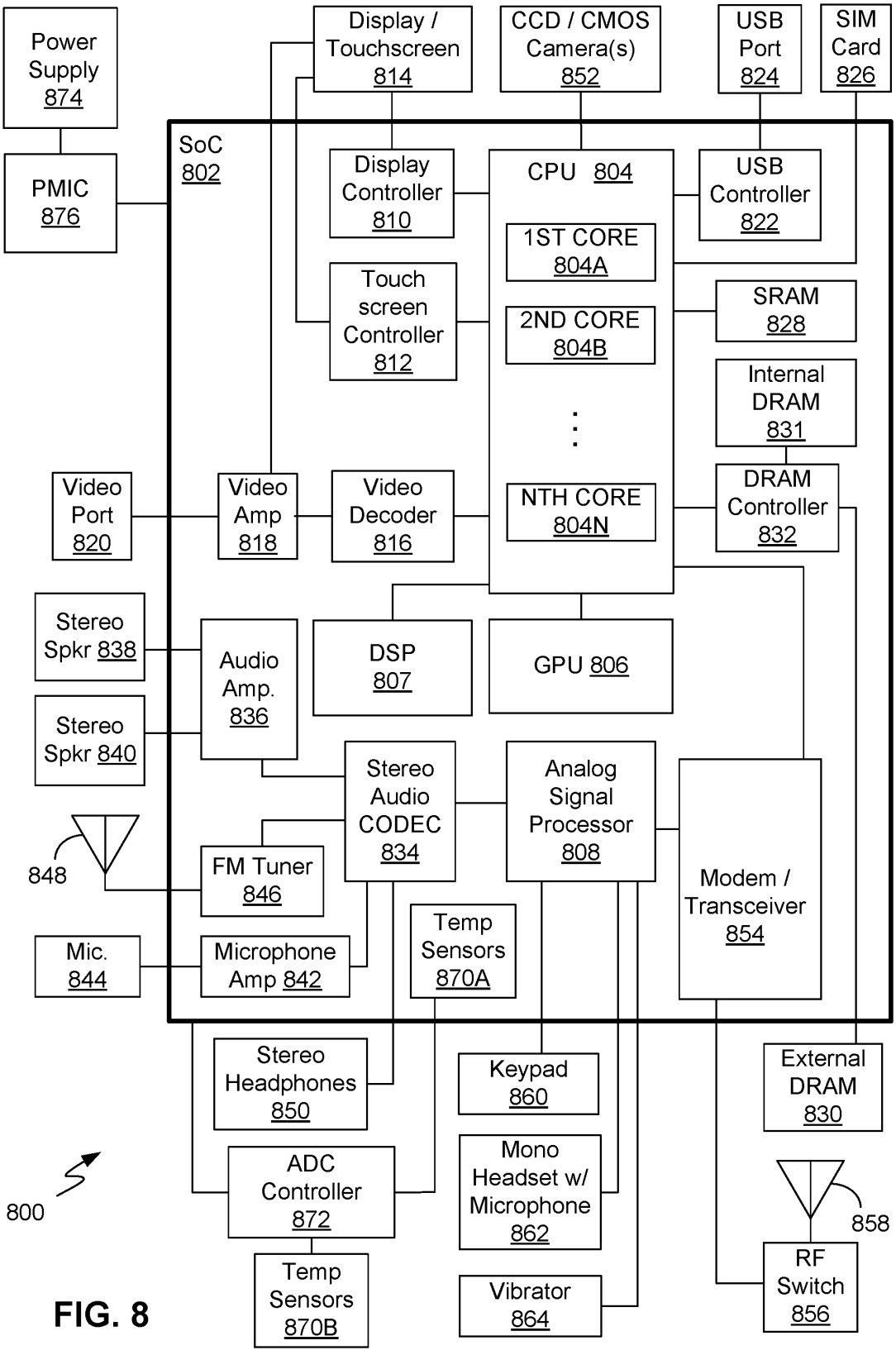

Power Supply 874
PMIC 876
SoC 802
Display / Touchscreen 814
CCD / CMOS Camera(s) 852
USB Port 824
SIM Card 826
Display Controller 810
CPU 804
1ST CORE 804A
2ND CORE 804B
NTH CORE 804N
USB Controller 822
Touch screen Controller 812
SRAM 828
Internal DRAM 831
DRAM Controller 832
Video Port 820
Video Amp 818
Video Decoder 816
Stereo Spkr 838
Stereo Spkr 840
Audio Amp. 836
DSP 807
GPU 806
Stereo Audio CODEC 834
Analog Signal Processor 808
848
FM Tuner 846
Modem / Transceiver 854
Mic. 844
Microphone Amp 842
Temp Sensors 870A
Stereo Headphones 850
Keypad 860
External DRAM 830
800
ADC Controller 872
Mono Headset w/ Microphone 862
858
Temp Sensors 870B
Vibrator 864
RF Switch 856

FIG. 8