FIG. 1A

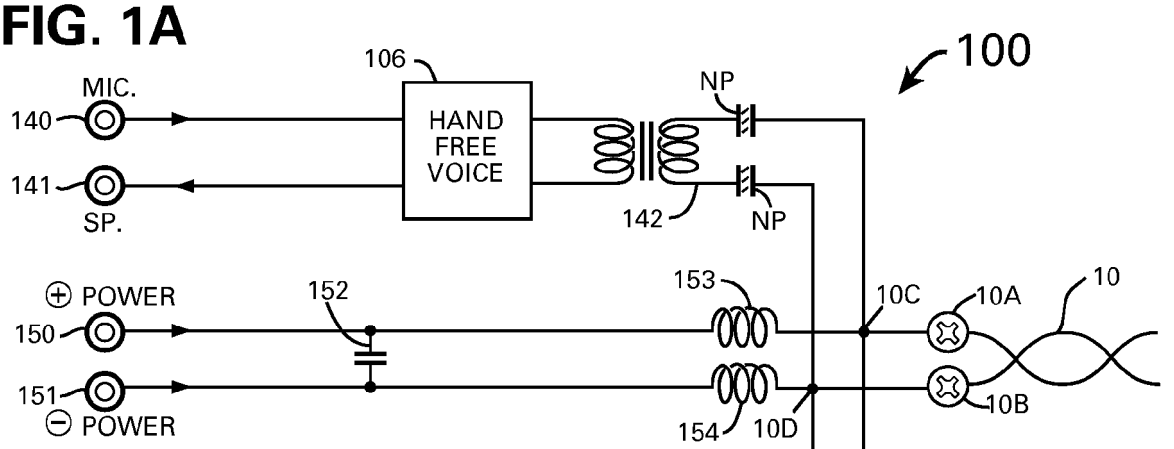

100
106
HAND FREE VOICE
MIC.
140
141
SP.
NP
142
NP
POWER
150
151
POWER
152
153
154
10C
10A
10
10B
10D

FIG. 1B

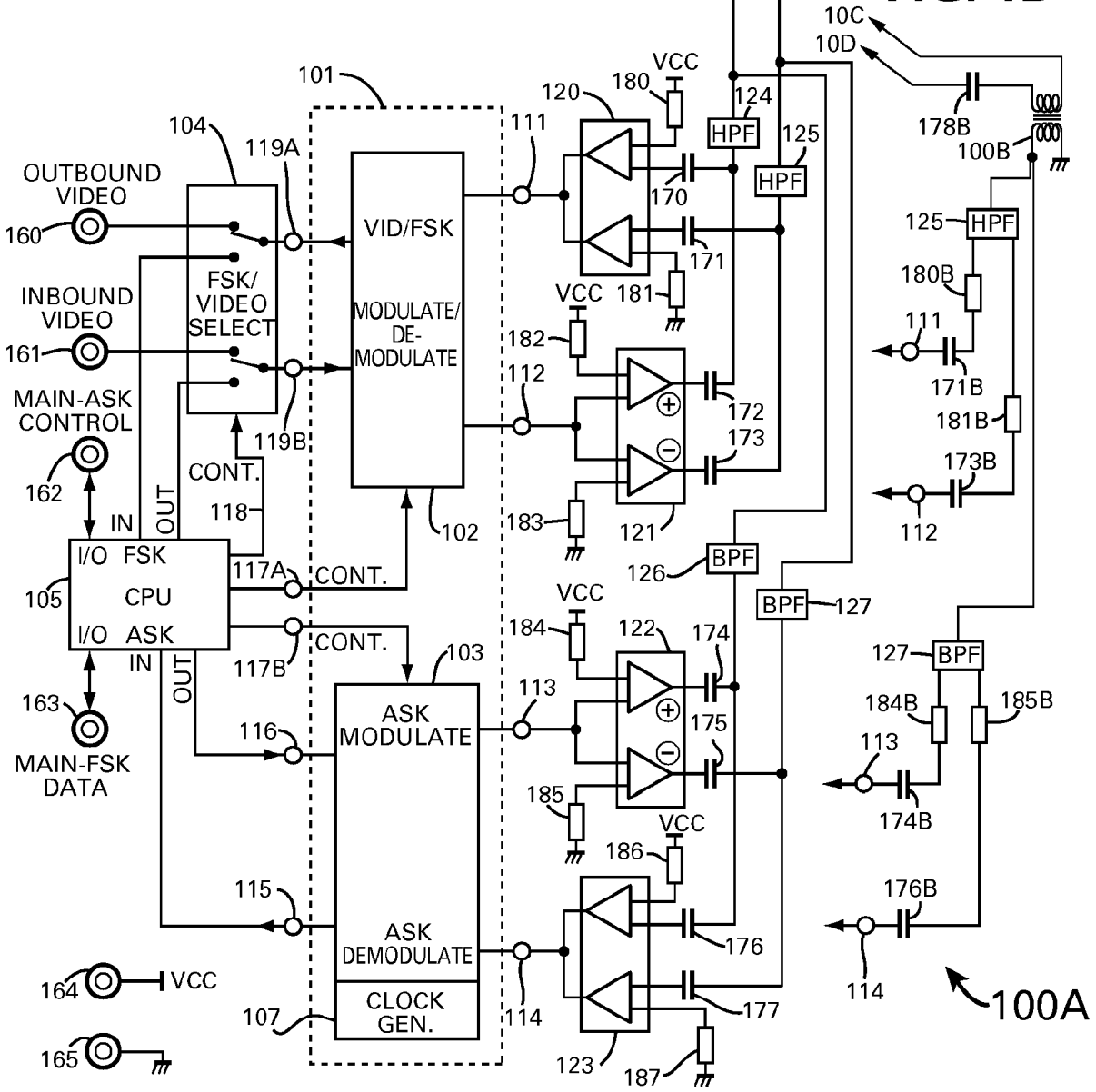

101
104
119A
OUTBOUND VIDEO
160
INBOUND VIDEO
161
MAIN-ASK CONTROL
162
FSK/ VIDEO SELECT
119B
CONT.
118
IN
OUT
105
I/O FSK
CPU
I/O ASK
117A
117B
CONT.
VID/FSK
MODULATE/ DE-MODULATE
102
103
ASK MODULATE
116
115
ASK DEMODULATE
CLOCK GEN.
107
163
MAIN-FSK DATA
164
VCC
165
111
112
120
180
VCC
170
171
181
182
172
173
183
121
124
HPF
125
HPF
126
BPF
127
BPF
122
174
175
184
185
186
176
177
187
123
114
178B
100B
125
HPF
180B
111
171B
181B
173B
112
127
BPF
184B
185B
113
174B
176B
114
10C
10D
100A

FIG. 2A

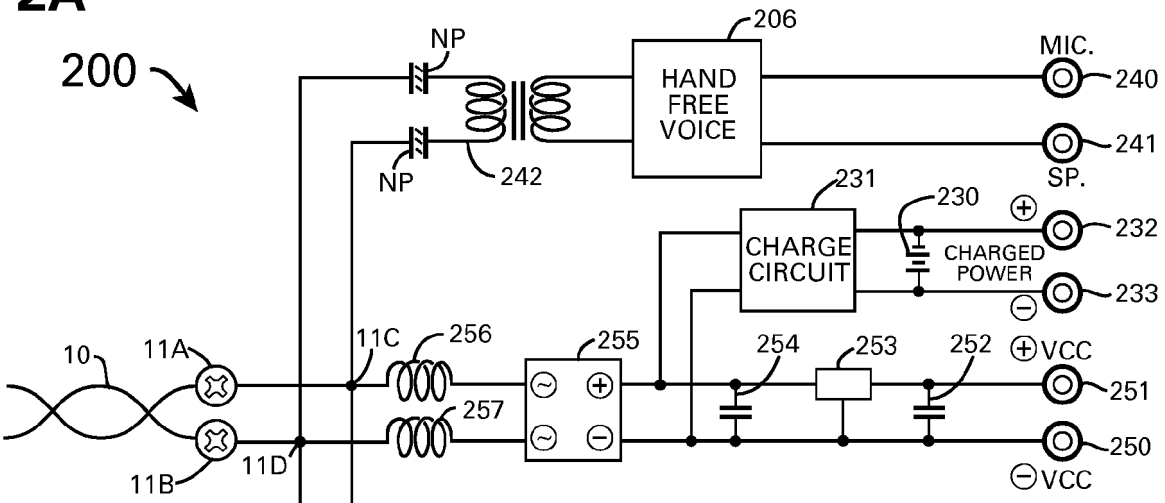

200
NP
NP
242
206
HAND FREE VOICE
MIC.
240
241
SP.
231
230
CHARGE CIRCUIT
CHARGED POWER
232
233
10
11A
11B
11C
11D
256
257
255
254
253
252
VCC
251
250
VCC

FIG. 2B

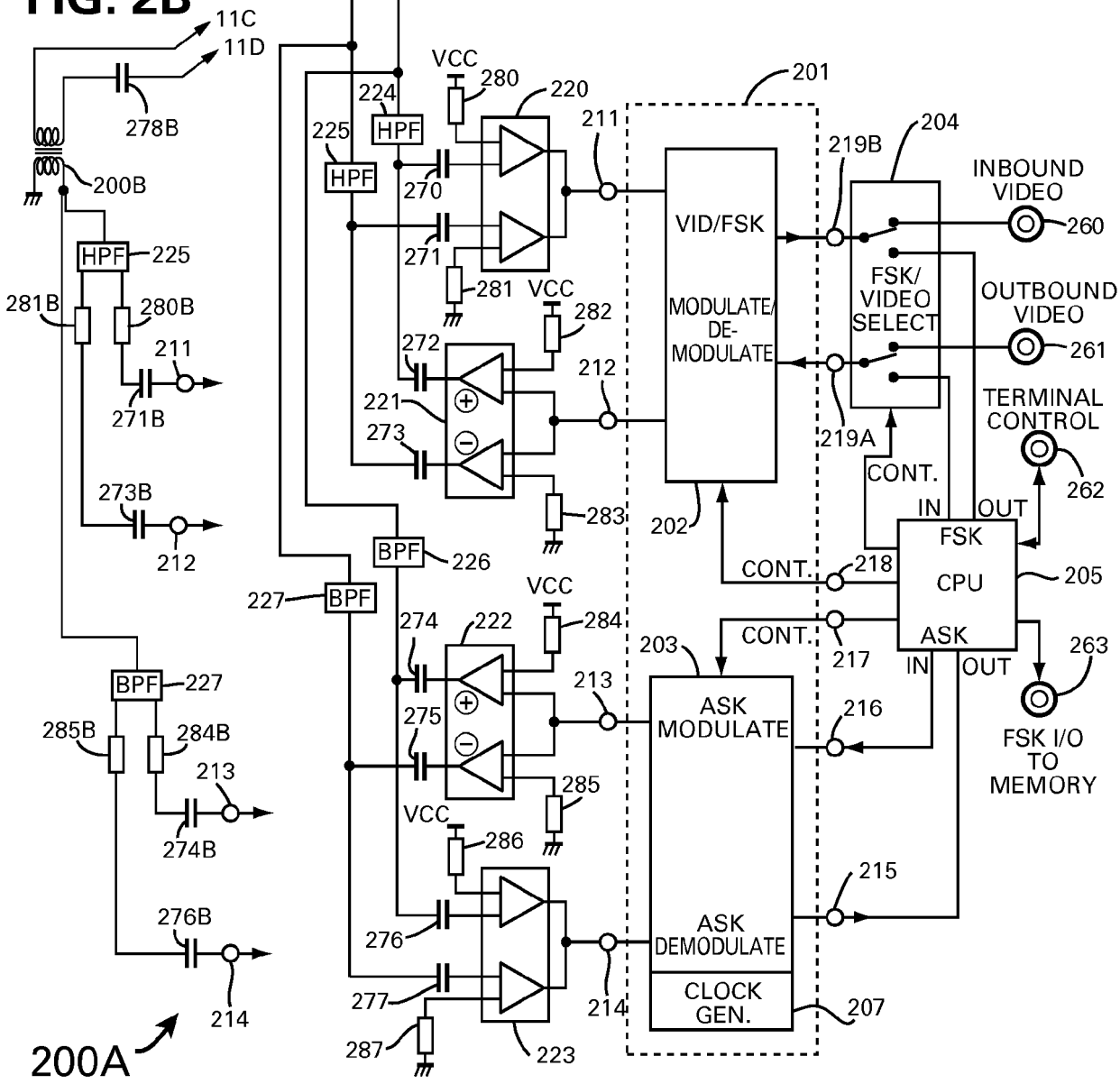

11C
11D
278B
200B
HPF
225
281B
280B
211
271B
273B
212
200A
VCC
280
220
224
HPF
225
HPF
270
271
281
VCC
282
272
221
273
283
BPF
226
227
BPF
VCC
284
274
222
275
285
VCC
286
276
277
287
223
214
213
203
ASK MODULATE
ASK DEMODULATE
CLOCK GEN.
207
215
216
217
218
CONT.
CONT.
CONT.
202
201
VID/FSK
MODULATE/ DE-MODULATE
211
212
219B
219A
204
FSK/ VIDEO SELECT
INBOUND VIDEO
260
OUTBOUND VIDEO
261
TERMINAL CONTROL
262
IN
OUT
FSK CPU
205
ASK
IN
OUT
263
FSK I/O TO MEMORY

FIG. 3A

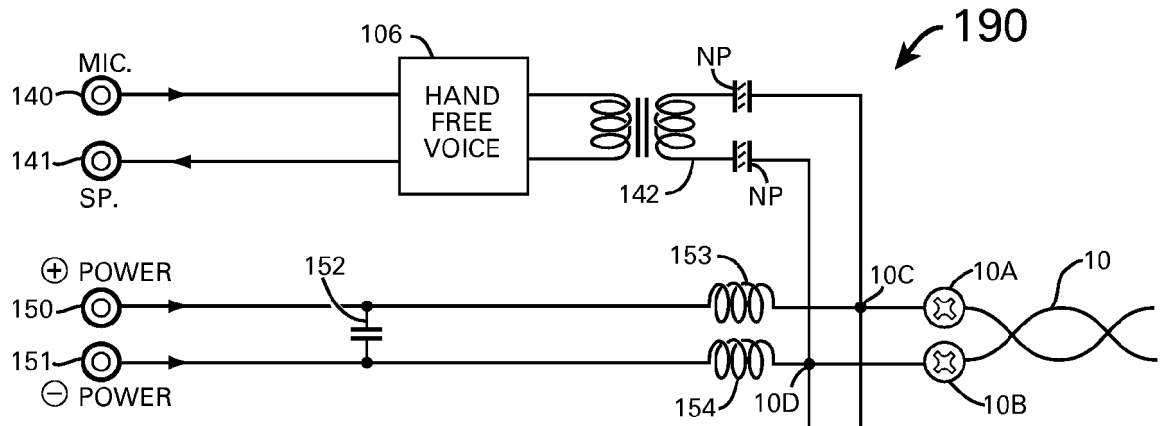

190
106
MIC.
140
141
SP.
HAND FREE VOICE
NP
142
NP
⊕ POWER
150
151
⊖ POWER
152
153
154
10C
10A
10
10D
10B

FIG. 3B

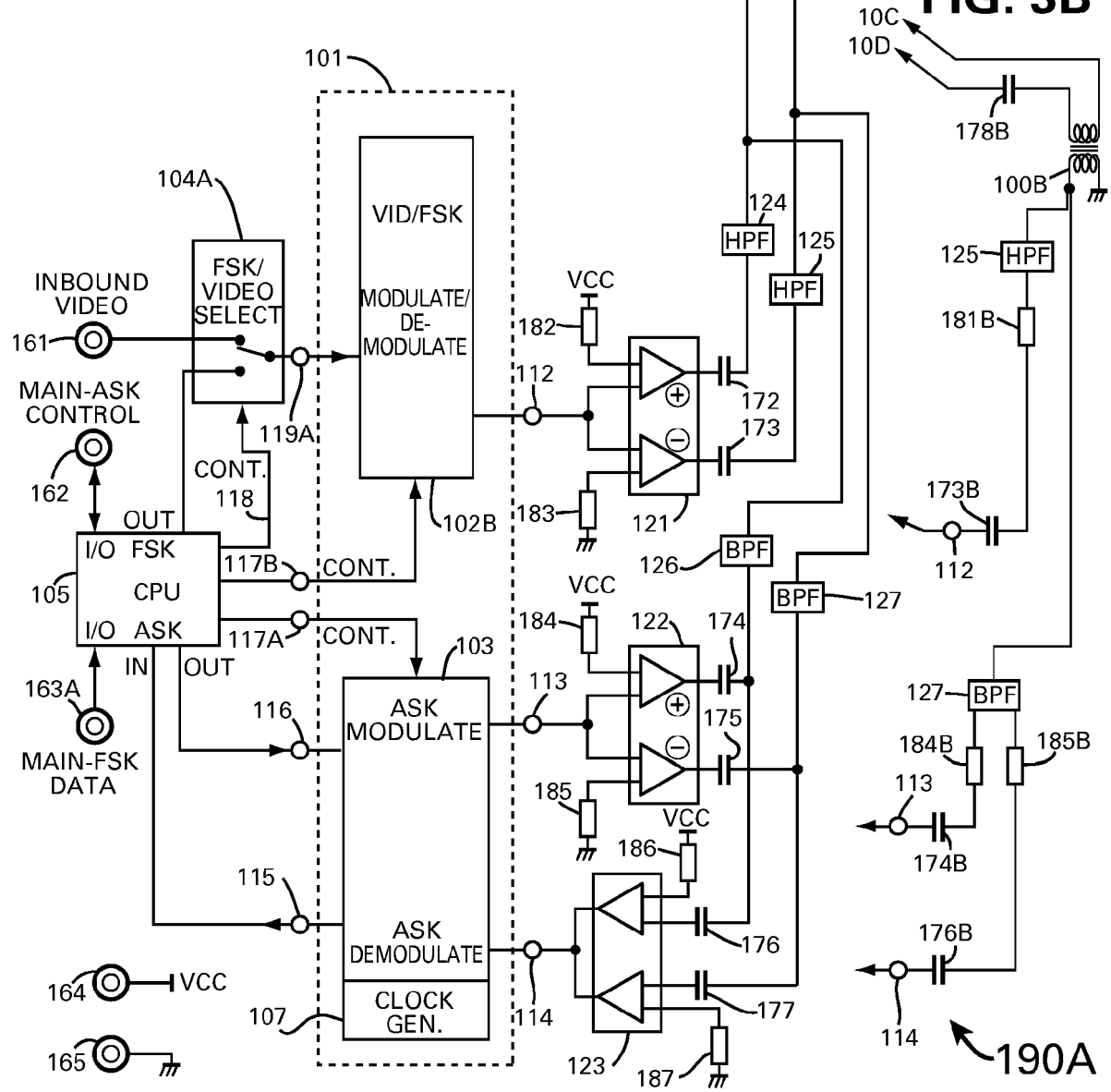

101
104A
FSK/ VIDEO SELECT
INBOUND VIDEO
161
MAIN-ASK CONTROL
162
119A
CONT. 118
OUT
I/O FSK
CPU
I/O ASK
IN
OUT
105
117B
CONT.
117A
CONT.
163A
MAIN-FSK DATA
VID/FSK MODULATE/ DE-MODULATE
102B
103
ASK MODULATE
116
115
ASK DEMODULATE
CLOCK GEN.
107
164
VCC
165
112
114
VCC
182
183
121
172
173
124
HPF
125
HPF
126
BPF
VCC
184
185
186
122
174
175
176
177
123
187
BPF
127
178B
100B
125
HPF
181B
173B
112
127
BPF
184B
185B
113
174B
176B
114
190A

FIG. 4A

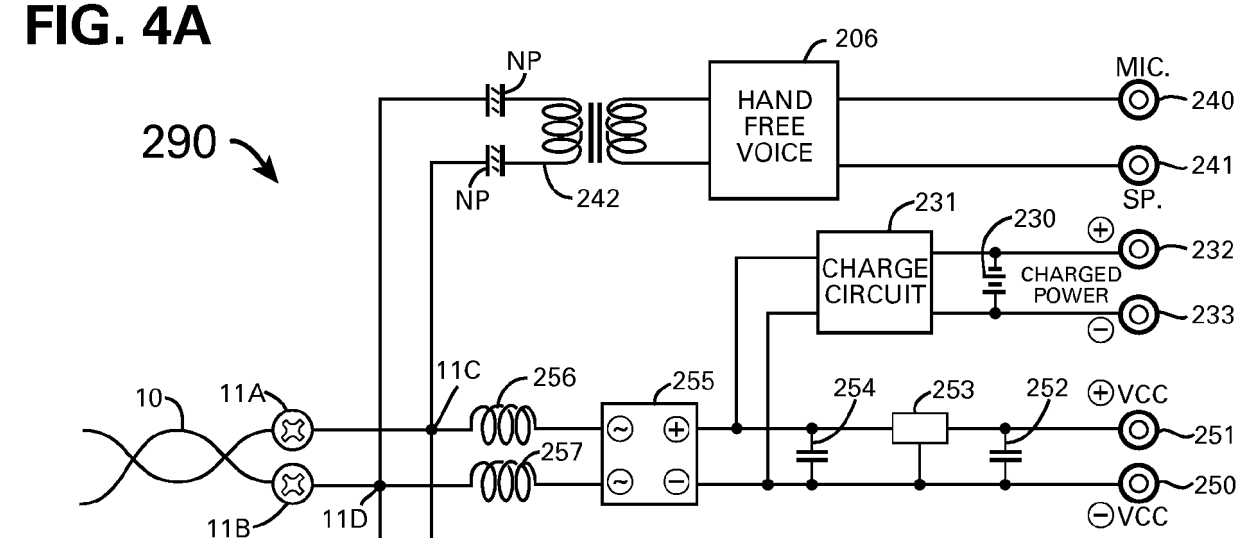

290
NP
NP
242
206
HAND FREE VOICE
MIC.
240
241
SP.
231
230
CHARGE CIRCUIT
CHARGED POWER
232
233
10
11A
11B
11C
11D
256
257
255
254
253
252
VCC
251
250
VCC

FIG. 4B

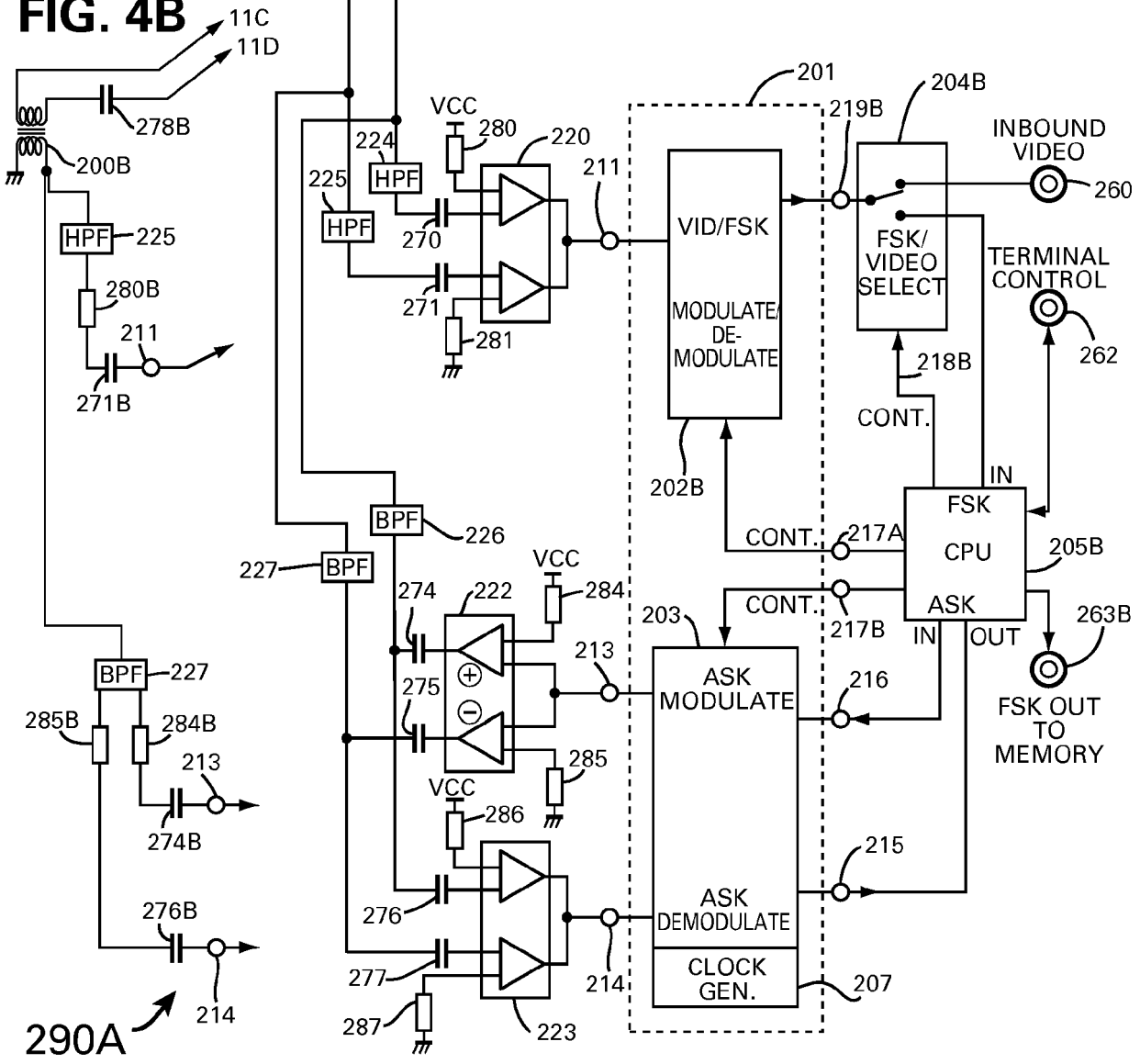

11C
11D
278B
200B
HPF
225
280B
211
271B
VCC
280
220
224
HPF
225
HPF
270
271
281
211
201
VID/FSK
MODULATE/ DE-MODULATE
202B
219B
204B
INBOUND VIDEO
260
FSK/ VIDEO SELECT
TERMINAL CONTROL
262
218B
CONT.
IN
FSK CPU ASK
205B
263B
FSK OUT TO MEMORY
CONT.
217A
CONT.
217B
IN
OUT
BPF
226
227
BPF
VCC
284
274
222
213
275
285
VCC
286
276
277
287
223
214
203
ASK MODULATE
216
215
ASK DEMODULATE
CLOCK GEN.
207
BPF
227
285B
284B
213
274B
276B
214
290A

FIG. 5A

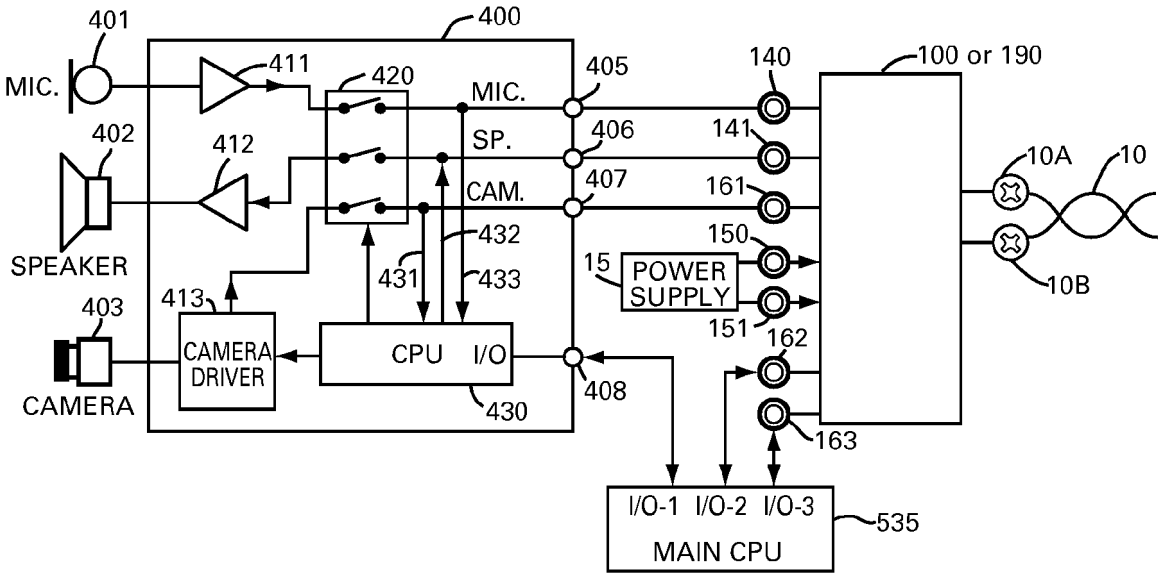

401
MIC.
400
411
420
MIC.
405
140
100 or 190
402
SPEAKER
412
SP.
406
141
10A
10
CAM.
407
161
432
150
15
POWER SUPPLY
431
433
413
403
CAMERA
CAMERA DRIVER
CPU I/O
430
408
151
162
163
10B
I/O-1 I/O-2 I/O-3
MAIN CPU
535

FIG. 5B

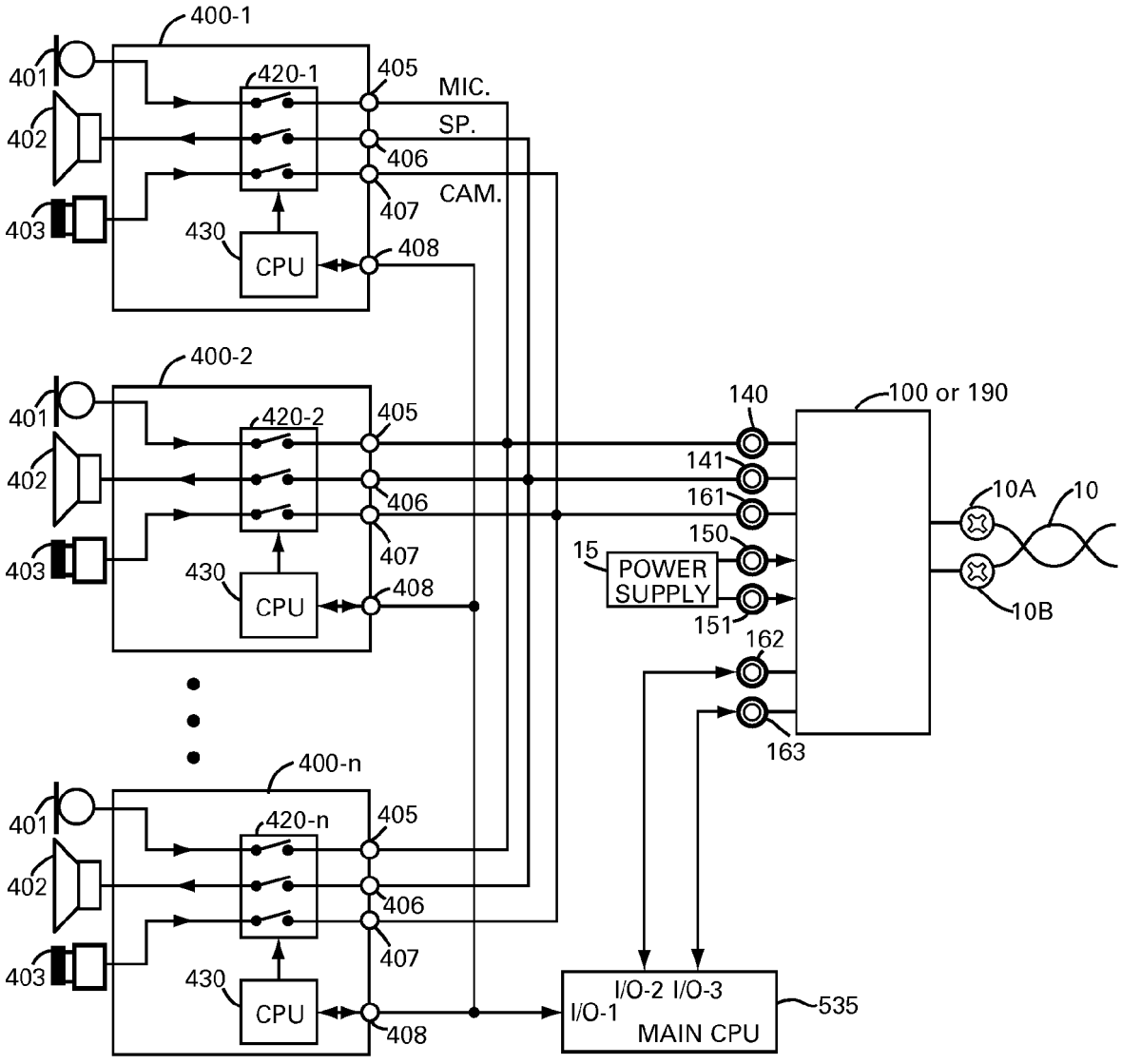

400-1
401
420-1
405
MIC.
402
SP.
406
CAM.
407
403
430
CPU
408
400-2
401
420-2
405
140
100 or 190
402
141
406
161
10A
10
403
150
15
POWER SUPPLY
430
CPU
408
151
162
10B
163
400-n
401
420-n
405
402
406
403
407
430
CPU
I/O-2 I/O-3
I/O-1
MAIN CPU
535
408

FIG. 6A

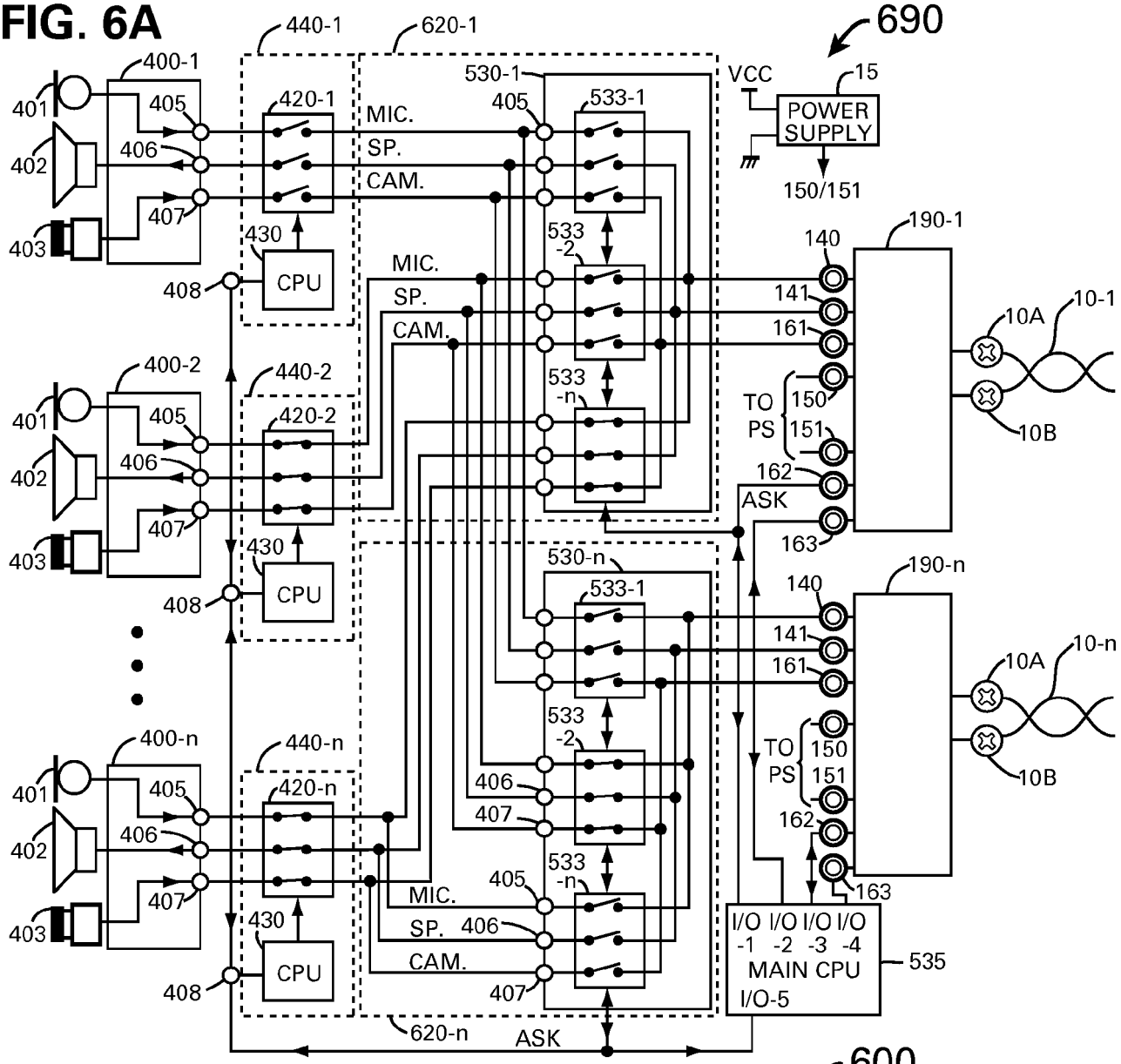

690
440-1
620-1
400-1
401
402
403
405
406
407
420-1
MIC.
SP.
CAM.
530-1
533-1
VCC
15
POWER SUPPLY
150/151
430
CPU
408
533 -2
533 -n
140
190-1
141
161
150
TO PS
151
162
163
ASK
10A
10-1
10B
400-2
440-2
420-2
530-n
190-n
10-n
400-n
440-n
420-n
I/O -1
I/O -2
I/O -3
I/O -4
MAIN CPU I/O-5
535
620-n

FIG. 6B

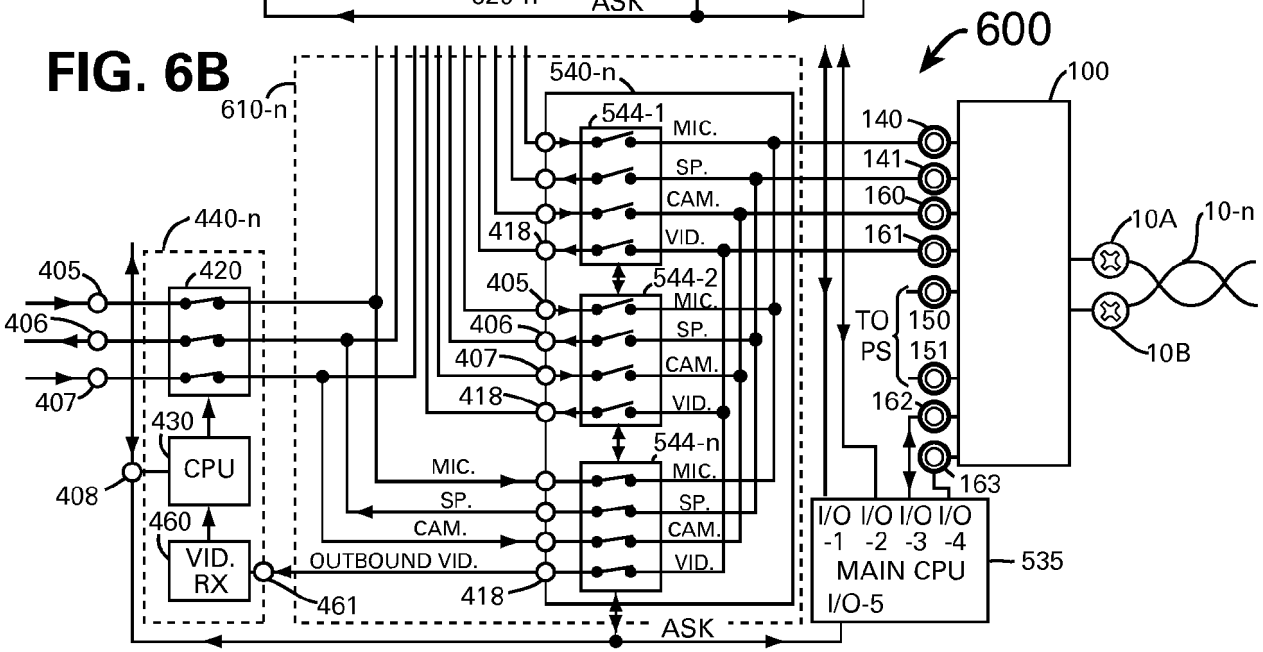

600
100
610-n
540-n
544-1
544-2
544-n
MIC.
SP.
CAM.
VID.
418
440-n
405
406
407
420
430
CPU
408
460
VID. RX
461
OUTBOUND VID.
140
141
160
161
150
TO PS
151
162
163
10A
10-n
10B
I/O -1
I/O -2
I/O -3
I/O -4
MAIN CPU I/O-5
535
ASK

FIG. 7

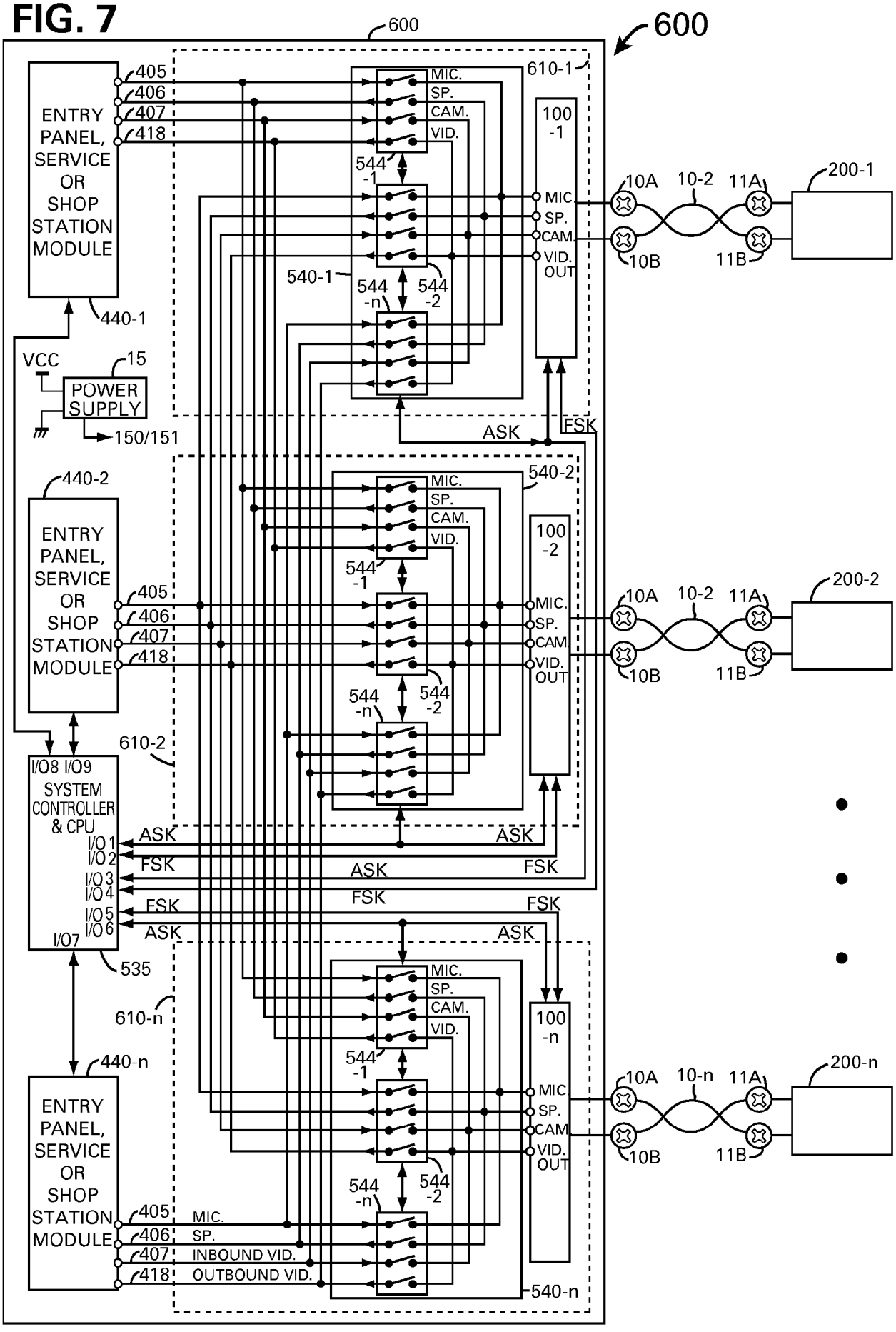

600
600
610-1
ENTRY PANEL, SERVICE OR SHOP STATION MODULE
405
406
407
418
MIC.
SP.
CAM.
VID.
544 -1
100 -1
MIC
SP.
CAM.
VID. OUT
10A
10-2
11A
200-1
10B
11B
540-1
544 -n
544 -2
440-1
VCC
15
POWER SUPPLY
150/151
ASK
FSK
440-2
540-2
100 -2
200-2
610-2
I/O8 I/O9
SYSTEM CONTROLLER & CPU
I/O1
I/O2
I/O3
I/O4
I/O5
I/O6
I/O7
535
610-n
100 -n
200-n
10-n
440-n
INBOUND VID.
OUTBOUND VID.
540-n

FIG. 8

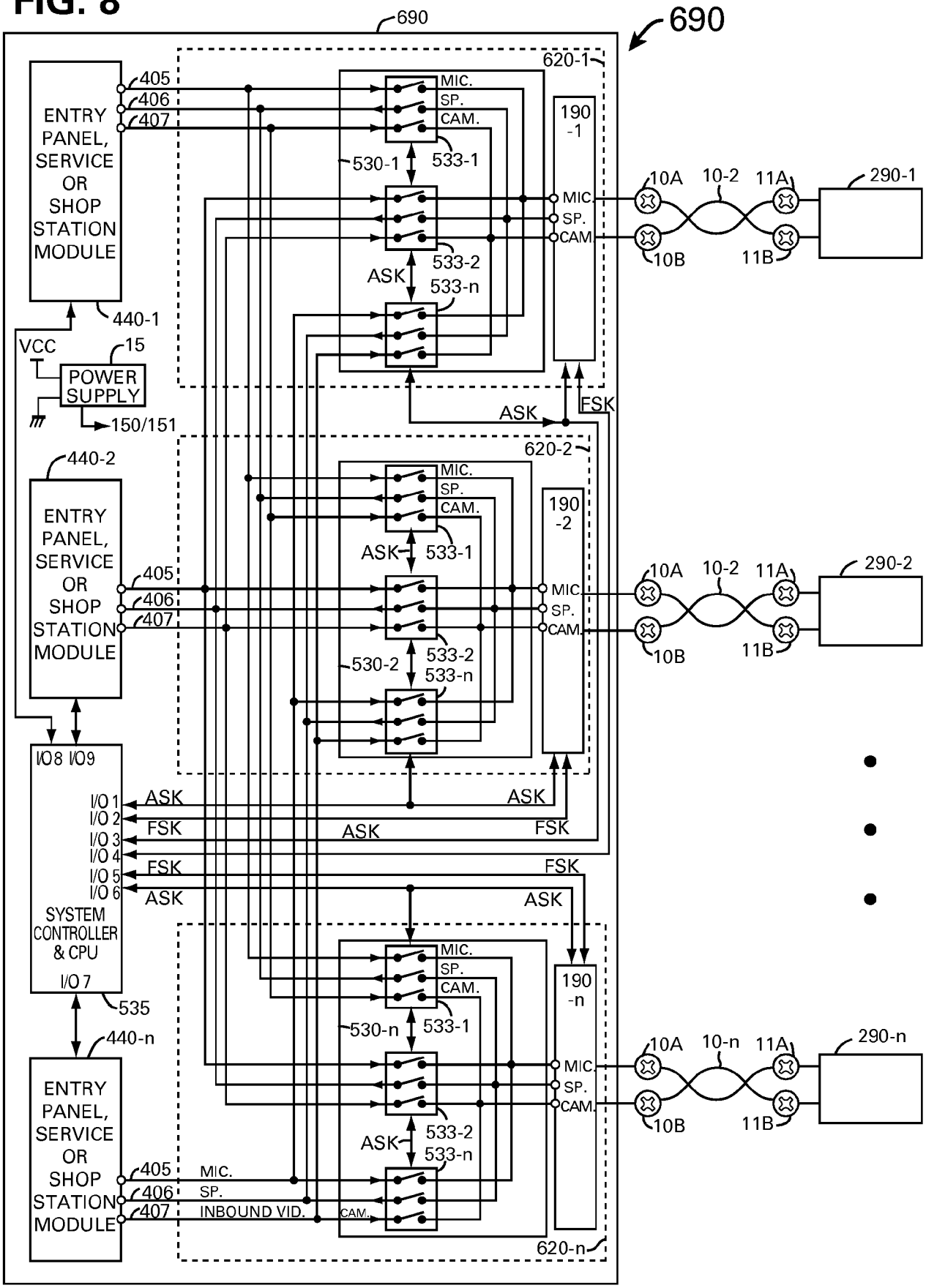

690
690
620-1
620-2
620-n
ENTRY PANEL, SERVICE OR SHOP STATION MODULE
405
406
407
440-1
440-2
440-n
VCC
15
POWER SUPPLY
150/151
MIC.
SP.
CAM.
530-1
533-1
533-2
533-n
ASK
FSK
190 -1
190 -2
190 -n
MIC
SP.
CAM
10A
10-2
11A
10B
11B
290-1
290-2
290-n
10-n
I/O 8 I/O 9
I/O 1
I/O 2
I/O 3
I/O 4
I/O 5
I/O 6
SYSTEM CONTROLLER & CPU
I/O 7
535
INBOUND VID.

FIG. 9

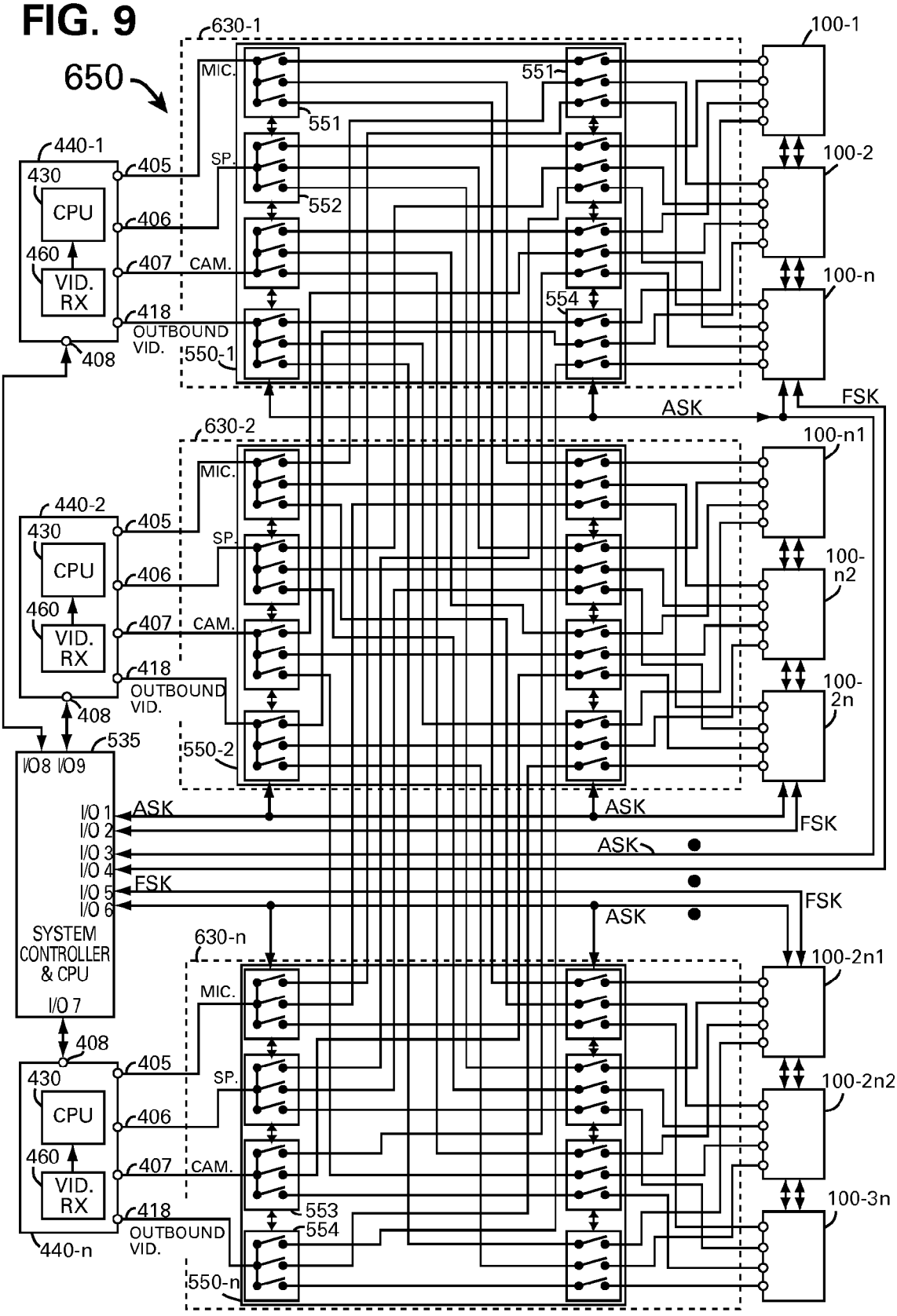

650
630-1
100-1
MIC.
551
SP.
552
440-1
405
430
CPU
406
460
VID. RX
407
CAM.
418
OUTBOUND VID.
408
550-1
554
100-2
100-n
ASK
FSK
630-2
100-n1
440-2
100-n2
100-2n
535
I/O8 I/O9
I/O 1
I/O 2
I/O 3
I/O 4
I/O 5
I/O 6
SYSTEM CONTROLLER & CPU
I/O 7
550-2
630-n
100-2n1
100-2n2
100-3n
553
440-n
550-n

FIG. 10

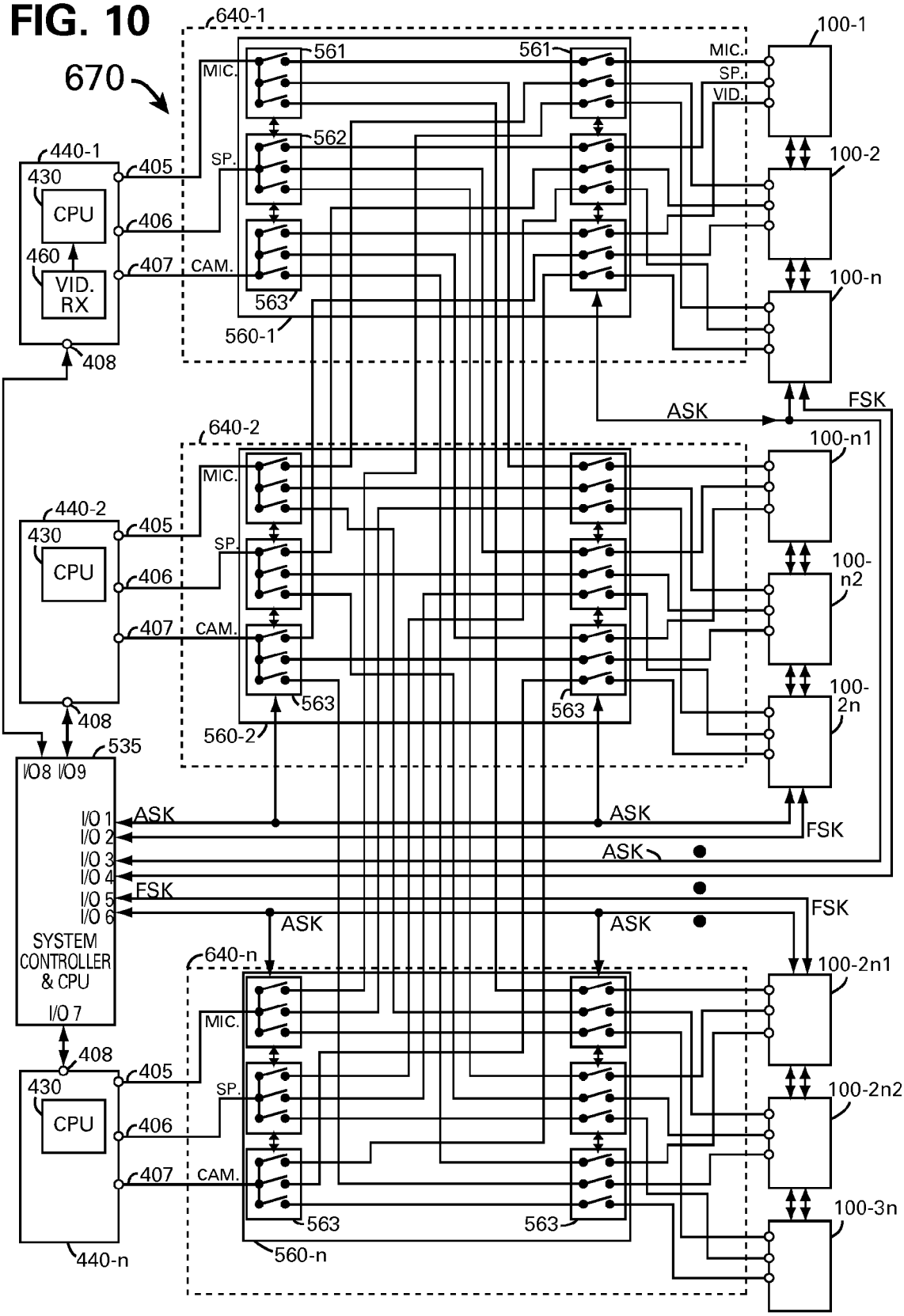

670
640-1
561
561
MIC.
SP.
VID.
100-1
562
100-2
440-1
430
CPU
405
406
407
SP.
CAM.
460
VID. RX
563
100-n
560-1
408
ASK
FSK
640-2
100-n1
MIC.
440-2
430
CPU
405
406
407
SP.
CAM.
100-n2
100-2n
563
563
560-2
408
535
I/O8 I/O9
I/O 1
I/O 2
I/O 3
I/O 4
I/O 5
I/O 6
SYSTEM CONTROLLER & CPU
I/O 7
ASK
ASK
FSK
ASK
FSK
ASK
ASK
640-n
100-2n1
408
MIC.
405
430
CPU
406
SP.
100-2n2
407
CAM.
563
563
100-3n
440-n
560-n

FIG. 11A

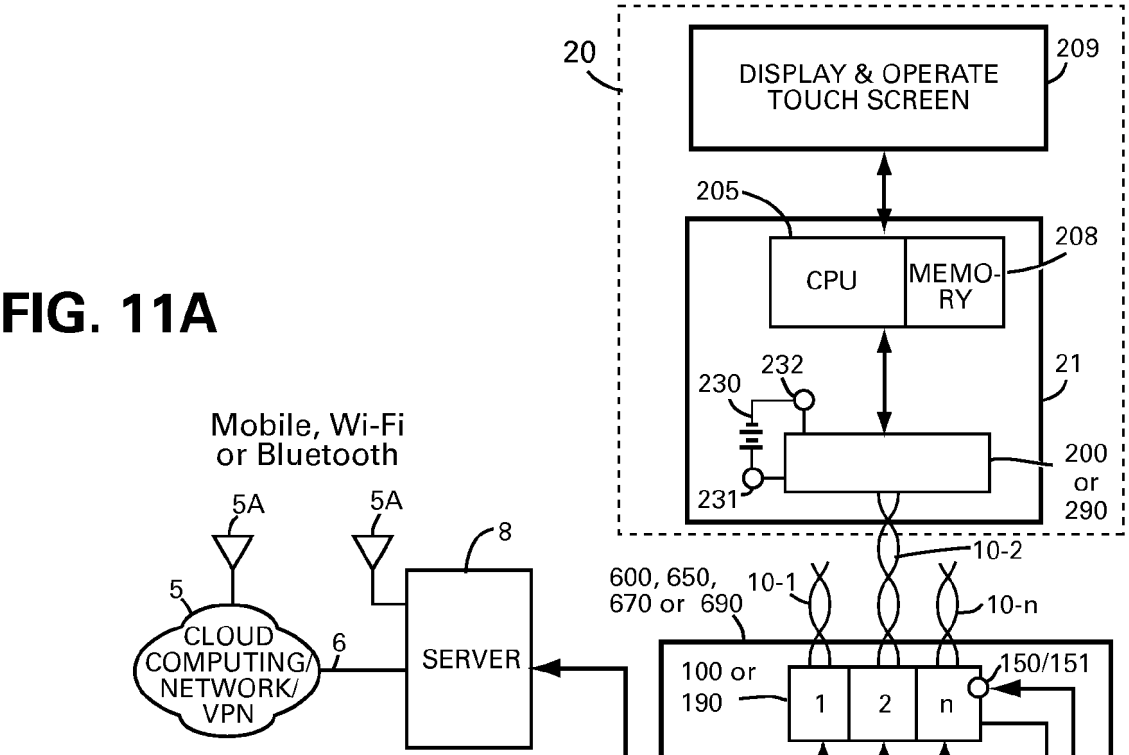


FIG. 11B

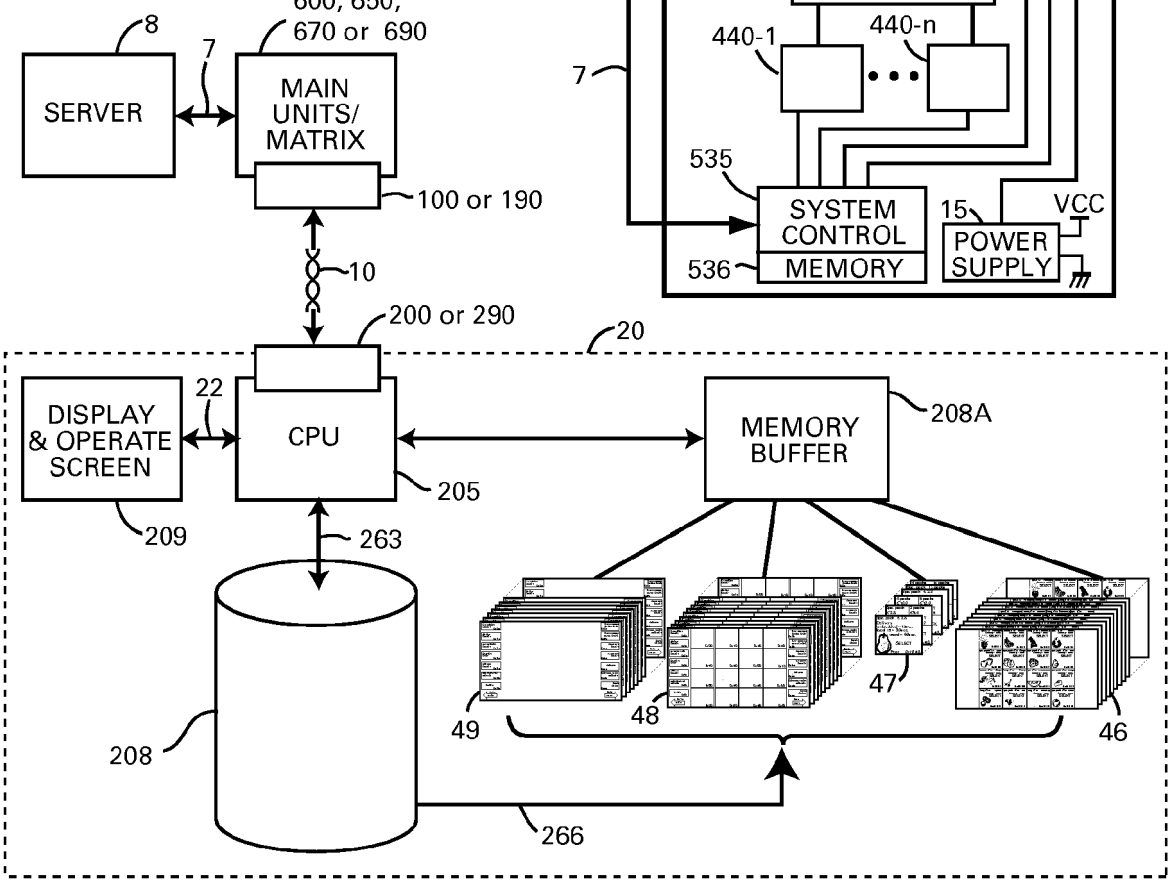


FIG. 12

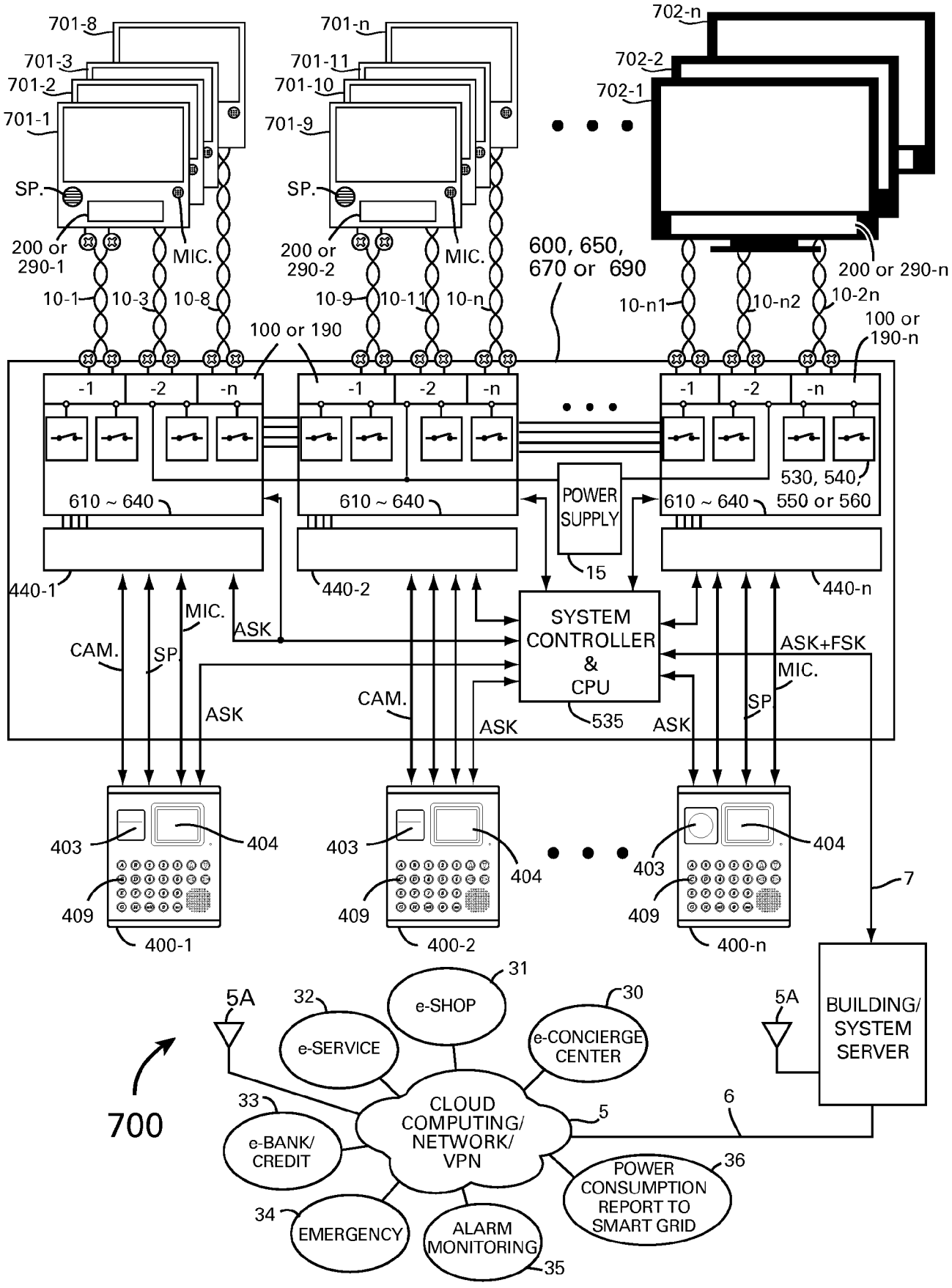

701-8
701-3
701-2
701-1
701-n
701-11
701-10
701-9
702-n
702-2
702-1
SP.
MIC.
200 or 290-1
200 or 290-2
200 or 290-n
600, 650, 670 or 690
10-1
10-3
10-8
10-9
10-11
10-n
10-n1
10-n2
10-2n
100 or 190
100 or 190-n
-1
-2
-n
610 ~ 640
530, 540, 550 or 560
POWER SUPPLY
15
440-1
440-2
440-n
CAM.
ASK
ASK+FSK
SYSTEM CONTROLLER & CPU
535
403
404
409
400-1
400-2
400-n
7
5A
31
32
30
e-SHOP
e-SERVICE
e-CONCIERGE CENTER
BUILDING/ SYSTEM SERVER
700
33
CLOUD COMPUTING/ NETWORK/ VPN
5
6
e-BANK/ CREDIT
36
POWER CONSUMPTION REPORT TO SMART GRID
34
EMERGENCY
ALARM MONITORING
35

FIG. 13

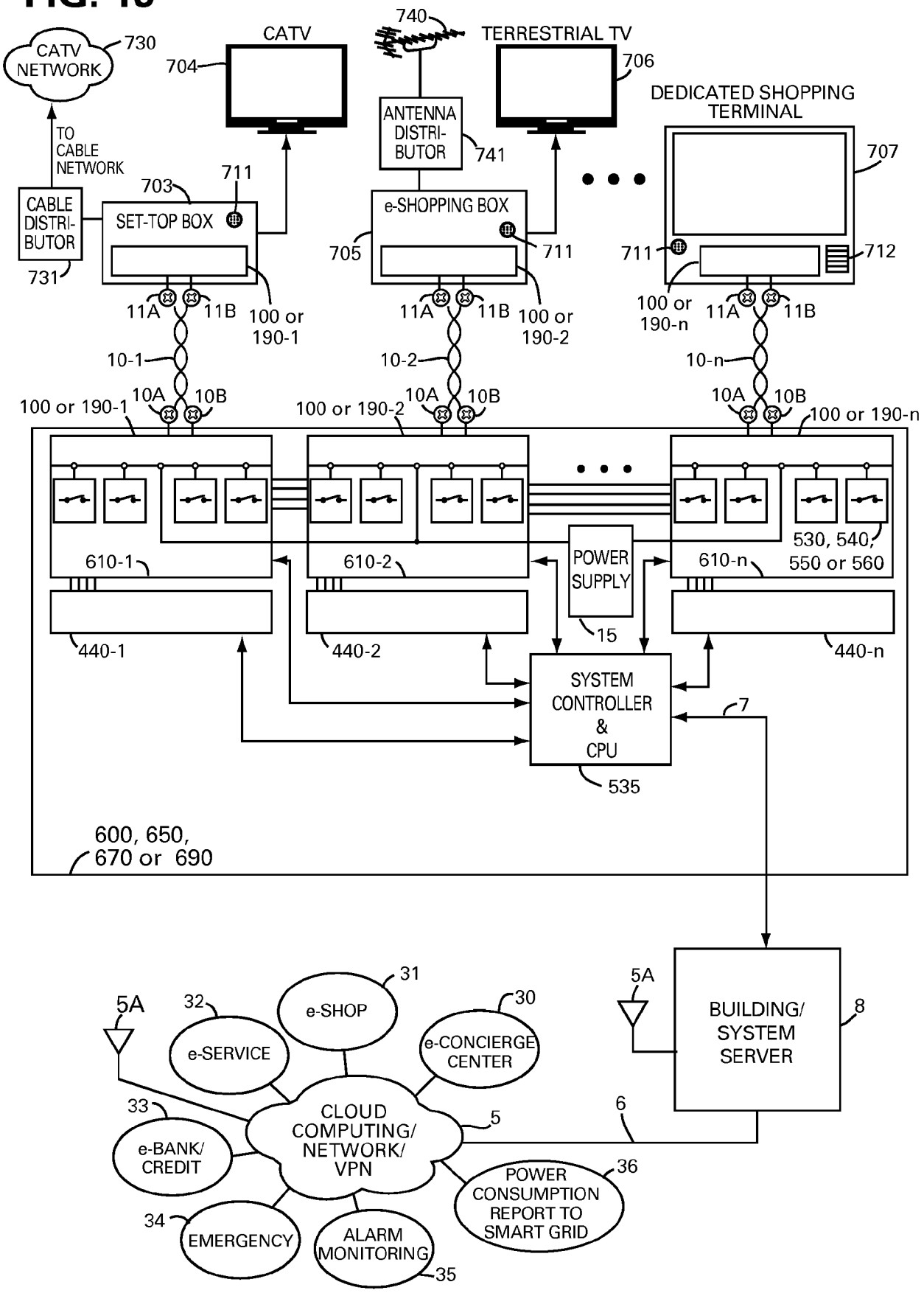

CATV NETWORK
730
CATV
704
740
TERRESTRIAL TV
706
DEDICATED SHOPPING TERMINAL
707
ANTENNA DISTRI-BUTOR
741
TO CABLE NETWORK
CABLE DISTRI-BUTOR
731
703
711
SET-TOP BOX
e-SHOPPING BOX
705
711
711
712
11A
11B
100 or 190-1
10-1
100 or 190-2
10-2
100 or 190-n
10-n
10A
10B
100 or 190-1
100 or 190-2
100 or 190-n
610-1
610-2
610-n
POWER SUPPLY
530, 540, 550 or 560
15
440-1
440-2
440-n
SYSTEM CONTROLLER & CPU
7
535
600, 650, 670 or 690
5A
31
e-SHOP
32
e-SERVICE
30
e-CONCIERGE CENTER
33
e-BANK/ CREDIT
CLOUD COMPUTING/ NETWORK/ VPN
5
6
5A
BUILDING/ SYSTEM SERVER
8
36
POWER CONSUMPTION REPORT TO SMART GRID
34
EMERGENCY
ALARM MONITORING
35

FIG. 14

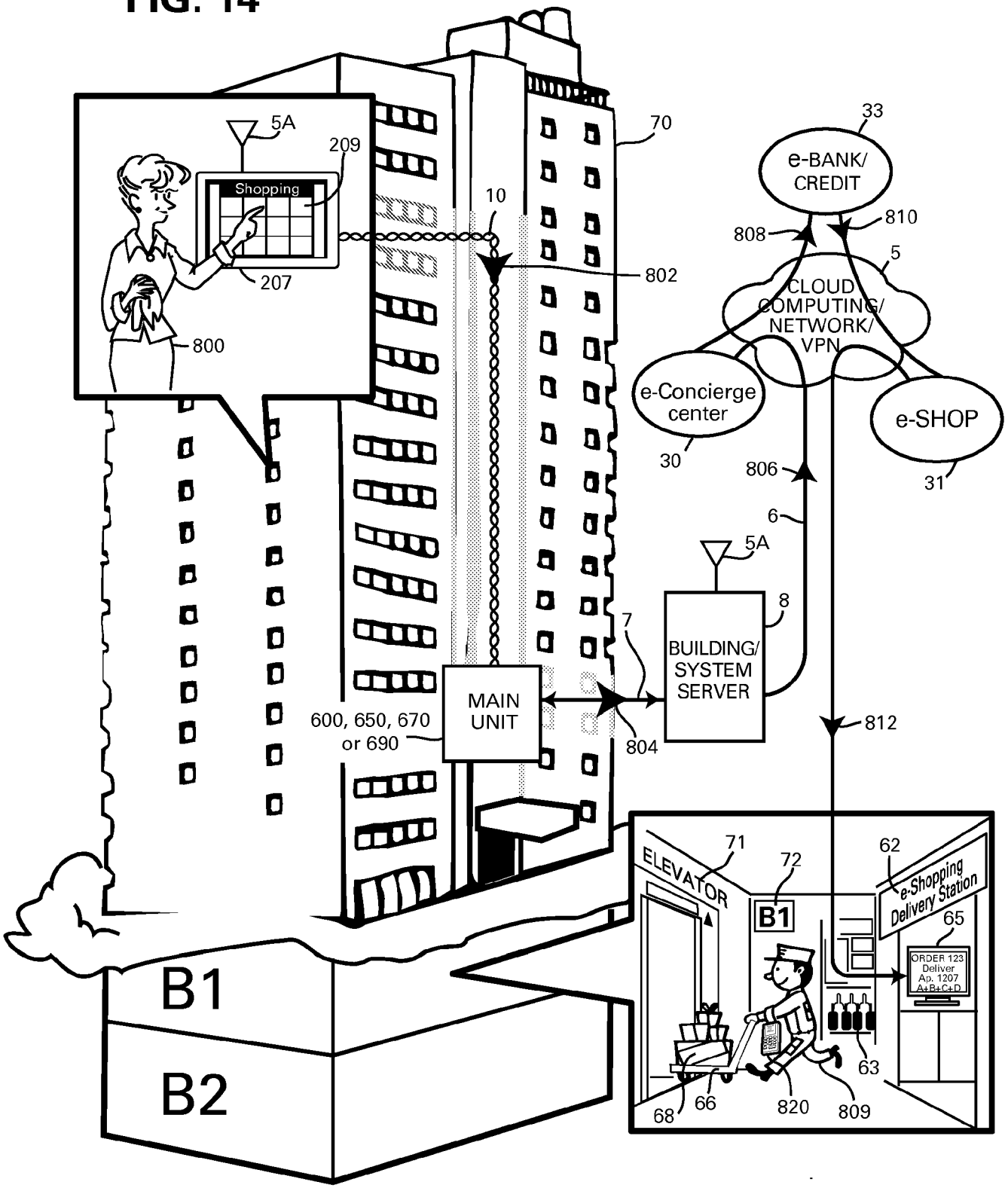

5A
209
Shopping
207
800
70
10
802
33
e-BANK/
CREDIT
808
810
5
CLOUD
COMPUTING/
NETWORK/
VPN
e-Concierge
center
30
e-SHOP
31
806
6
5A
8
7
BUILDING/
SYSTEM
SERVER
MAIN
UNIT
600, 650, 670
or 690
804
812
B1
B2
71
72
ELEVATOR
B1
62
e-Shopping
Delivery Station
65
ORDER 123
Deliver
Ap. 1207
A+B+C+D
63
68
66
820
809

FIG. 15A

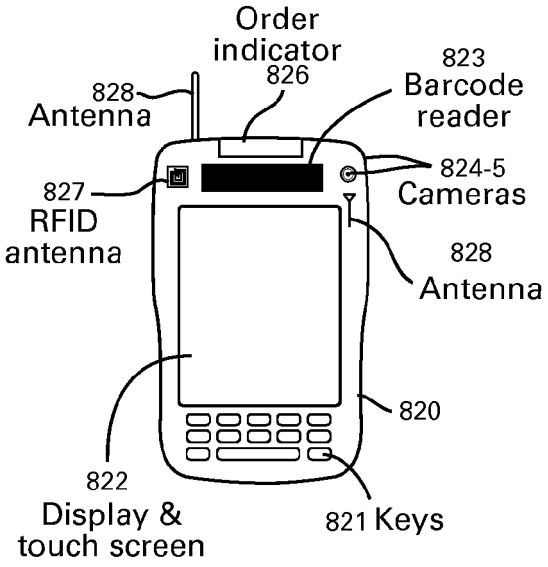


FIG. 15B

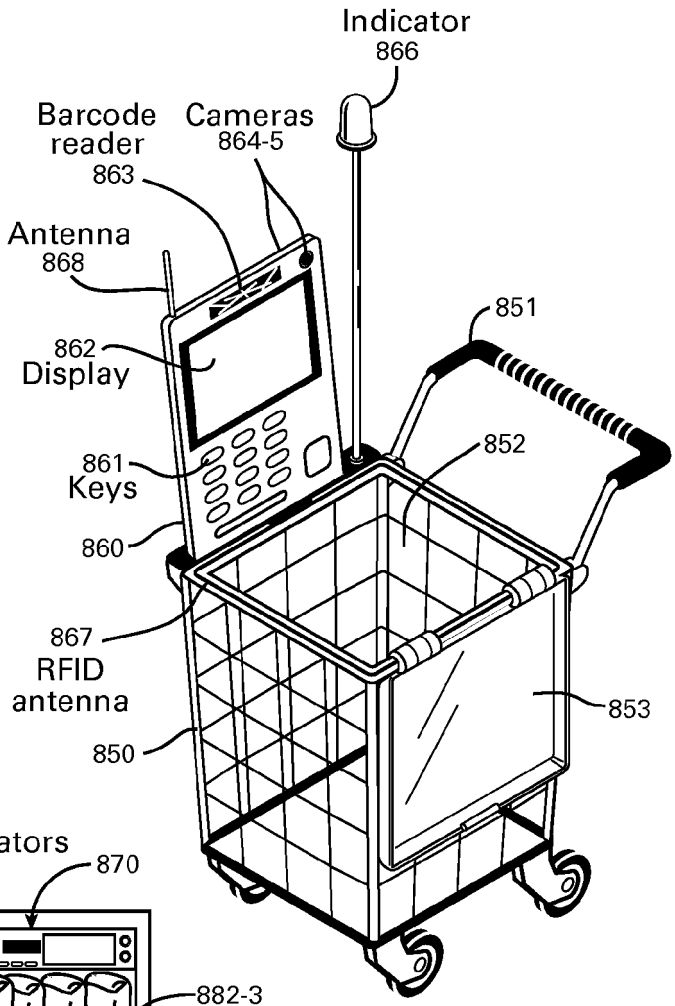


FIG. 15C

