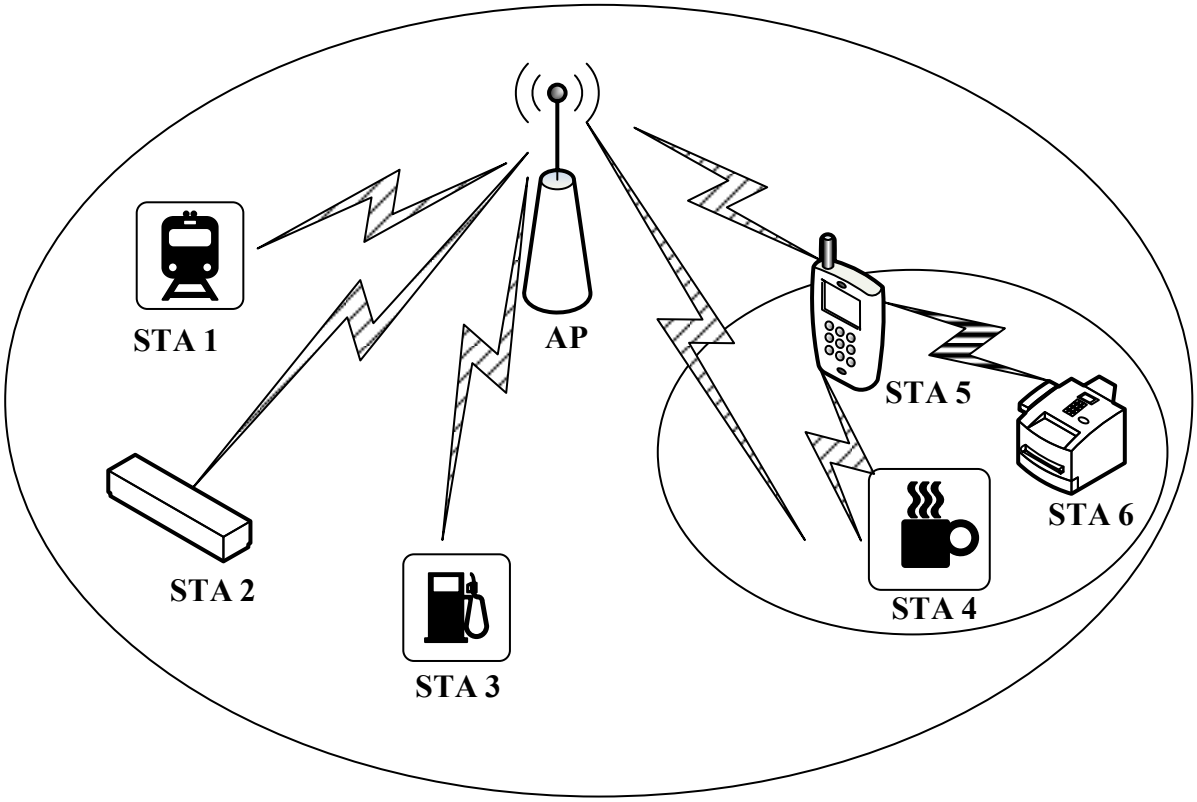

STA 1
AP
STA 5
STA 6
STA 2
STA 4
STA 3

FIG. 1

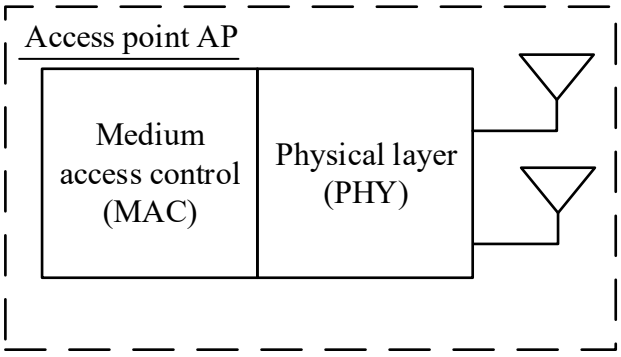

Access point AP
Medium access control (MAC)
Physical layer (PHY)

FIG. 2a

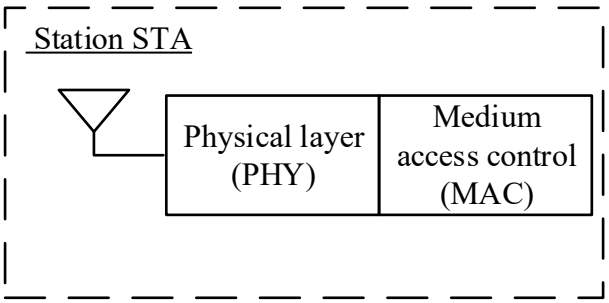


FIG. 2b

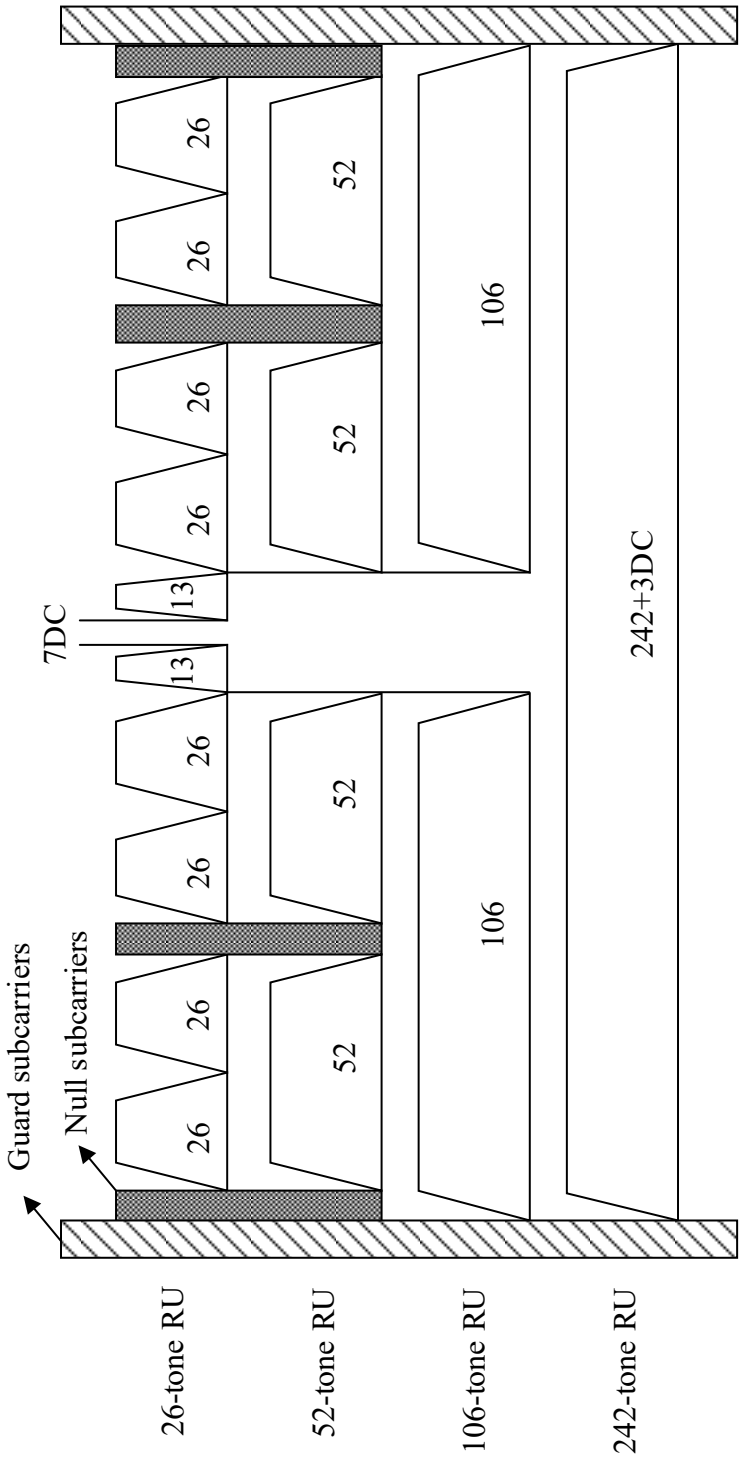

Guard subcarriers
Null subcarriers
7DC
26
52
106
242+3DC
13
26-tone RU
52-tone RU
106-tone RU
242-tone RU
Tone: Tone

FIG. 3

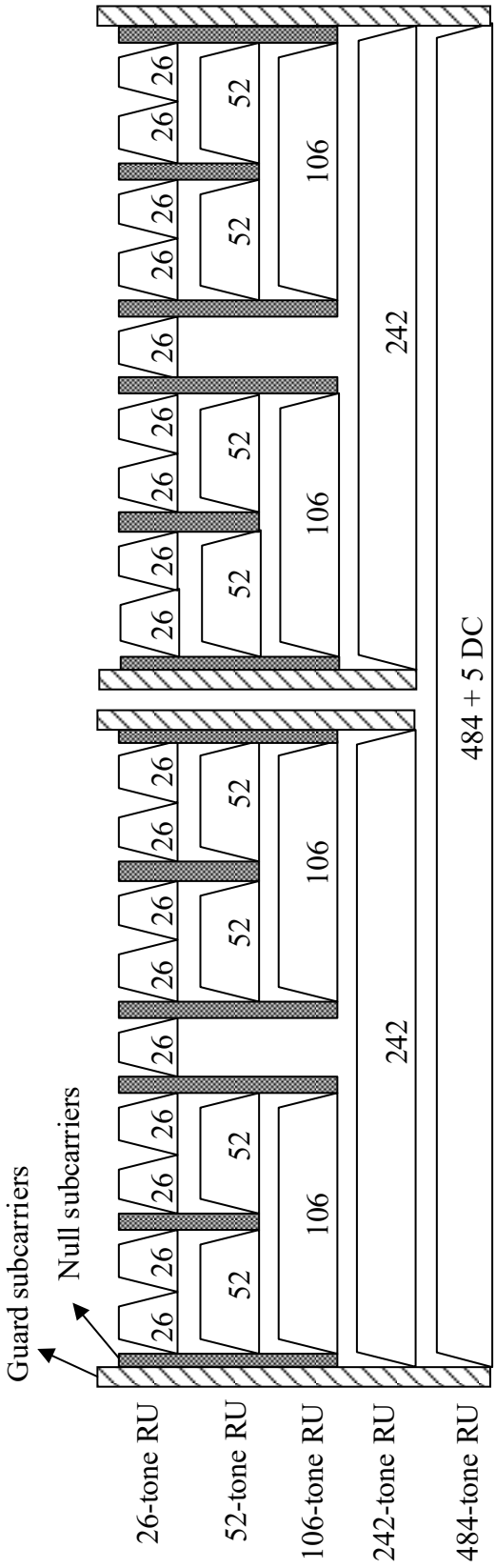

Guard subcarriers
Null subcarriers
26-tone RU
52-tone RU
106-tone RU
242-tone RU
484-tone RU
Tone: Tone
484 + 5 DC

FIG. 4

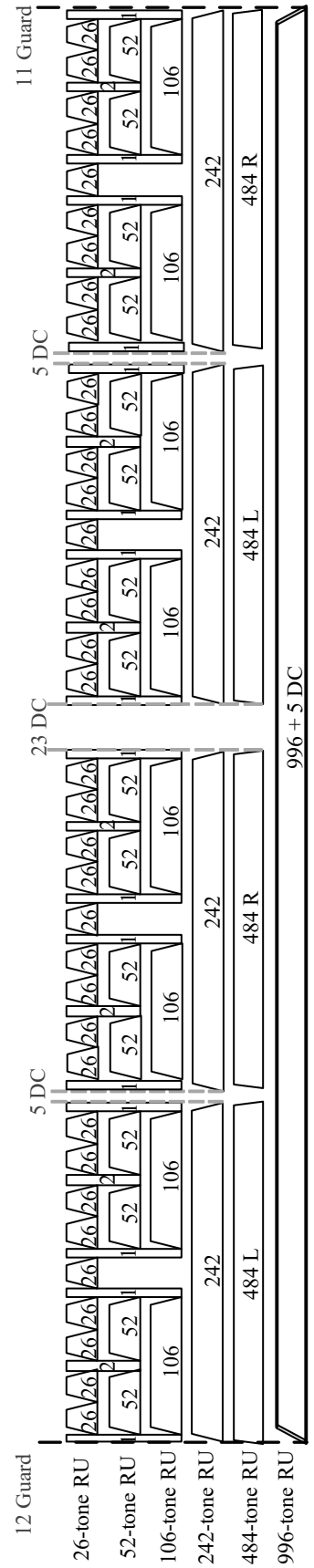

12 Guard
11 Guard
5 DC
5 DC
23 DC
26-tone RU
52-tone RU
106-tone RU
242-tone RU
484-tone RU
996-tone RU
26
52
106
242
484 L
484 R
996 + 5 DC
Tone: Tone
Guard: Guard

FIG. 5

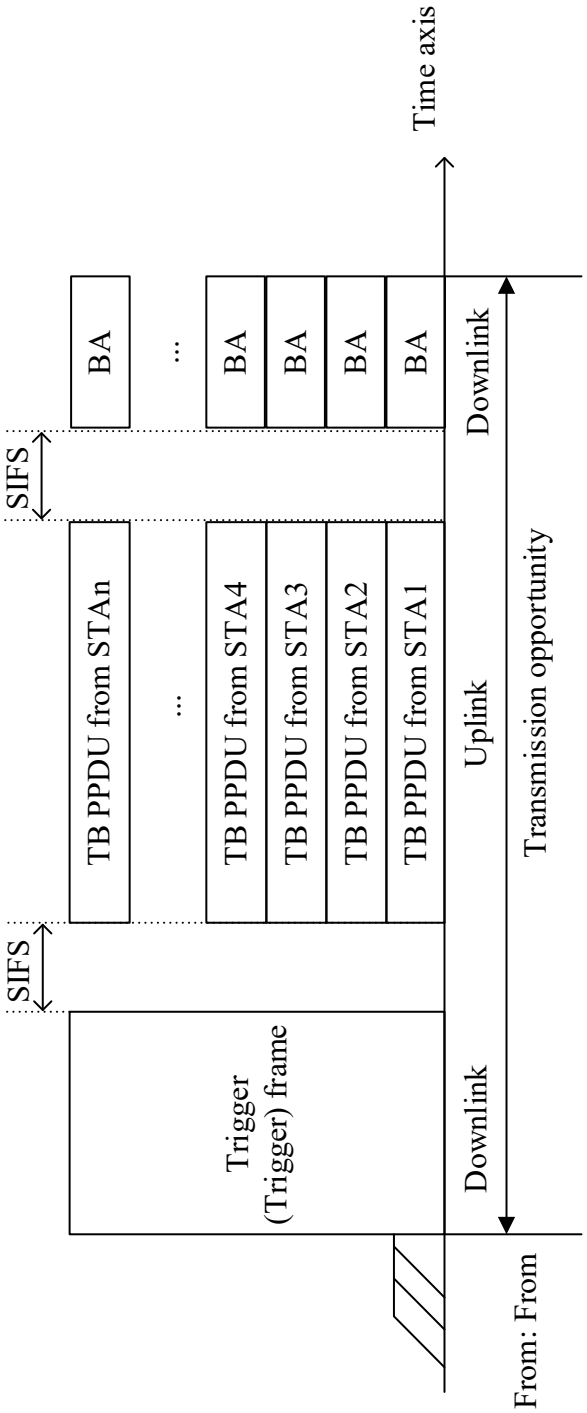

Time axis
From: From
Trigger
(Trigger) frame
SIFS
TB PPDU from STAn
TB PPDU from STA4
TB PPDU from STA3
TB PPDU from STA2
TB PPDU from STA1
SIFS
BA
BA
BA
BA
BA
Downlink
Uplink
Downlink
Transmission opportunity

FIG. 6

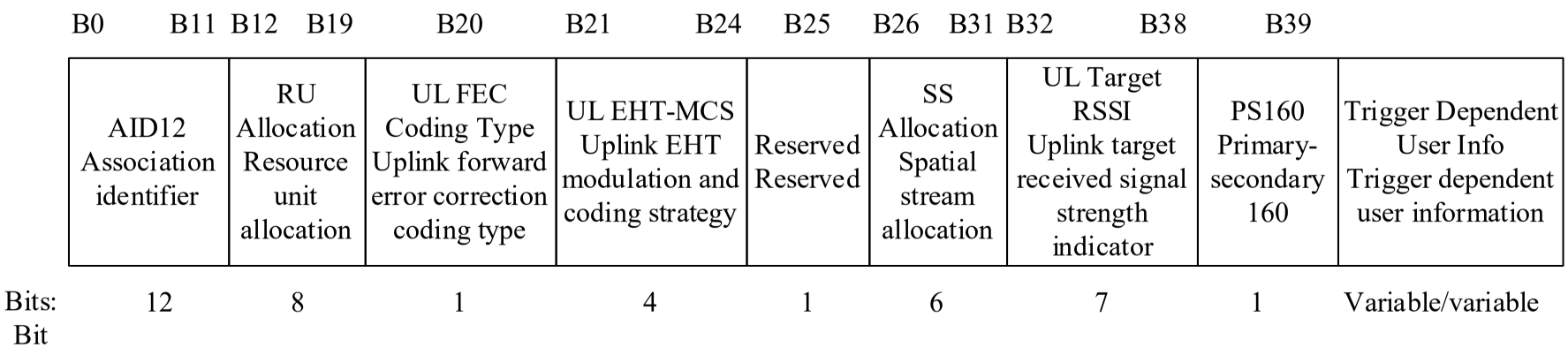

B0
B11
B12
B19
B20
B21
B24
B25
B26
B31
B32
B38
B39
AID12 Association identifier
RU Allocation Resource unit allocation
UL FEC Coding Type Uplink forward error correction coding type
UL EHT-MCS Uplink EHT modulation and coding strategy
Reserved Reserved
SS Allocation Spatial stream allocation
UL Target RSSI Uplink target received signal strength indicator
PS160 Primary-secondary 160
Trigger Dependent User Info Trigger dependent user information
Bits:
Bit
12
8
1
4
1
6
7
1
Variable/variable

FIG. 7

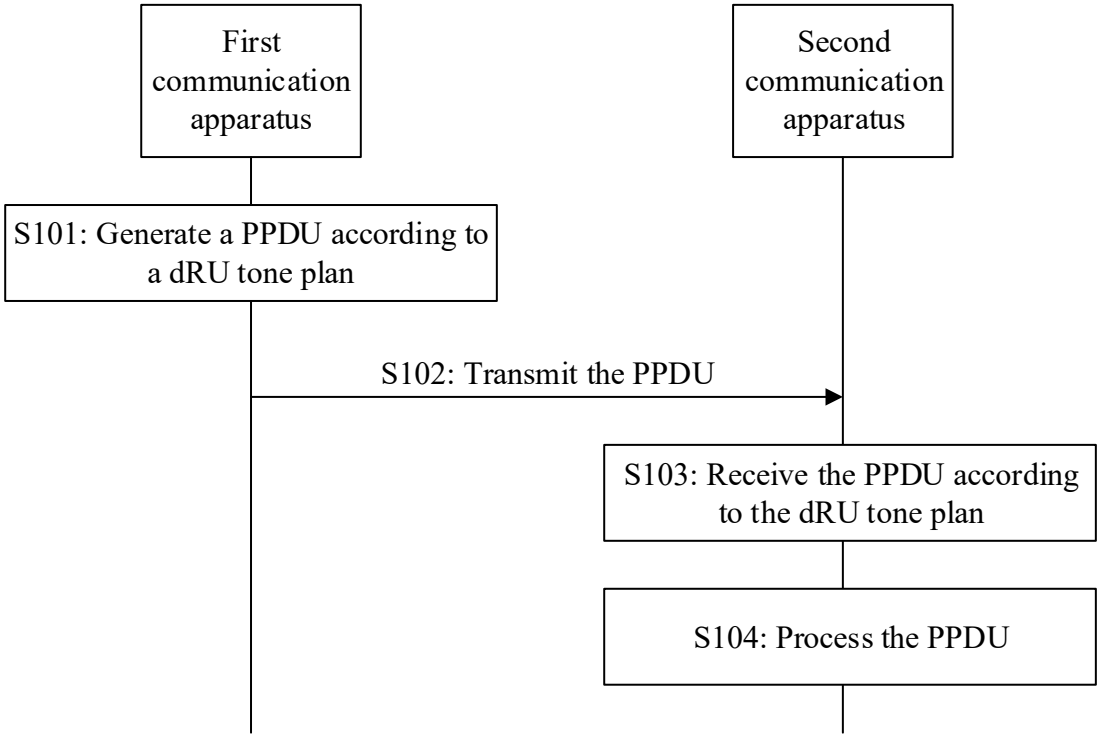

First communication apparatus
Second communication apparatus
S101: Generate a PPDU according to a dRU tone plan
S102: Transmit the PPDU
S103: Receive the PPDU according to the dRU tone plan
S104: Process the PPDU

FIG. 8

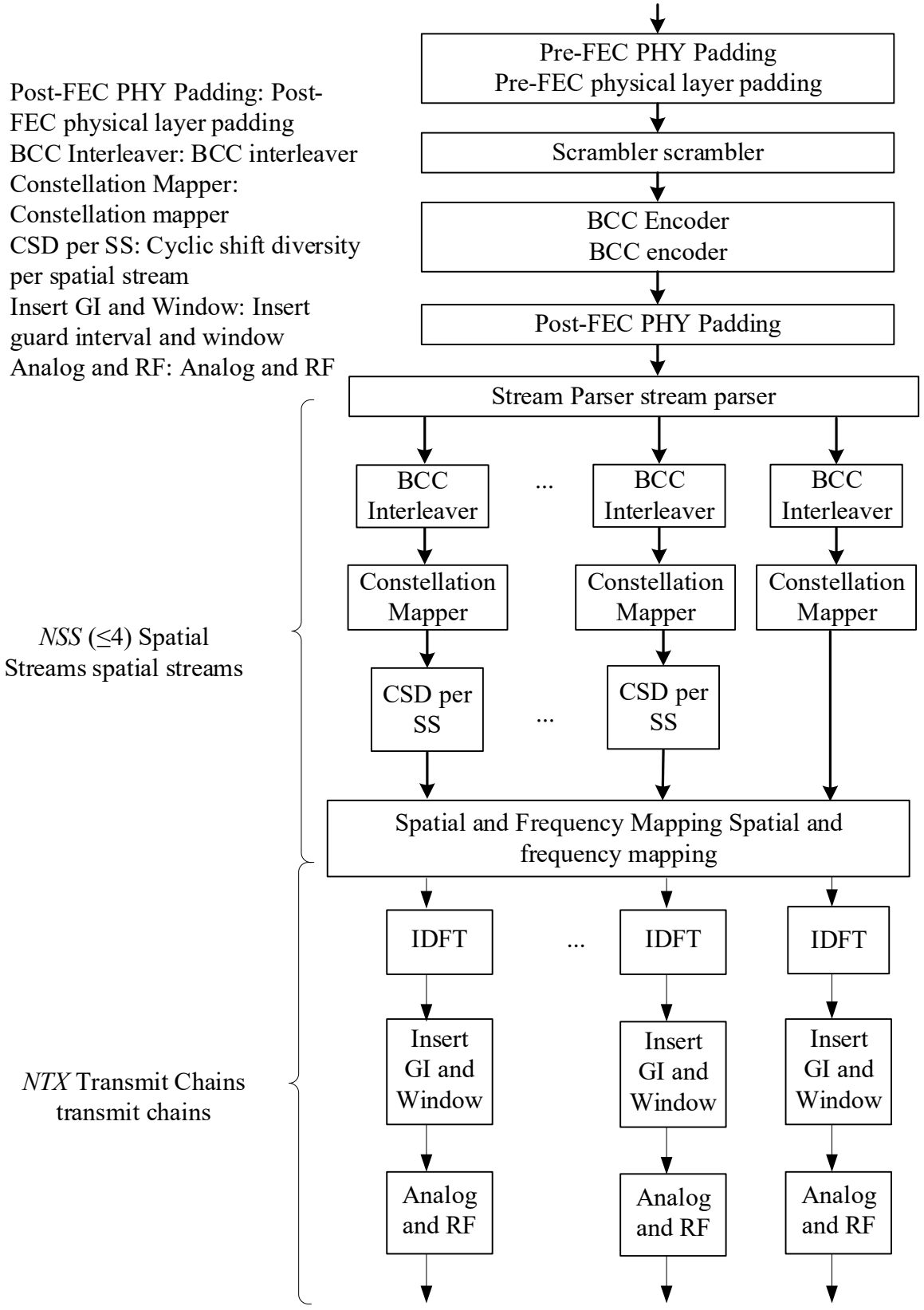

Post-FEC PHY Padding: Post-FEC physical layer padding
BCC Interleaver: BCC interleaver
Constellation Mapper: Constellation mapper
CSD per SS: Cyclic shift diversity per spatial stream
Insert GI and Window: Insert guard interval and window
Analog and RF: Analog and RF
Pre-FEC PHY Padding
Pre-FEC physical layer padding
Scrambler scrambler
BCC Encoder
BCC encoder
Post-FEC PHY Padding
Stream Parser stream parser
BCC Interleaver
...
BCC Interleaver
BCC Interleaver
Constellation Mapper
Constellation Mapper
Constellation Mapper
CSD per SS
...
CSD per SS
NSS (≤4) Spatial Streams spatial streams
Spatial and Frequency Mapping Spatial and frequency mapping
IDFT
...
IDFT
IDFT
Insert GI and Window
Insert GI and Window
Insert GI and Window
Analog and RF
Analog and RF
Analog and RF
NTX Transmit Chains transmit chains

FIG. 9

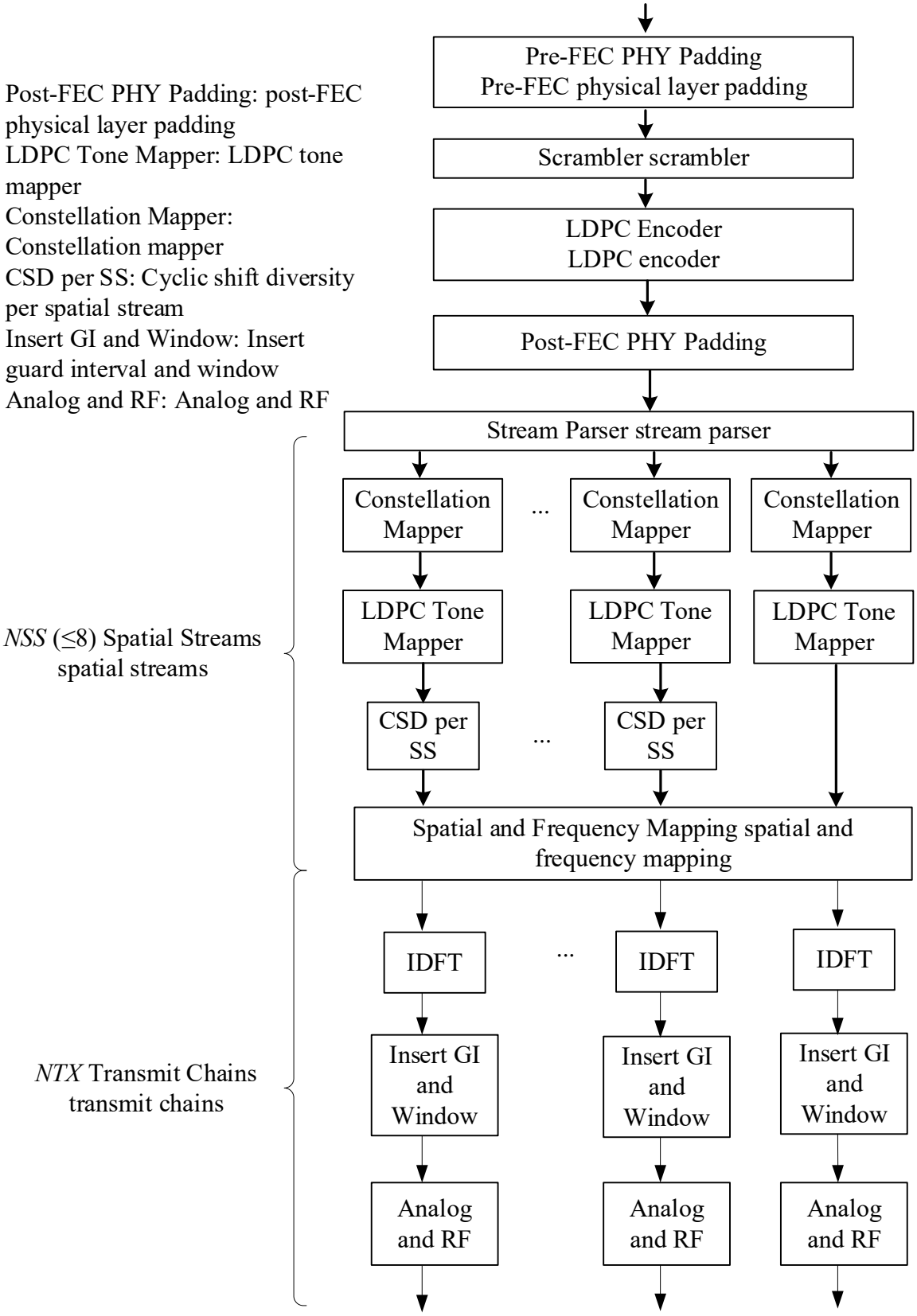
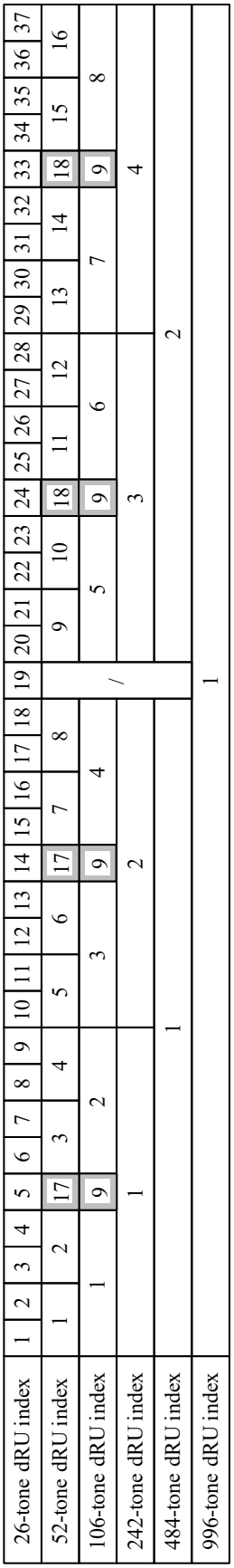

Post-FEC PHY Padding: post-FEC physical layer padding
LDPC Tone Mapper: LDPC tone mapper
Constellation Mapper: Constellation mapper
CSD per SS: Cyclic shift diversity per spatial stream
Insert GI and Window: Insert guard interval and window
Analog and RF: Analog and RF
Pre-FEC PHY Padding
Pre-FEC physical layer padding
Scrambler scrambler
LDPC Encoder
LDPC encoder
Post-FEC PHY Padding
Stream Parser stream parser
Constellation Mapper
Constellation Mapper
Constellation Mapper
LDPC Tone Mapper
LDPC Tone Mapper
LDPC Tone Mapper
CSD per SS
CSD per SS
NSS (≤8) Spatial Streams
spatial streams
Spatial and Frequency Mapping spatial and frequency mapping
IDFT
IDFT
IDFT
Insert GI and Window
Insert GI and Window
Insert GI and Window
Analog and RF
Analog and RF
Analog and RF
NTX Transmit Chains
transmit chains

FIG. 10

26-tone dRU index	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
52-tone dRU index	1		2		9	3		4		5		6		9	7		8	
106-tone dRU index	1				/	2				3				/	4			
242-tone dRU index	1									2								
484-tone dRU index	1																	

Index: Index

FIG. 11



26-tone dRU index	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37
52-tone dRU index	1		2		17	3		4		5		6		17	7		8			9		10		18	11		12		13		14		18	15		16	
106-tone dRU index	1				9	2				3				9	4				/	5				9	6				7				9	8			
242-tone dRU index	1									2										3									4								
484-tone dRU index	1																			2																	
996-tone dRU index	1																																				

FIG. 12

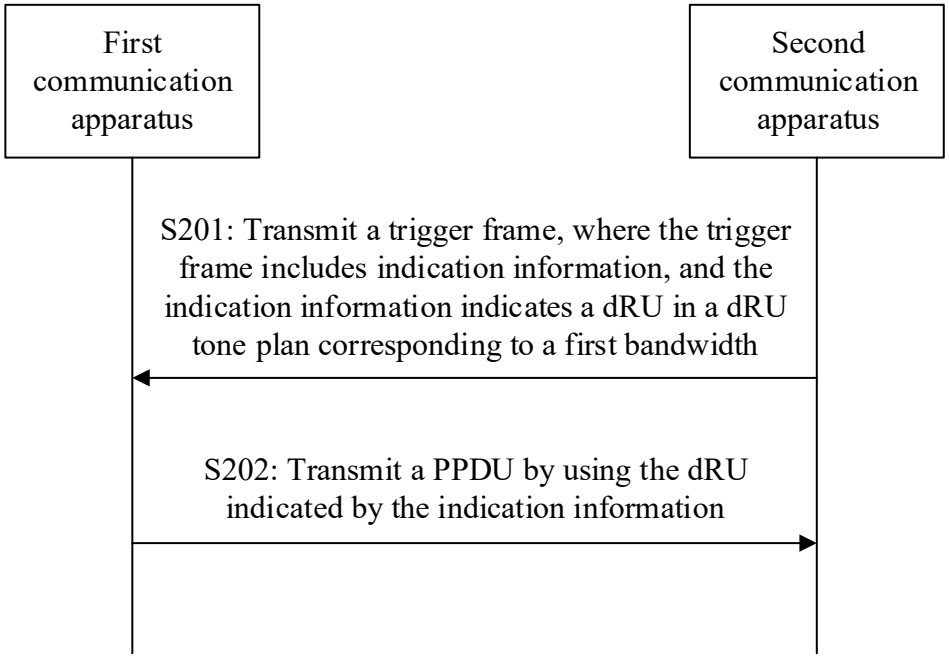

First communication apparatus
Second communication apparatus
S201: Transmit a trigger frame, where the trigger frame includes indication information, and the indication information indicates a dRU in a dRU tone plan corresponding to a first bandwidth
S202: Transmit a PPDU by using the dRU indicated by the indication information

FIG. 13

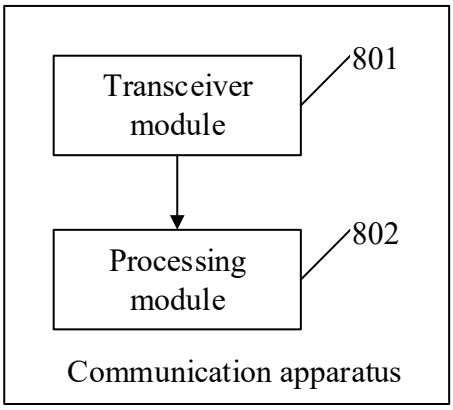

Transceiver module
801
Processing module
802
Communication apparatus

FIG. 14

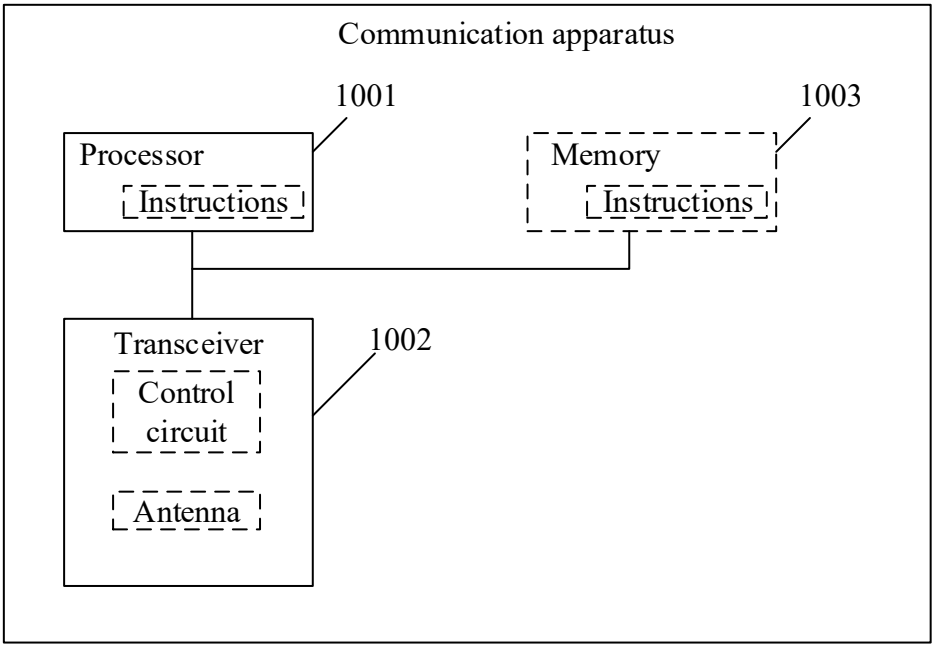

Communication apparatus
1001
1003
Processor
Instructions
Memory
Instructions
Transceiver
1002
Control circuit
Antenna

FIG. 15

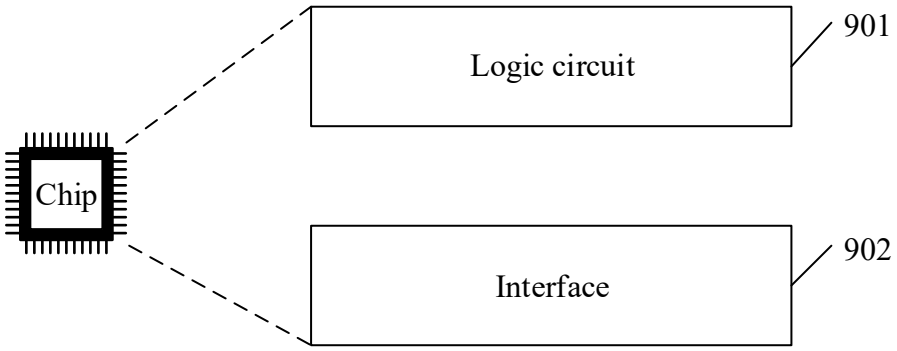

Logic circuit
901
Chip
Interface
902

FIG. 16