

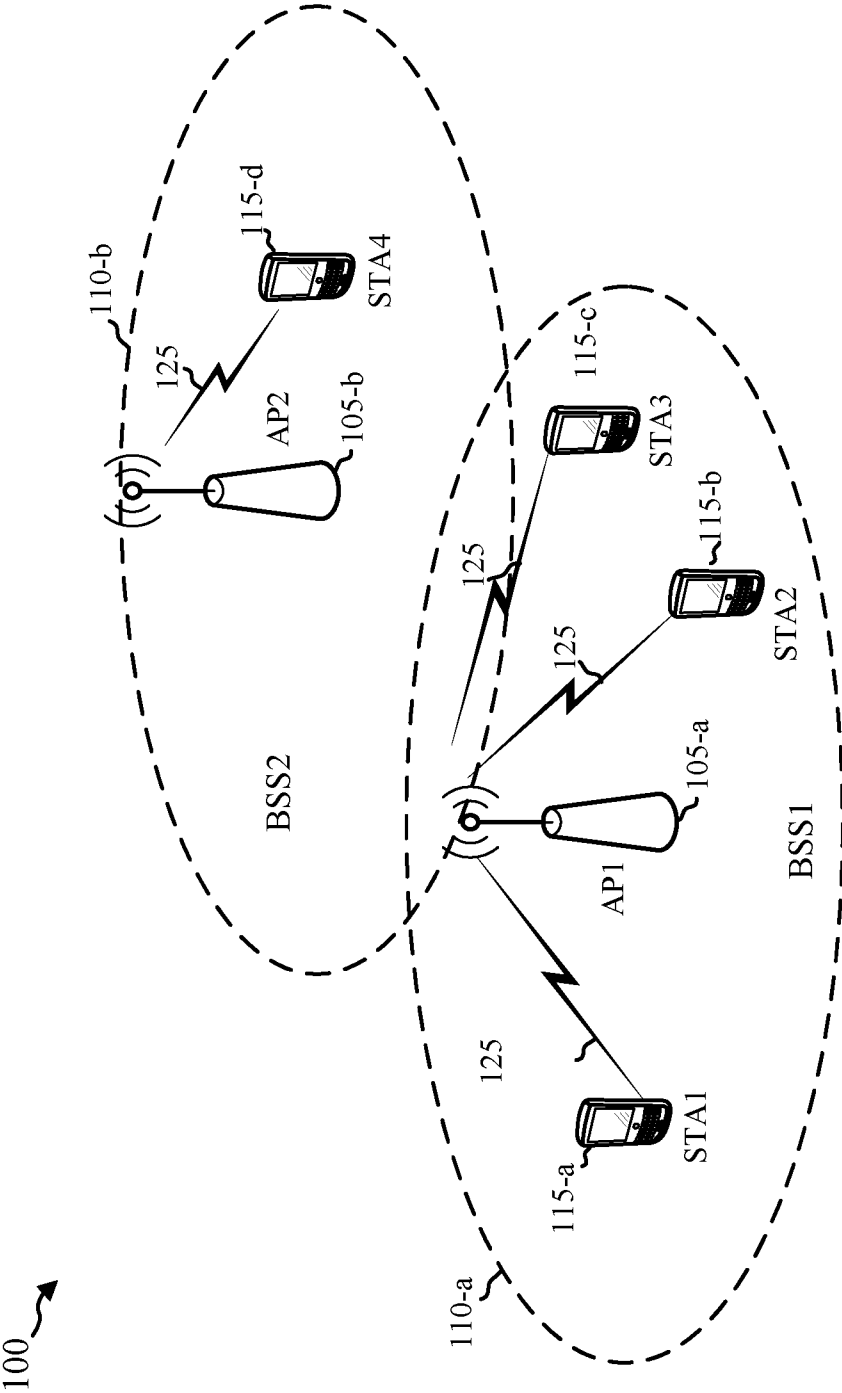


FIG. 1

200

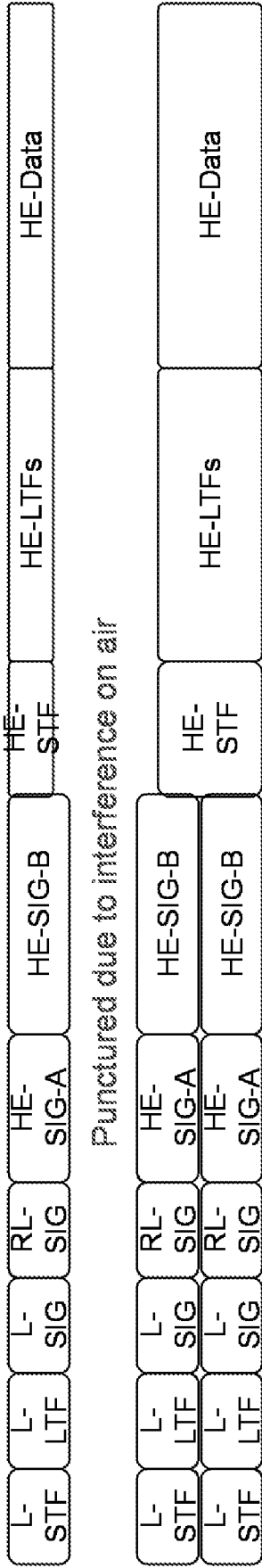
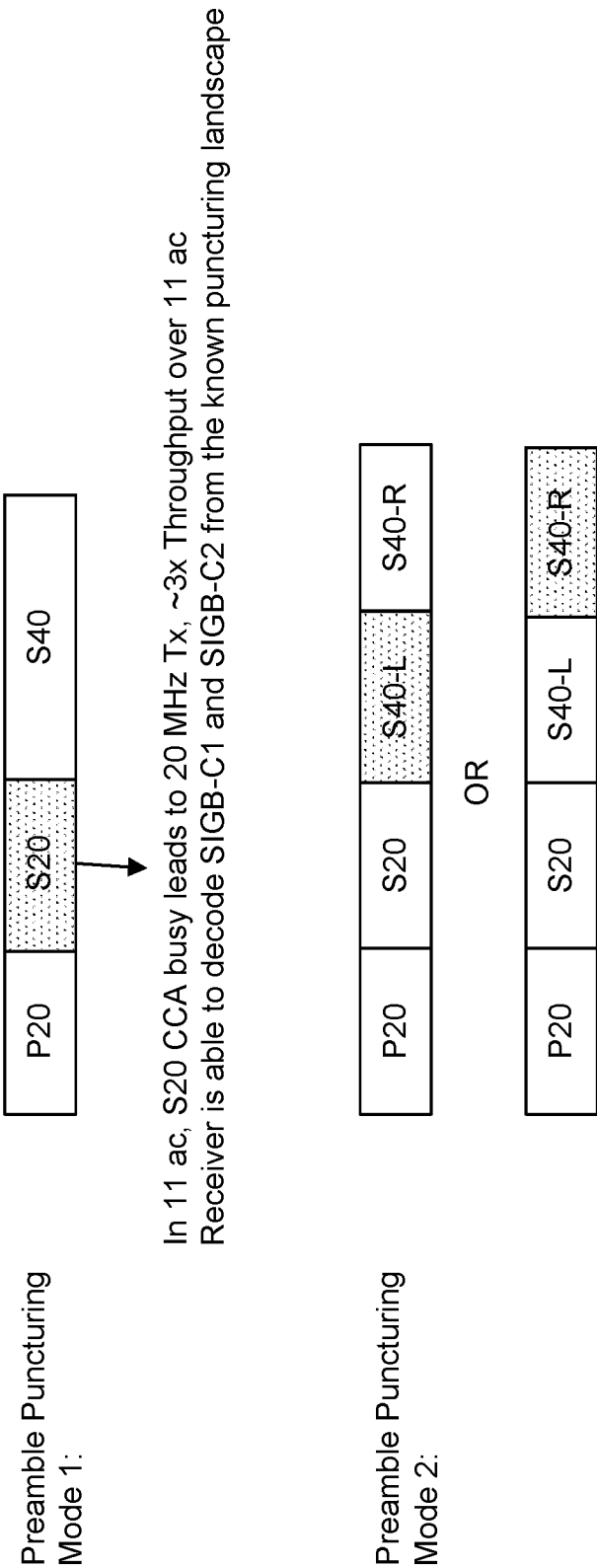


FIG. 2

300



Receiver is able to decode SIGB-C1 and SIGB-C2 from P40

FIG. 3A

310

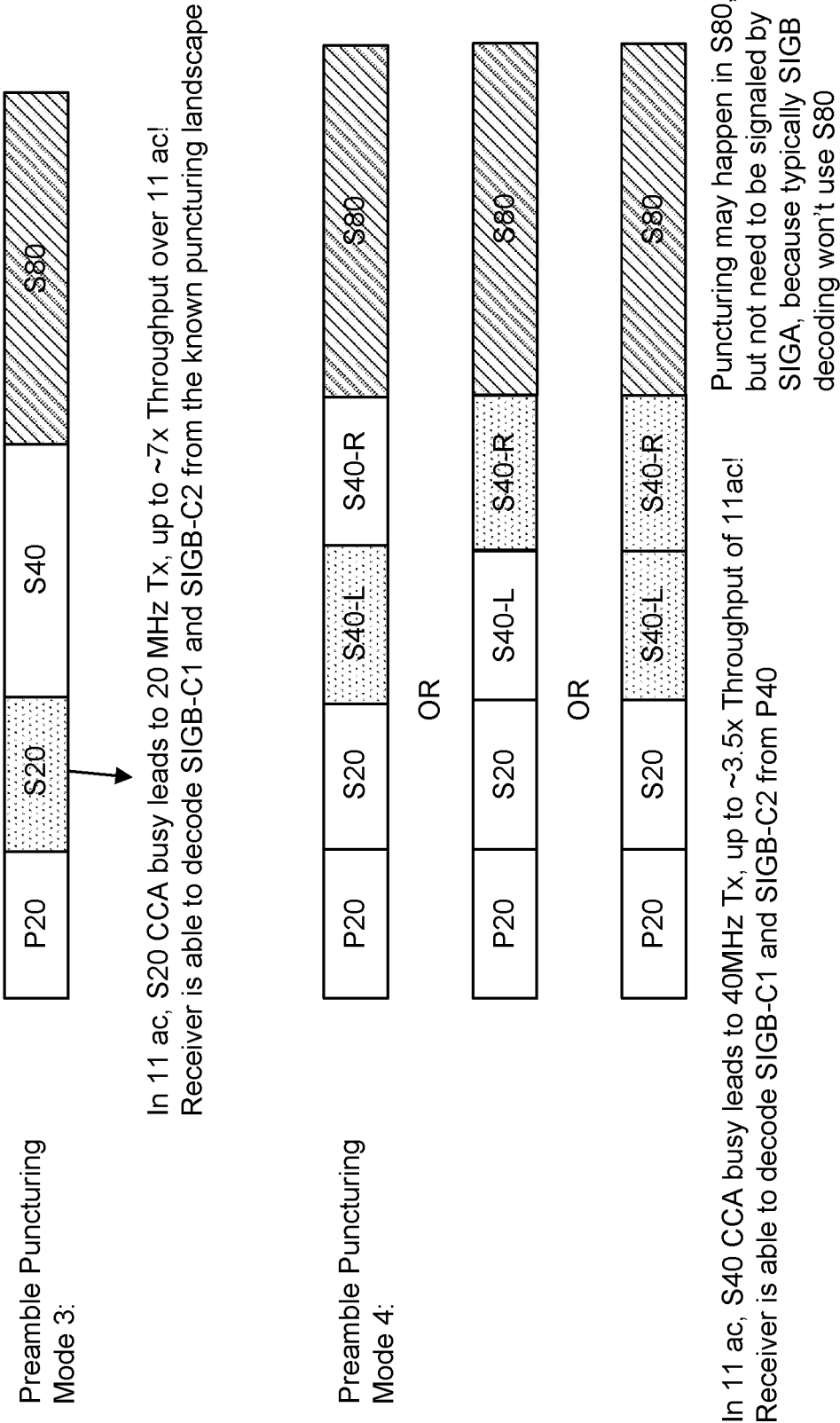


FIG. 3B

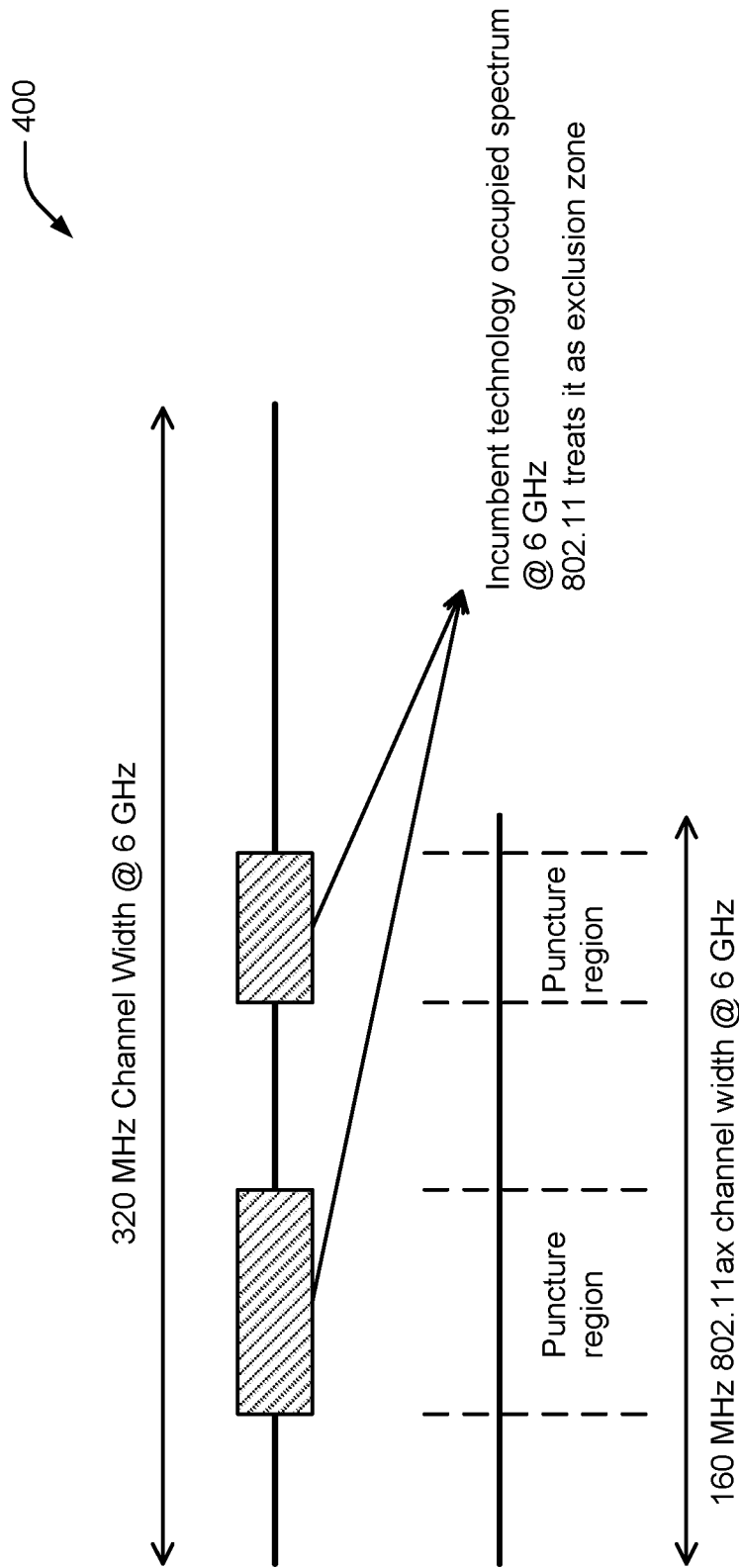


FIG. 4

500

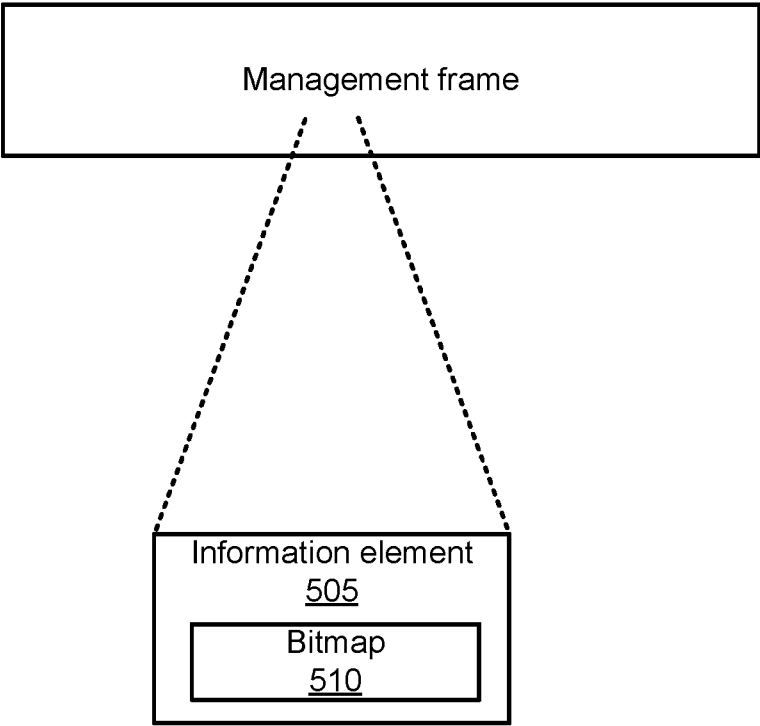


FIG. 5

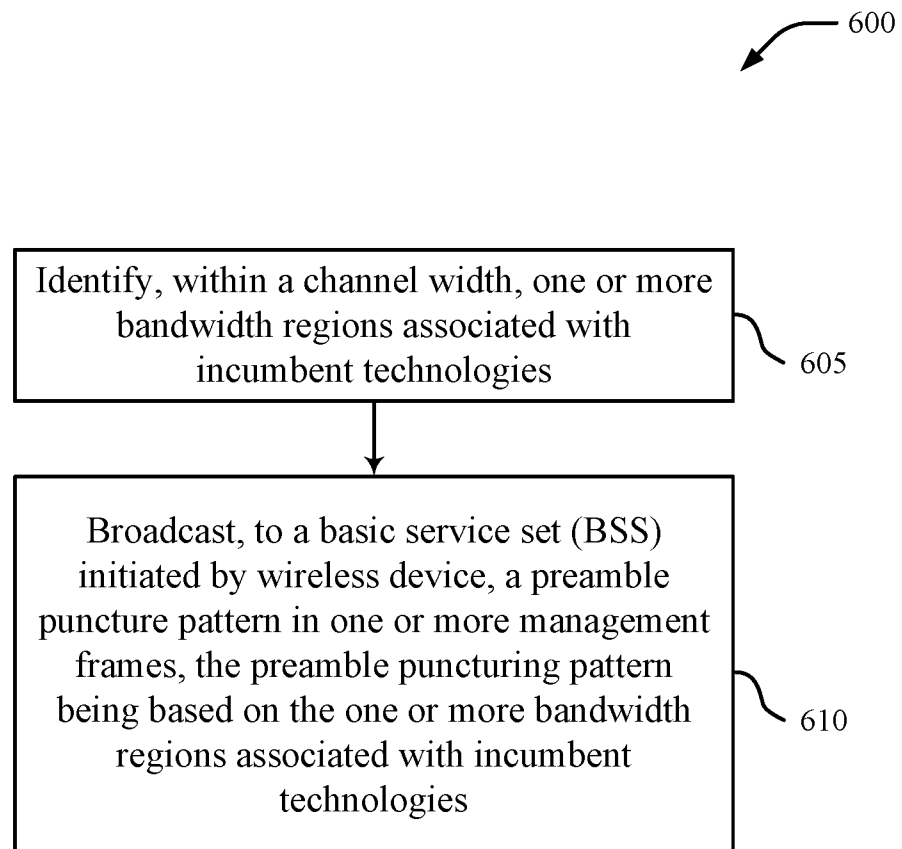


FIG. 6

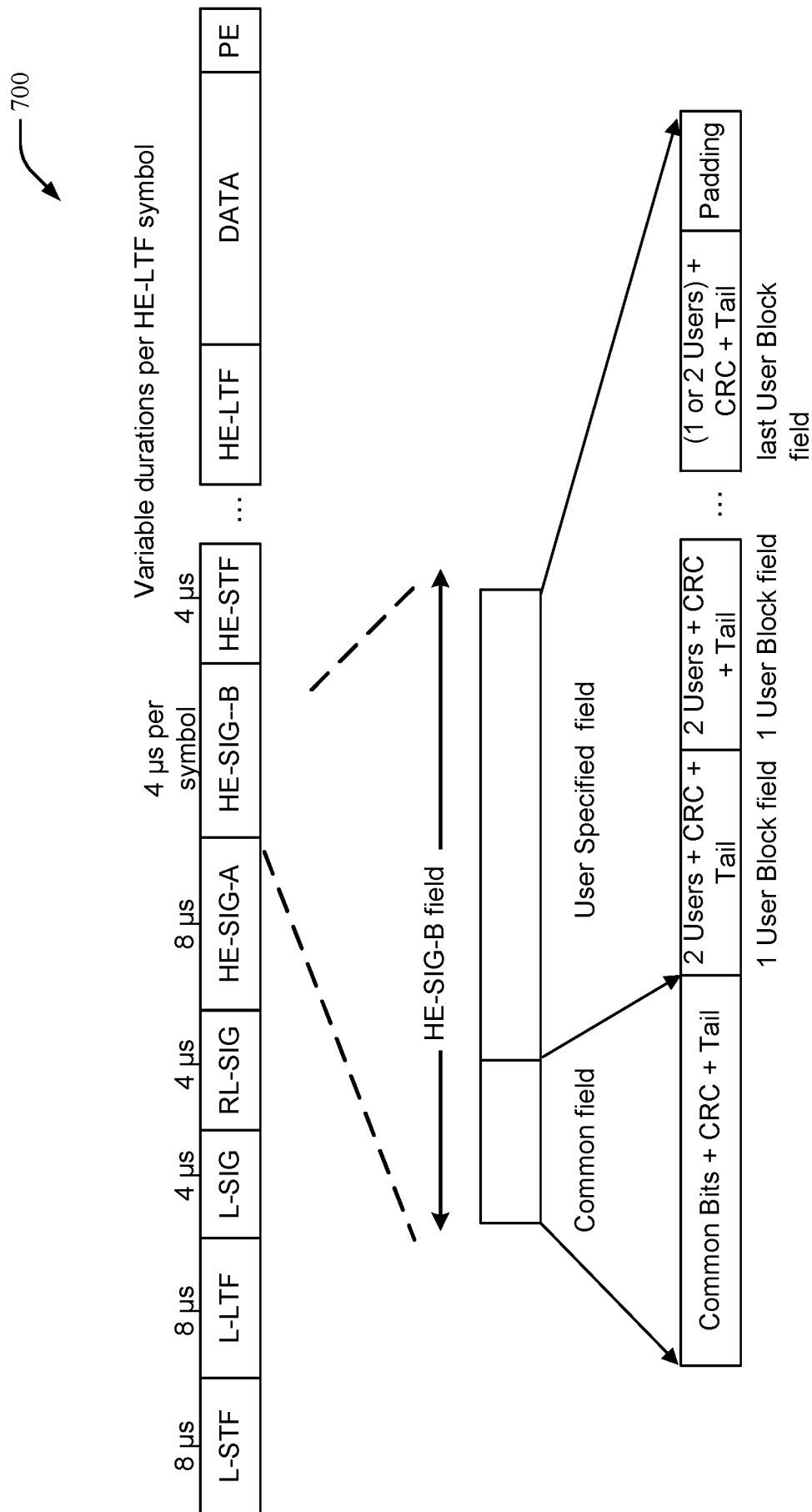
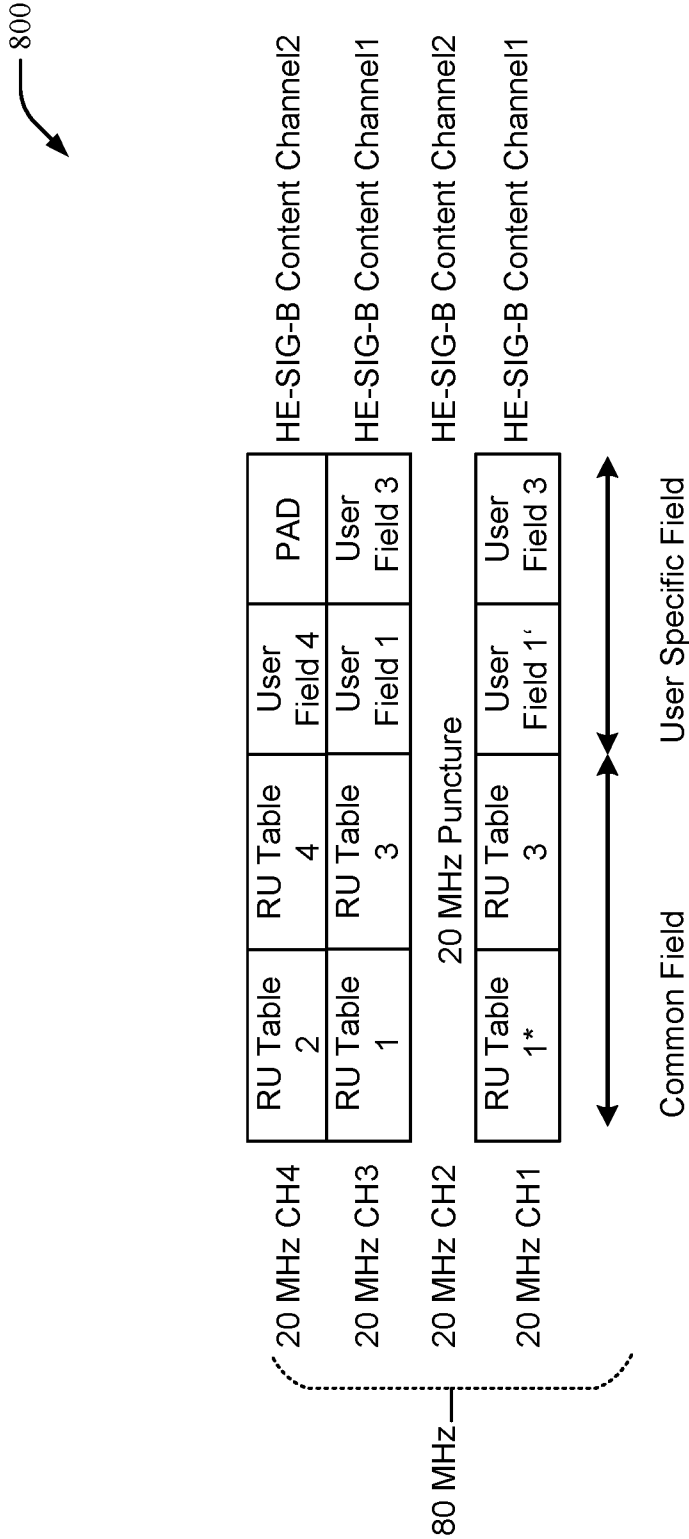


FIG. 7



- RU Table 1, 3, 4 indicates "242 with 1 user"
- RU Table 2 indicate "242 RU Empty"
- ' User Field 1 – 4, has STA ID that is assigned the RU allocation signaled in RU Table

FIG. 8A

- RU Table 1, 3, 4, 5, 6, 7 indicates “242 with 1 user”
- RU Table 2 indicate “242 RU Empty”; No User field for it
- ‘ User Field 1 – 8, has STA ID that is assigned the RU allocation signaled in RU Table

810

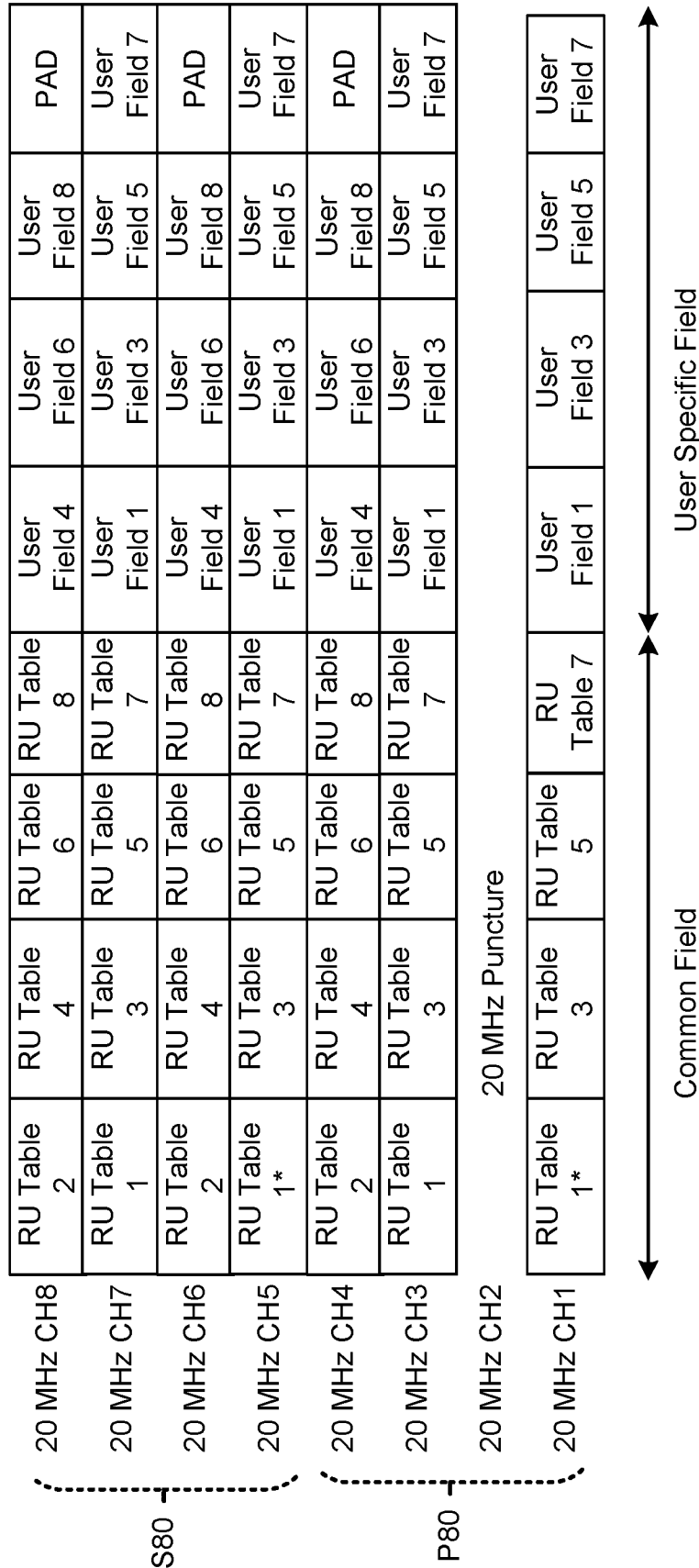


FIG. 8B

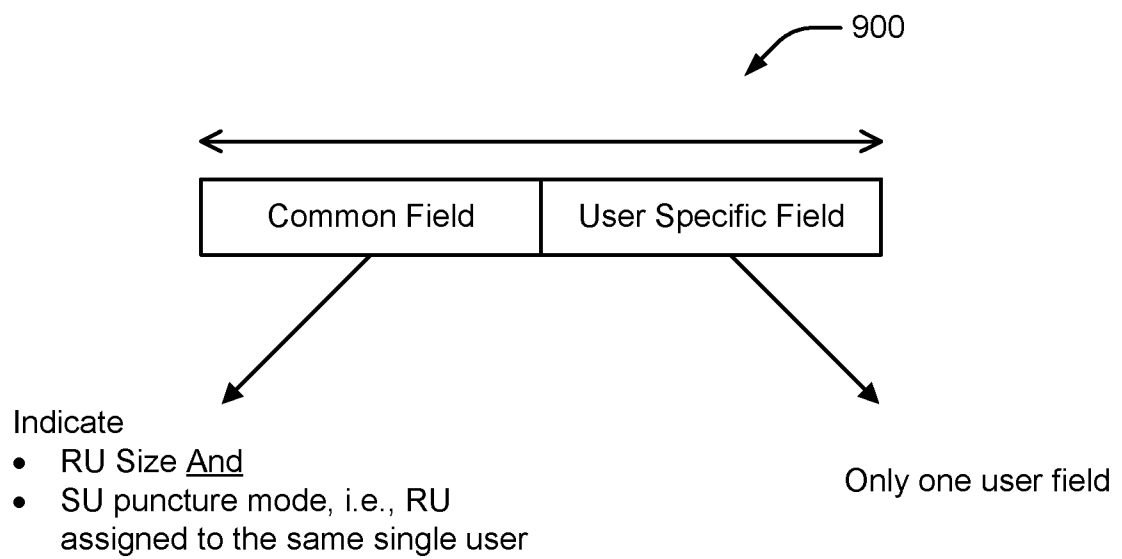
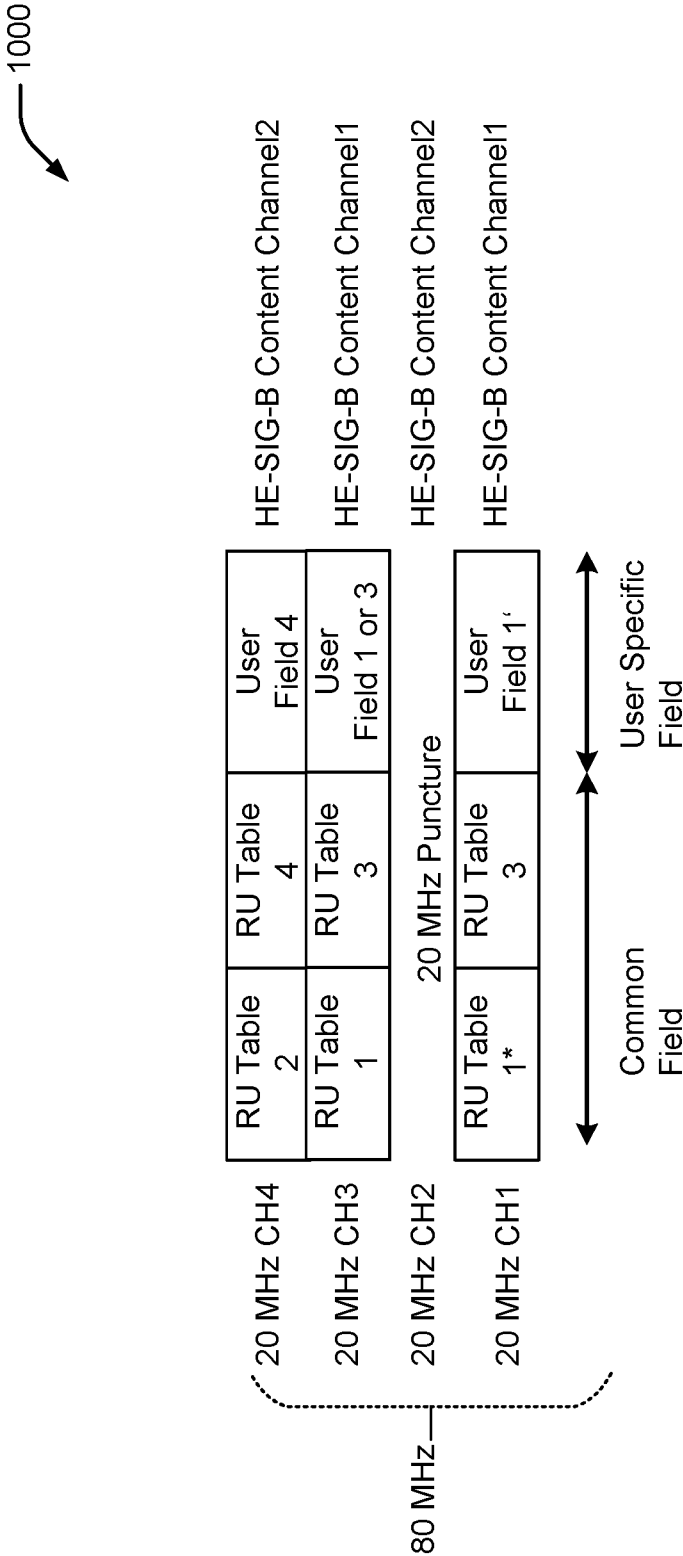
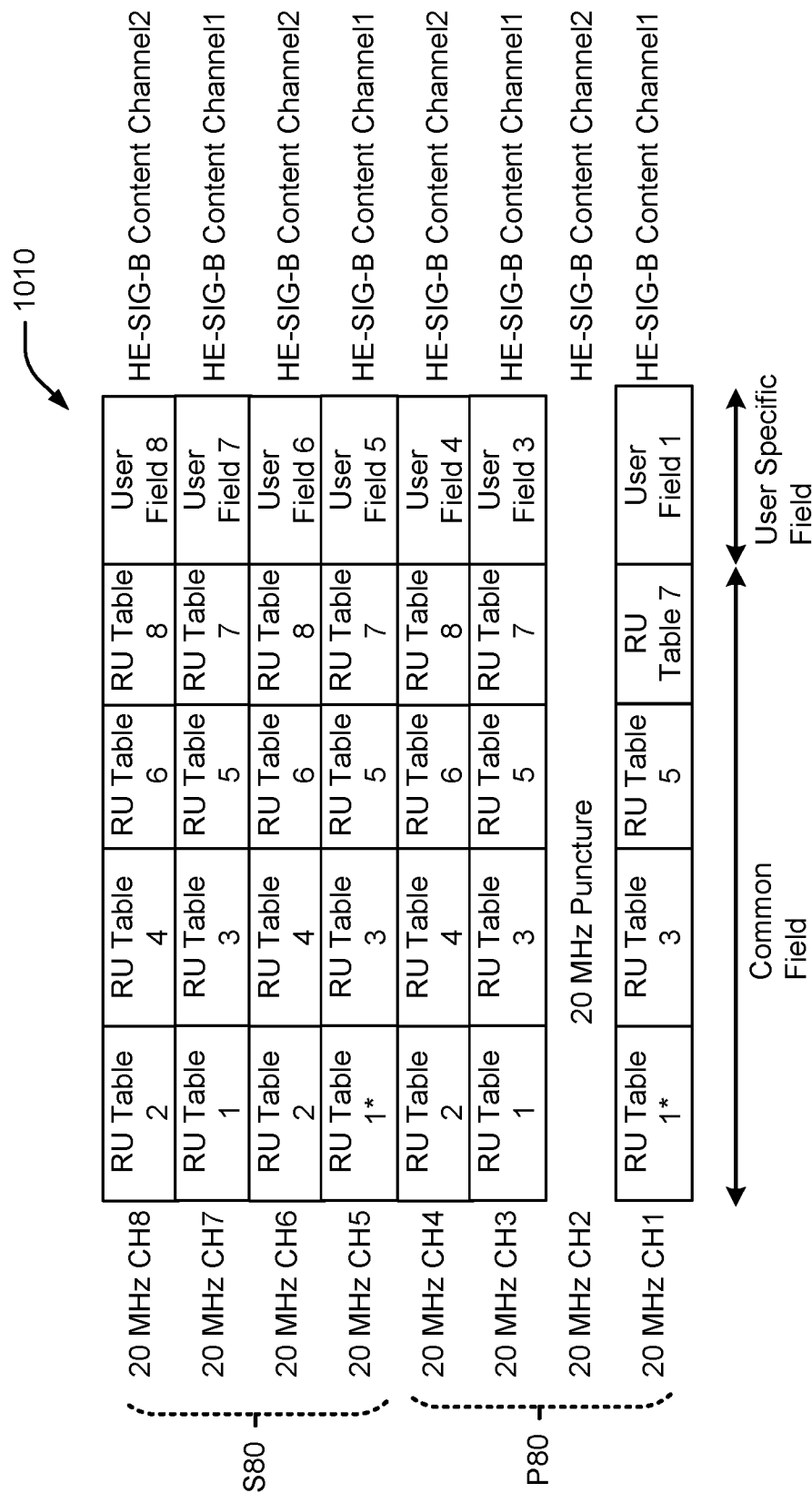


FIG. 9



- * RU Table 1 - 4 indicates "242 assigned to the same single user"
- ' User Field 1 has STA ID that is assigned the RU allocation signaled in RU Table 1 - 4

FIG. 10A



- * RU Table 1 – 8 indicates “242 assigned to the same single user”
- ‘ User Field 1 has STA ID that is assigned the RU allocation signaled in RU Table 1 - 8

FIG. 10B

 1100

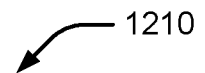
Subfield	Number of bits	Description
RU Allocation	$N \times 8$	Indicates the RU assignment in the frequency domain. It also indicates the number of users in each RU. For RUs of size greater than or equal to 106-tones that support MU-MIMO, it indicates the number of users multiplexed using MU-MIMO. Consists of N RU Allocation subfields: N = 1 for a 20 MHz and a 40 MHz HE MU PPDU N = 2 for a 80 MHz HE MU PPDU N = 4 for a 160 MHz or 80+80 MHz HE MU PPDU
Center 26-tone RU	1	This field is present only when the value of the Bandwidth field of HE-SIG-A field in an HE MU PPDU is set to greater than 1. When the Bandwidth field of the HE-SIG-A field in an HE MU PPDU is set to 2, 4 or 5 for 80 MHz: Set to 1 to indicate that a user is allocated to the center 26-tone RU (see Figures 28-7 (RU locations in an 80 MHz HE PPDU)); otherwise, set to 0. Use the same value in both HE-SIG-B content channels. When the Bandwidth field of the HE-SIG-A field in an HE MU PPDU is set to 3, 6 or 7 for 160 MHz or 80+80 MHz: For HE-SIG-B content channel 1, set to 1 to indicate that a user is allocated to the center 26-tone RU of the lower frequency 80 MHz; otherwise, set to 0. For HE-SIG-B content channel 2, set to 1 to indicate that a user is allocated to the center 26-tone RU of the higher frequency 80 MHz; otherwise, set to 0.
CRC	4	See 28.3.10.7.3 (CRC computation)
Tail	6	Used to terminate the trellis of the convolutional decoder. Set to 0
NOTE—Integer fields are transmitted in unsigned binary format, LSB first, where the LSB is in the lowest numbered bit position.		

FIG. 11

 1200

8 bits indices (B7 B6 B5 B4 B3 B2 B1 B0)	#1	#2	#3	#4	#5	#6	#7	#8	#9	Number of entries
00000000	26	26	26	26	26	26	26	26	26	1
00000001	26	26	26	26	26	26	26	52		1
00000010	26	26	26	26	26	52		26	26	1
00000011	26	26	26	26	26	52		52		1
00000100	26	26	52		26	26	26	26	26	1
00000101	26	26	52		26	26	26	52		1
00000110	26	26	52		26	52		26	26	1
00000111	26	26	52		26	52		52		1
00001000	52		26	26	26	26	26	26	26	1
00001001	52		26	26	26	26	26	52		1
00001010	52		26	26	26	52		26	26	1
00001011	52		26	26	26	52		52		1
00001100	52		52		26	26	26	26	26	1
00001101	52		52		26	26	26	52		1
00001110	52		52		26	52		26	26	1
00001111	52		52		26	52		52		1
00010 _{y₂y₁y₀}	52		52		-	106				8
00011 _{y₂y₁y₀}	106				-	52		52		8
00100 _{y₂y₁y₀}	26	26	26	26	26	106				8

FIG. 12A


 1210

8 bits indices (B7 B6 B5 B4 B3 B2 B1 B0)	#1	#2	#3	#4	#5	#6	#7	#8	#9	Number of entries
00101 $y_2y_1y_0$	26	26	52		26	106				8
00110 $y_2y_1y_0$	52		26	26	26	106				8
00111 $y_2y_1y_0$	52		52		26	106				8
01000 $y_2y_1y_0$	106				26	26	26	26	26	8
01001 $y_2y_1y_0$	106				26	26	26	52		8
01010 $y_2y_1y_0$	106				26	52		26	26	8
01011 $y_2y_1y_0$	106				26	52		52		8
0110 $y_1y_0y_1y_0$	106				—	106				16
01110000	52		52		—	52		52		1
01110001	242-tone RU empty									1
01110010	484-tone RU with no User fields in the HE-SIG-B content channel containing this RU Allocation subfield									1
01110011	996-tone RU with no User fields in the HE-SIG-B content channel containing this RU Allocatoin subfield									1
011101 x_1x_0	Reserved									4
01111 $y_2y_1y_0$	Reserved									8
10 $y_2y_1y_0z_2z_1z_0$	106				26	106				64
11000 $y_2y_1y_0$	242									8
11001 $y_2y_1y_0$	484									8
11010 $y_2y_1y_0$	996									8
11011 $y_2y_1y_0$	2x996									8
111 $x_4x_3x_2x_1x_0$	Reserved									32

FIG. 12B

 1220

8 bits indices (B7 B6 B5 B4 B3 B2 B1 B0)	#1	#2	#3	#4	#5	#6	#7	#8	#9	Number of entries
<p>In the case of load balancing for RUs of size greater than 242-tone RU, $y_2y_1y_0 = 000-111$ indicates number of User fields in the HE-SIG-B content channel that contains the corresponding 8-bit RU Allocation subfield. Otherwise, $y_2y_1y_0 = 000-111$ indicates number of STAs multiplexed in the 106-tone RU, 242-tone RU or the lower frequency 106-tone RU if there are two 106-tone RUs and one 26-tone RU is assigned between two 106-tone RUs. The binary vector $y_2y_1y_0$ indicates $22 \times y_2 + 21 \times y_1 + y_0 + 1$ STAs multiplexed the RU.</p> <p>$z_2z_1z_0 = 000-111$ indicates number of STAs multiplexed in the higher frequency 106-tone RU if there are two 106-tone RUs and one 26-tone RU is assigned between two 106-tone RUs. The binary vector $z_2z_1z_0$ indicates $22 \times z_2 + 21 \times z_1 + z_0 + 1$ STAs multiplexed in the RU.</p> <p>Similarly, $y_1y_0 = 00-11$ indicates number of STAs multiplexed in the lower frequency 106-tone RU. The binary vector y_1y_0 indicates $21 \times y_1 + y_0 + 1$ STAs multiplexed in the RU.</p> <p>Similarly, $z_1z_0 = 00-11$ indicates number of STAs multiplexed in the lower frequency 106-tone RU. The binary vector z_1z_0 indicates $21 \times y_1 + y_0 + 1$ STAs multiplexed in the RU.</p> <p>#1 to #9 (from left to the right) is ordered in increasing order of the absolute frequency.</p> <p>$x_1x_0 = 00-11$, $x_4x_3x_2x_1x_0 = 00000-11111$.</p> <p>'-' means no STA in that RU.</p>										

FIG. 12C

 1300

Bit	Field	Number of bits	Description
B0-B10	STA-ID	11	Set to a value of the element indicated from TXVECTOR parameter STA_ID_LIST (see 27.11.1 (STA_ID_LIST)).
B11-B13	NSTS	3	Number of spatial streams. Set to the number of space-time streams minus 1.
B14	Tx Beamforming	1	Use of transmit beamforming. Set to 1 if a beamforming steering matrix is applied to the waveform in an SU transmission. Set to 0 otherwise.
B15-B18	MCS	4	Modulation and coding scheme Set to n for MCS n , where $n = 0, 1, 2, \dots, 11$ Values 12 to 15 are reserved
B19	DCM	1	Indicates whether or not dual carrier modulation is used. Set to 1 to indicate that the HE-Data portion of the corresponding user of the HE MU PPDU is modulated with dual carrier modulation for the MCS. Set to 0 indicates that the payload of the PPDU is not modulated with dual carrier modulation for the MSC.
B20	Coding	1	Indicates whether BCC or LDPC is used. Set to 0 for BCC Set to 1 for LDPC
NOTE—Integer fields are transmitted in unsigned binary format, LSB first, where the LSB is in the lowest numbered bit position.			

FIG. 13

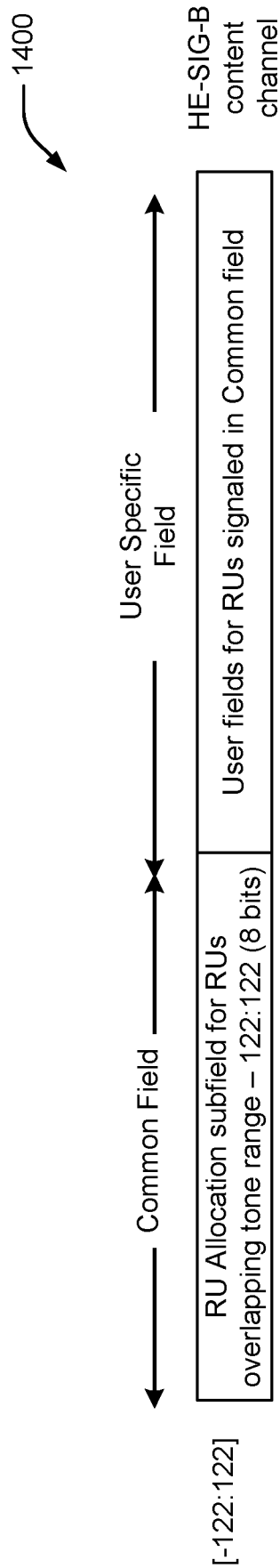


FIG. 14A

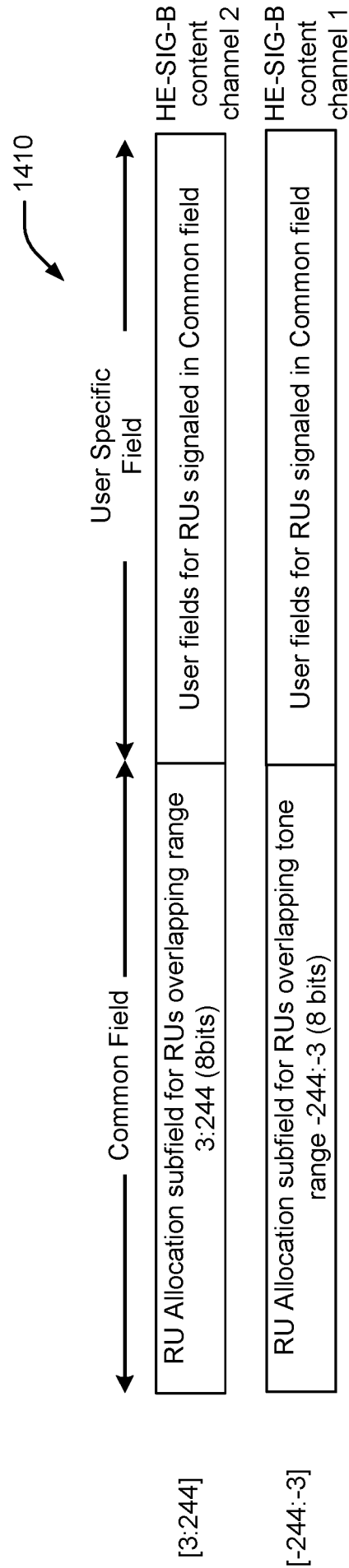


FIG. 14B

1420

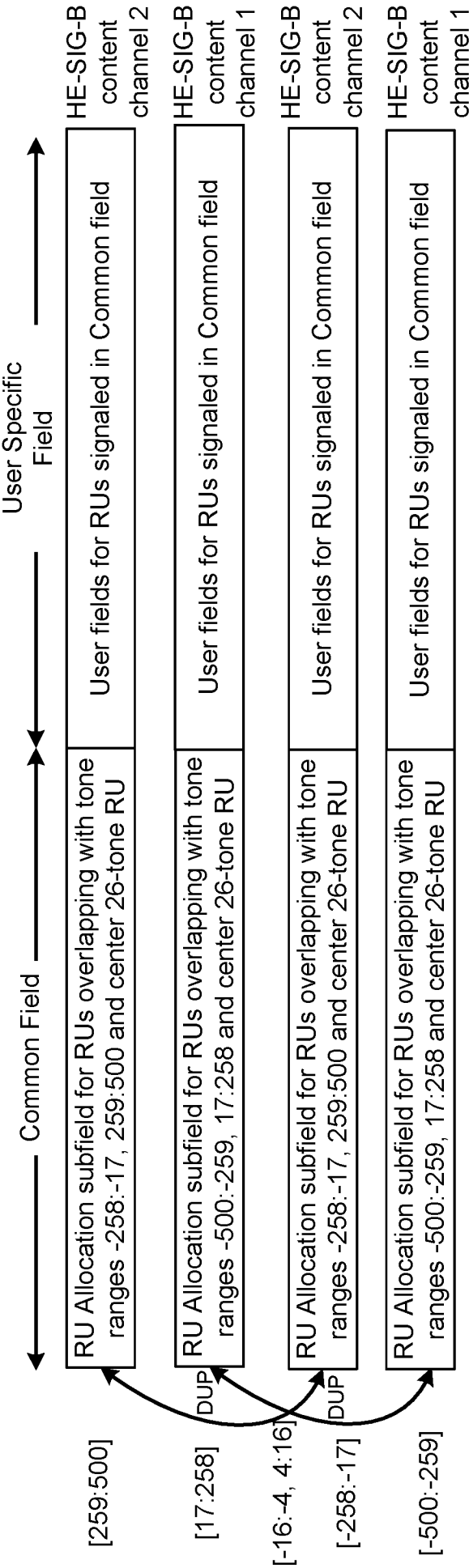


FIG. 14C

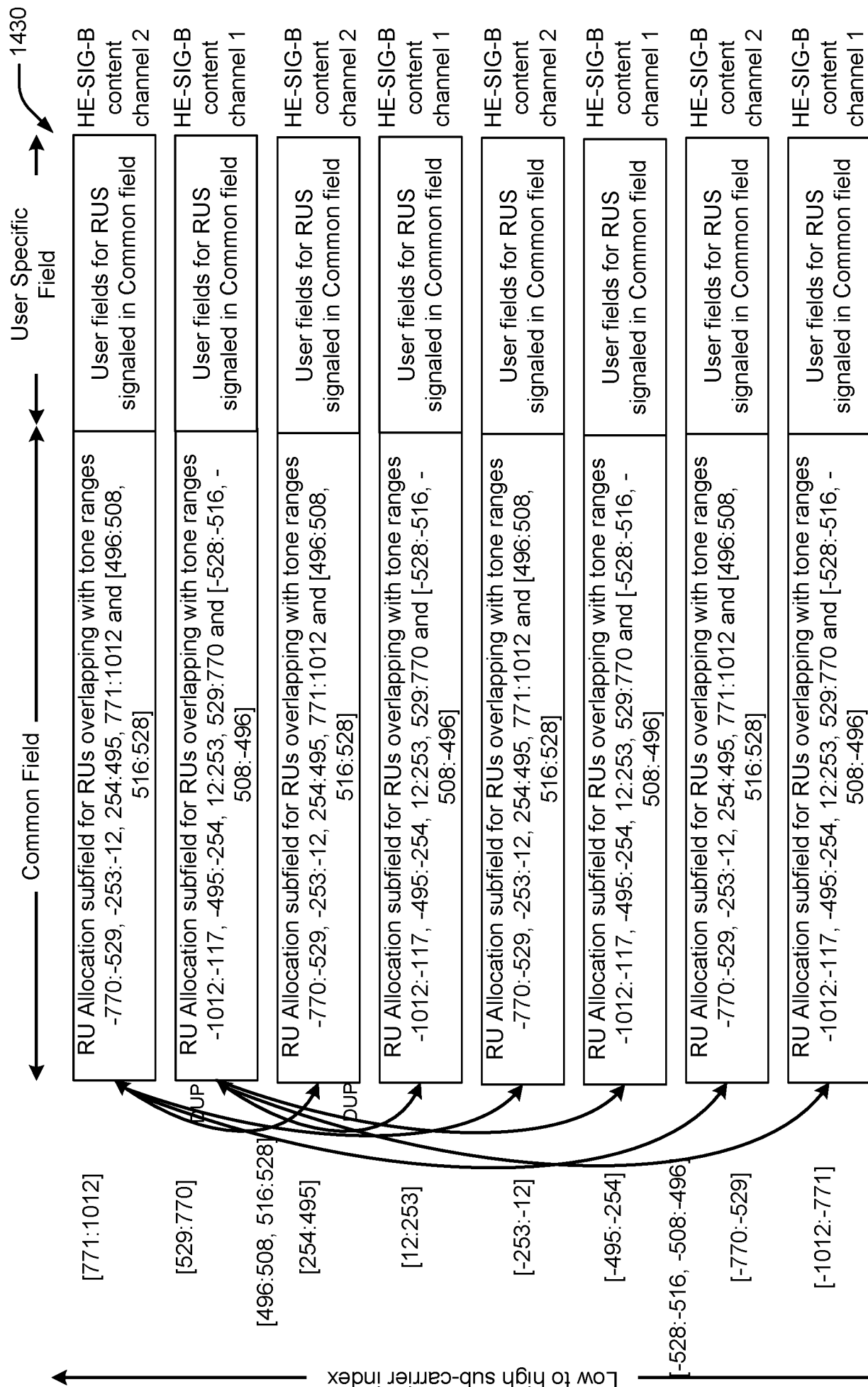


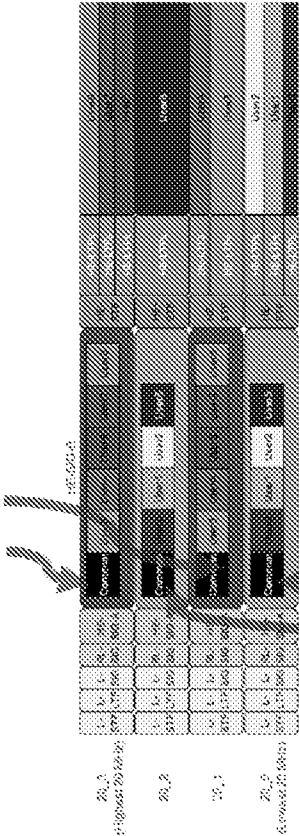
FIG. 14D

80 MHz HE MU PPDU as in D2.0 11ax

1500

SIGB Content Channel 2

Bit Location	Subfield	# of bits	Description
0:7	RU allocation	8	RU allocation for 20_1
8:15	RU allocation	8	RU allocation for 20_3
16	Center RU26	1	1 = center RU26 is used
16:19	CRC	4	
12:17	Tail	6	



SIGB Content Channel 1

Bit Location	Subfield	# of bits	Description
0:7	RU allocation	8	RU allocation for 20_0
8:15	RU allocation	8	RU allocation for 20_2
16	Center RU26	1	1 = center RU26 is used
16:19	CRC	4	
12:17	Tail	6	

FIG. 15A

1510

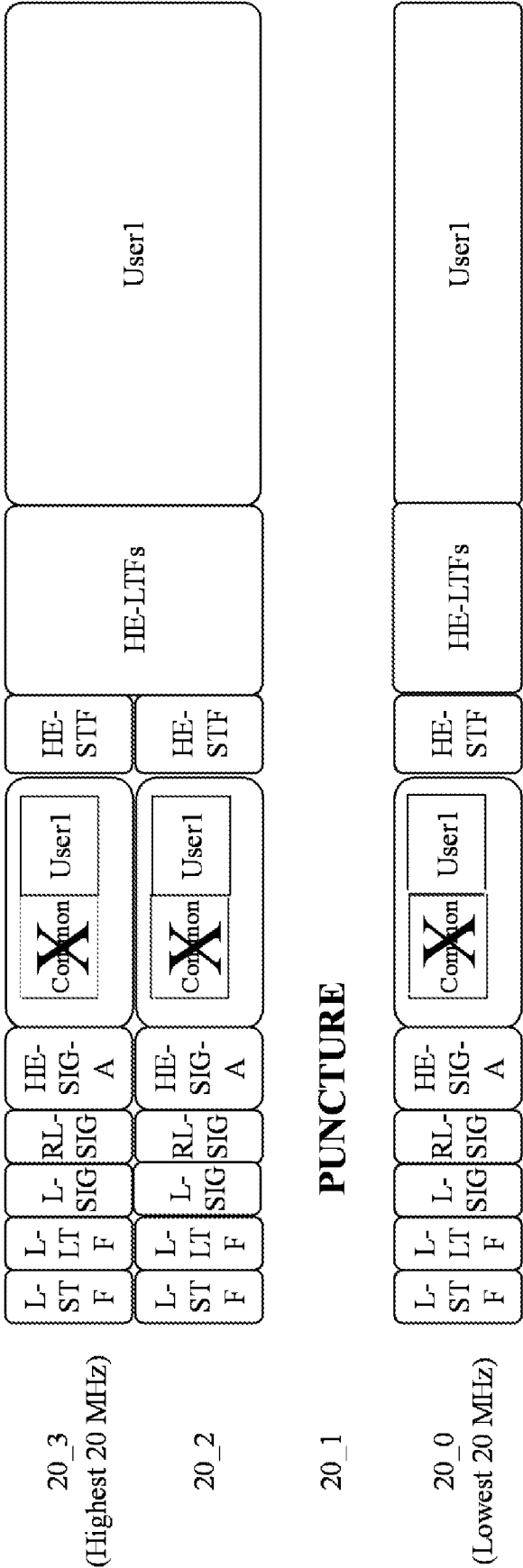


FIG. 15B

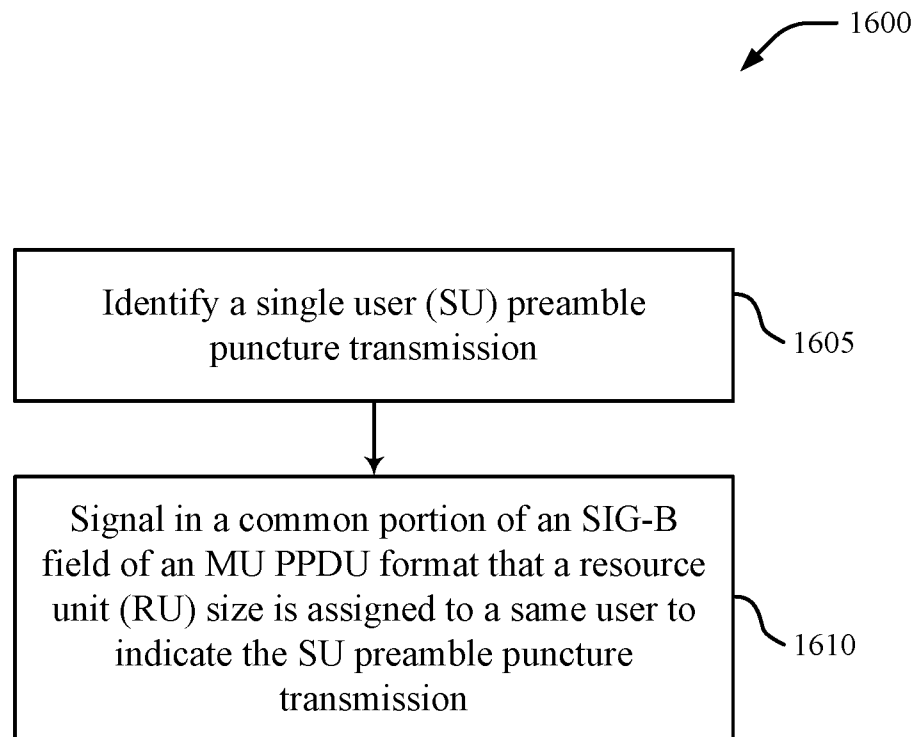


FIG. 16

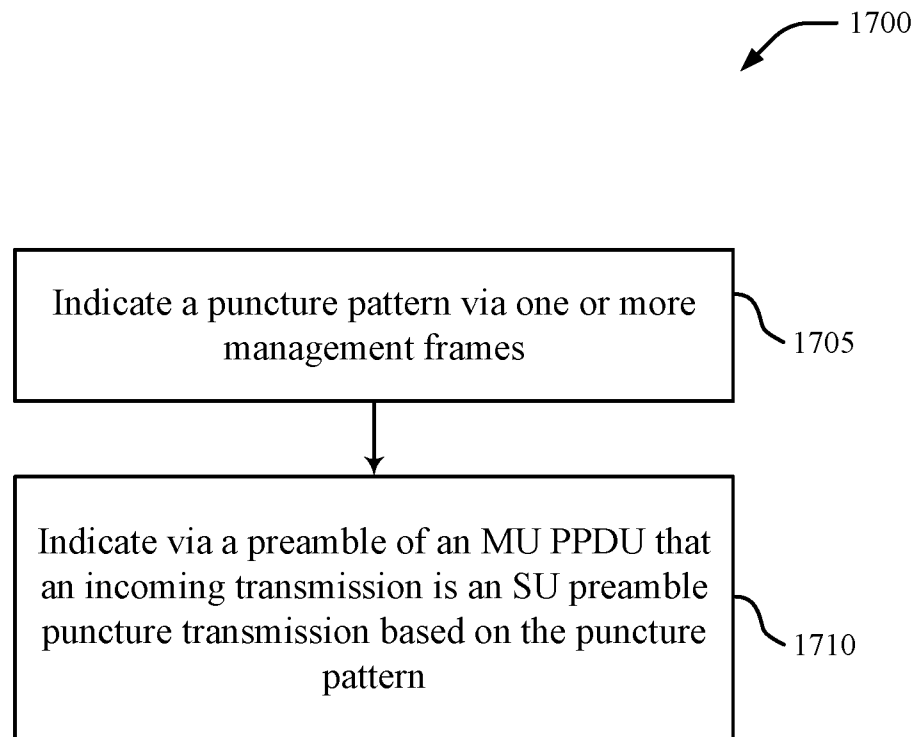


FIG. 17

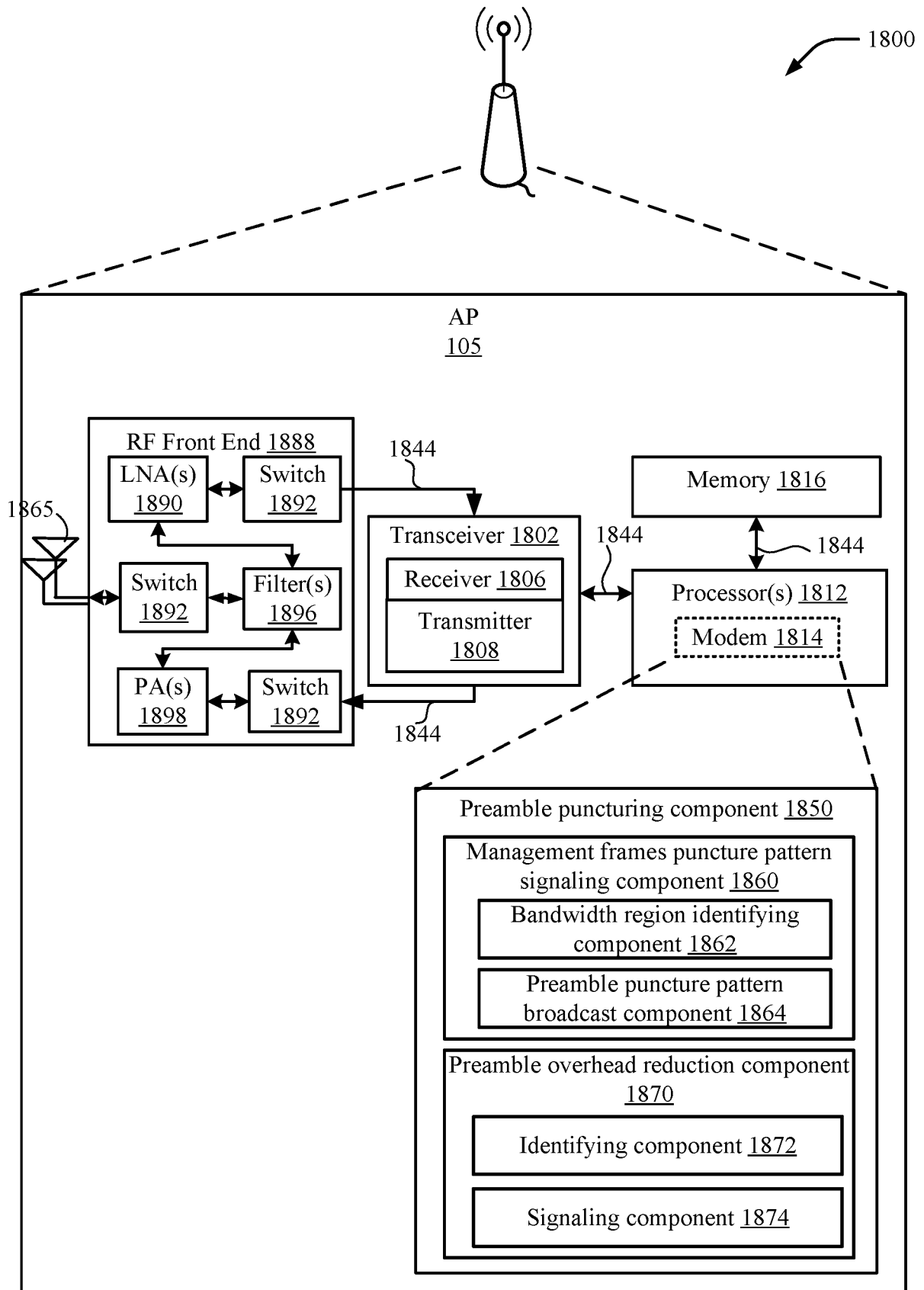


FIG. 18

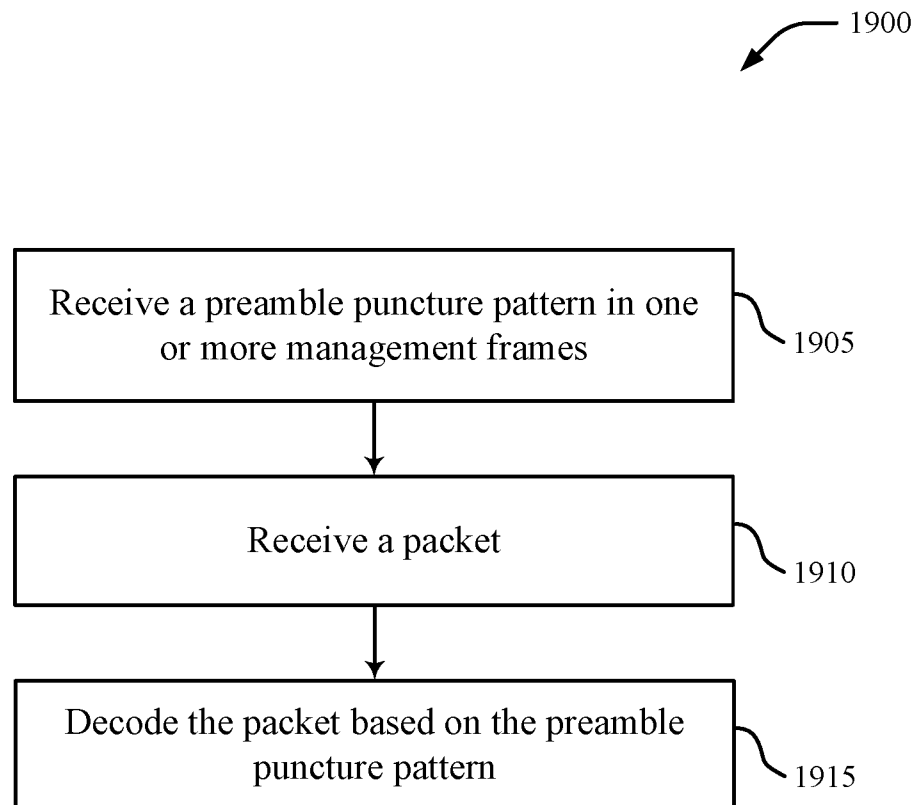


FIG. 19

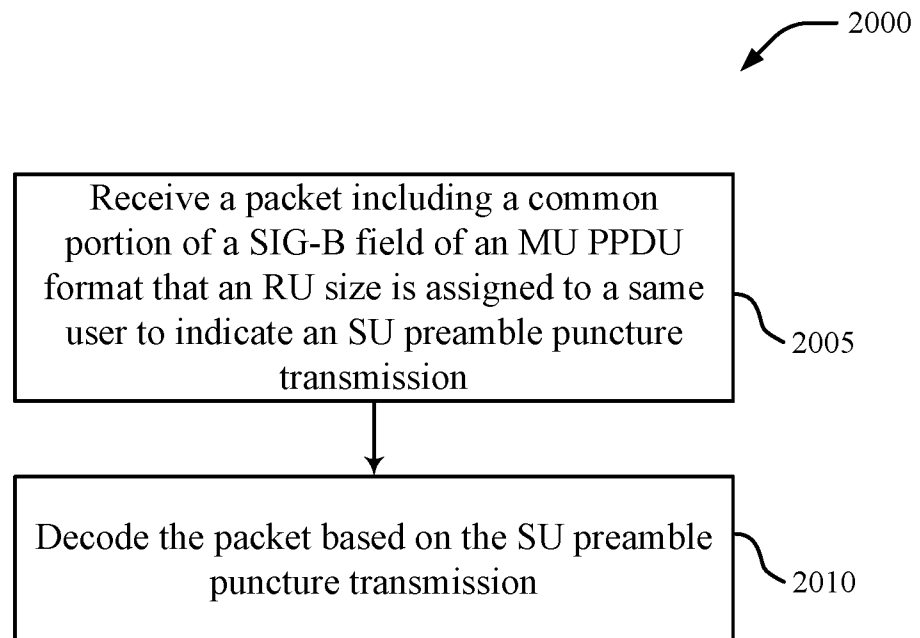


FIG. 20

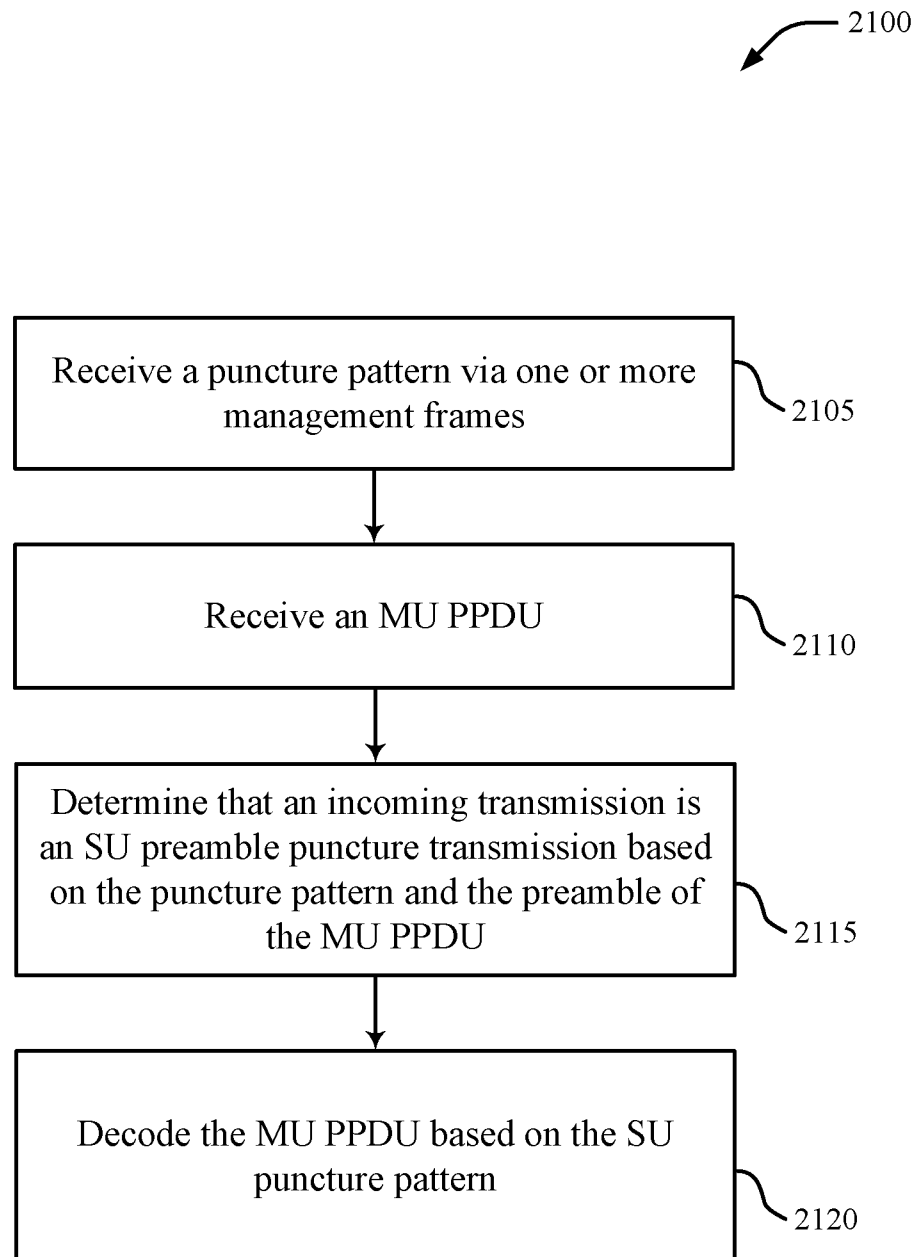


FIG. 21

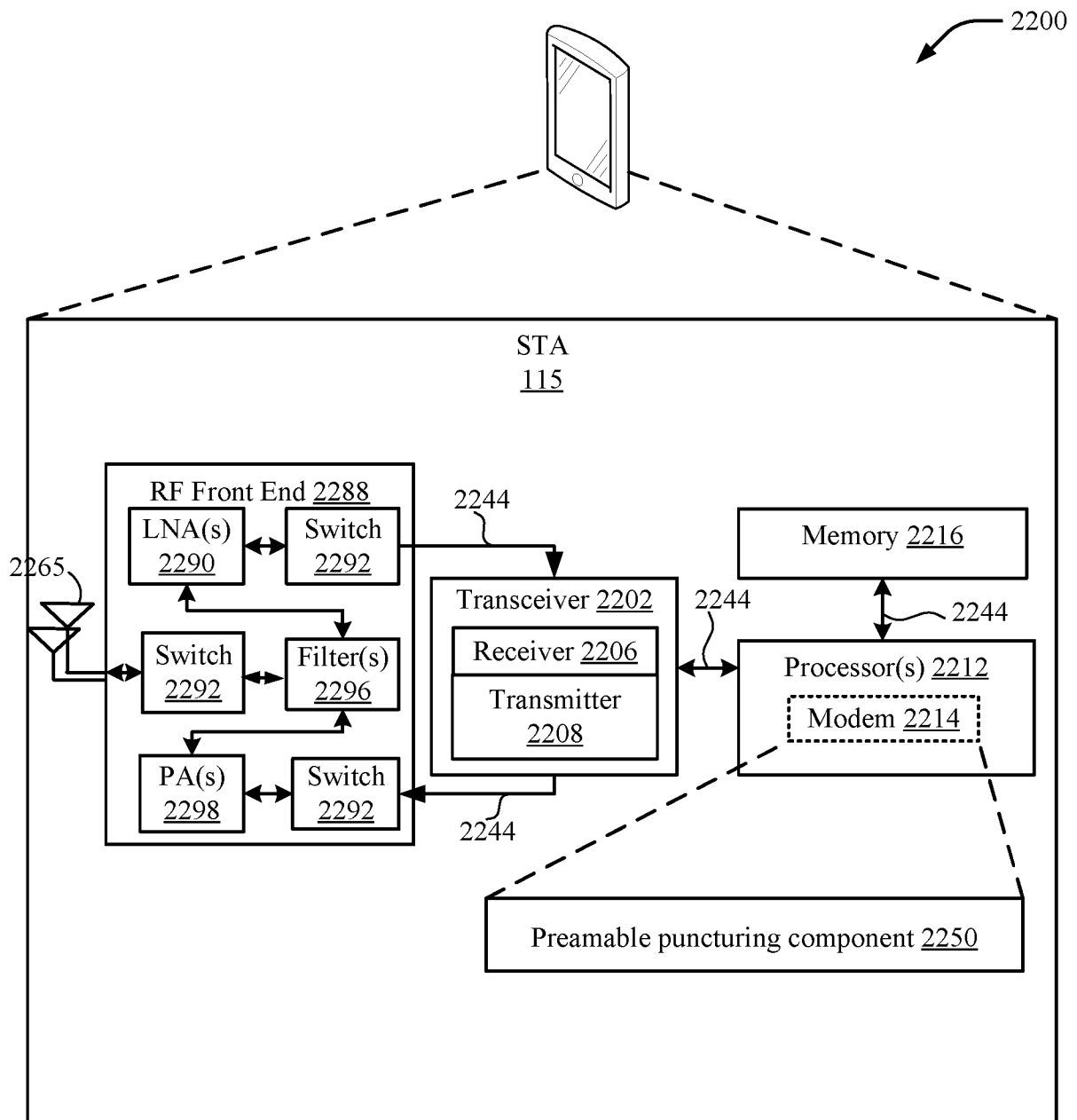


FIG. 22