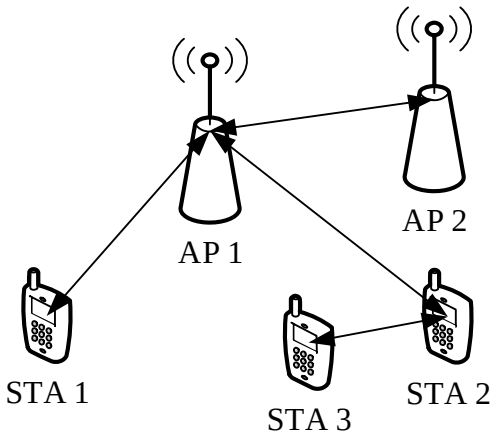

AP 1
AP 2
STA 1
STA 3
STA 2

FIG. 1

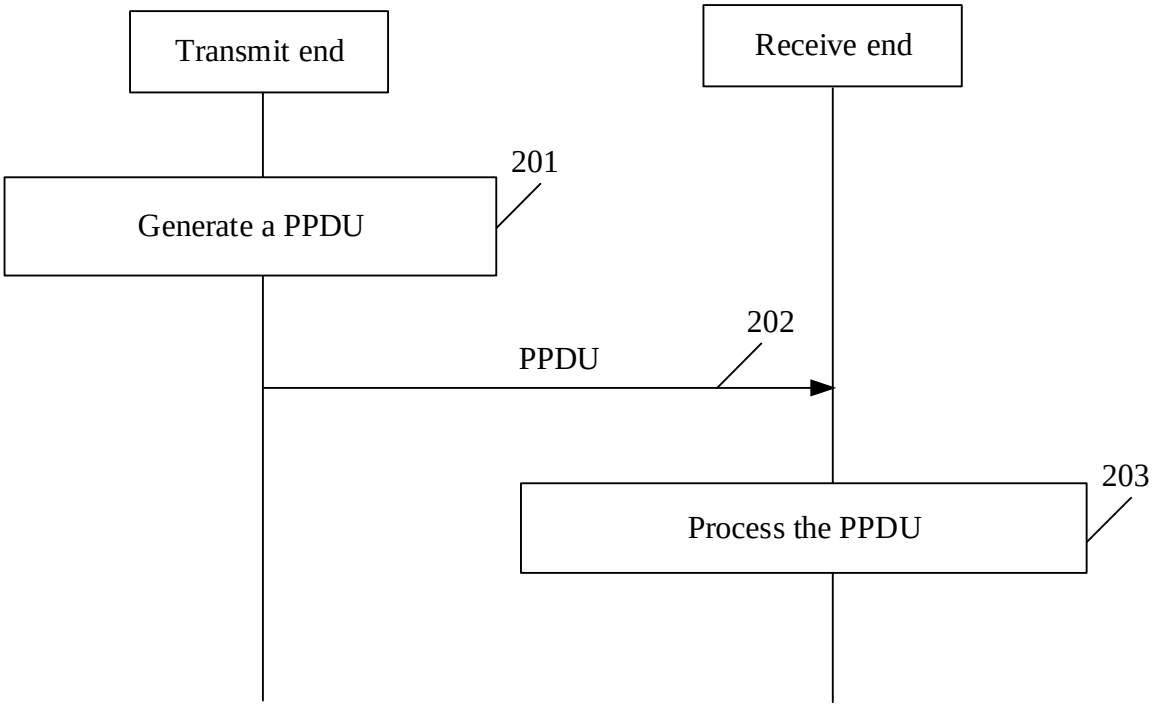

Transmit end
Receive end
201
Generate a PPDU
202
PPDU
203
Process the PPDU

FIG. 2

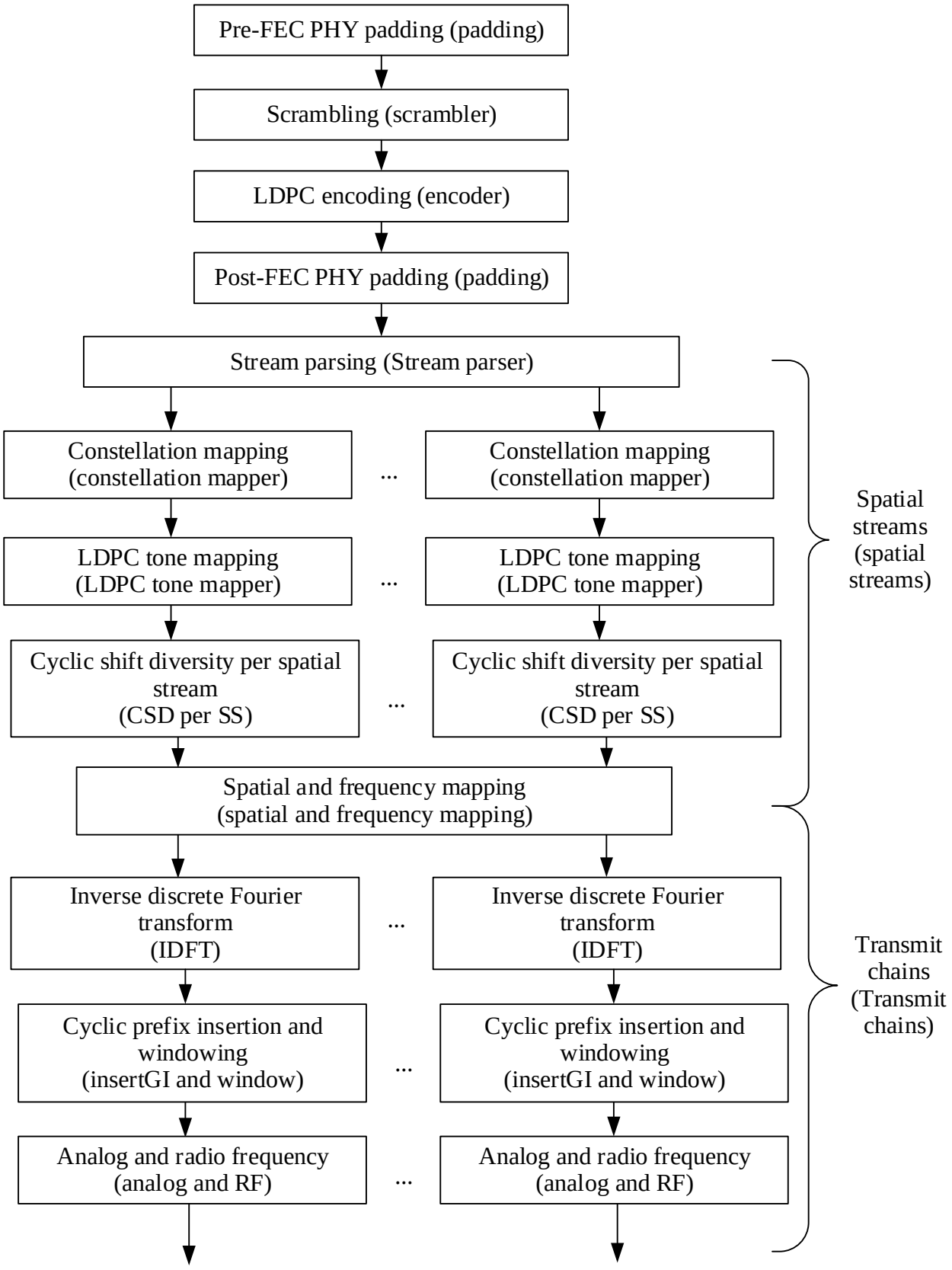

Pre-FEC PHY padding (padding)
Scrambling (scrambler)
LDPC encoding (encoder)
Post-FEC PHY padding (padding)
Stream parsing (Stream parser)
Constellation mapping (constellation mapper)
...
Constellation mapping (constellation mapper)
LDPC tone mapping (LDPC tone mapper)
...
LDPC tone mapping (LDPC tone mapper)
Cyclic shift diversity per spatial stream (CSD per SS)
...
Cyclic shift diversity per spatial stream (CSD per SS)
Spatial and frequency mapping (spatial and frequency mapping)
Inverse discrete Fourier transform (IDFT)
...
Inverse discrete Fourier transform (IDFT)
Cyclic prefix insertion and windowing (insertGI and window)
...
Cyclic prefix insertion and windowing (insertGI and window)
Analog and radio frequency (analog and RF)
...
Analog and radio frequency (analog and RF)
Spatial streams (spatial streams)
Transmit chains (Transmit chains)

FIG. 3a

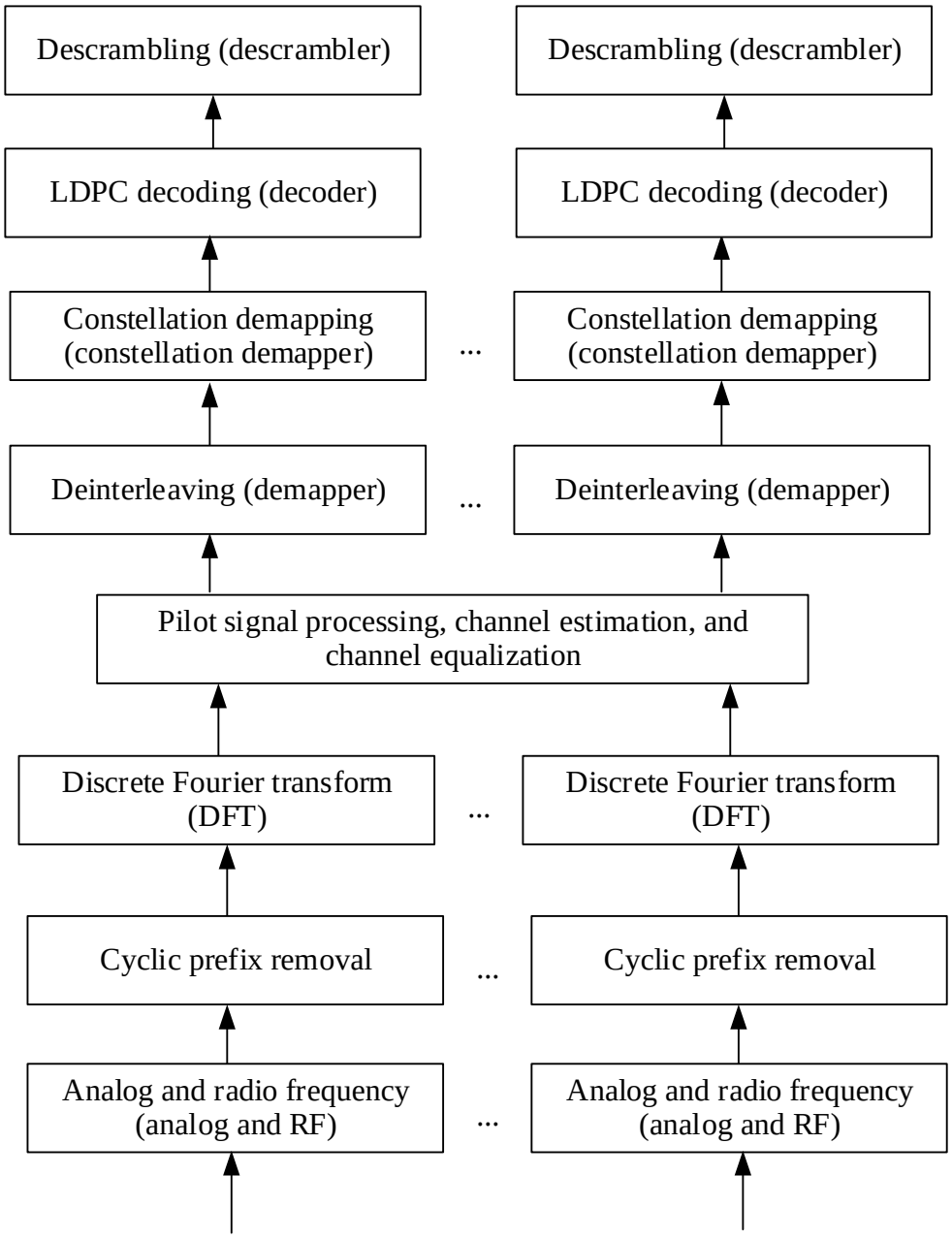

Descrambling (descrambler)
Descrambling (descrambler)
LDPC decoding (decoder)
LDPC decoding (decoder)
Constellation demapping (constellation demapper)
...
Constellation demapping (constellation demapper)
Deinterleaving (demapper)
...
Deinterleaving (demapper)
Pilot signal processing, channel estimation, and channel equalization
Discrete Fourier transform (DFT)
...
Discrete Fourier transform (DFT)
Cyclic prefix removal
...
Cyclic prefix removal
Analog and radio frequency (analog and RF)
...
Analog and radio frequency (analog and RF)

FIG. 3b

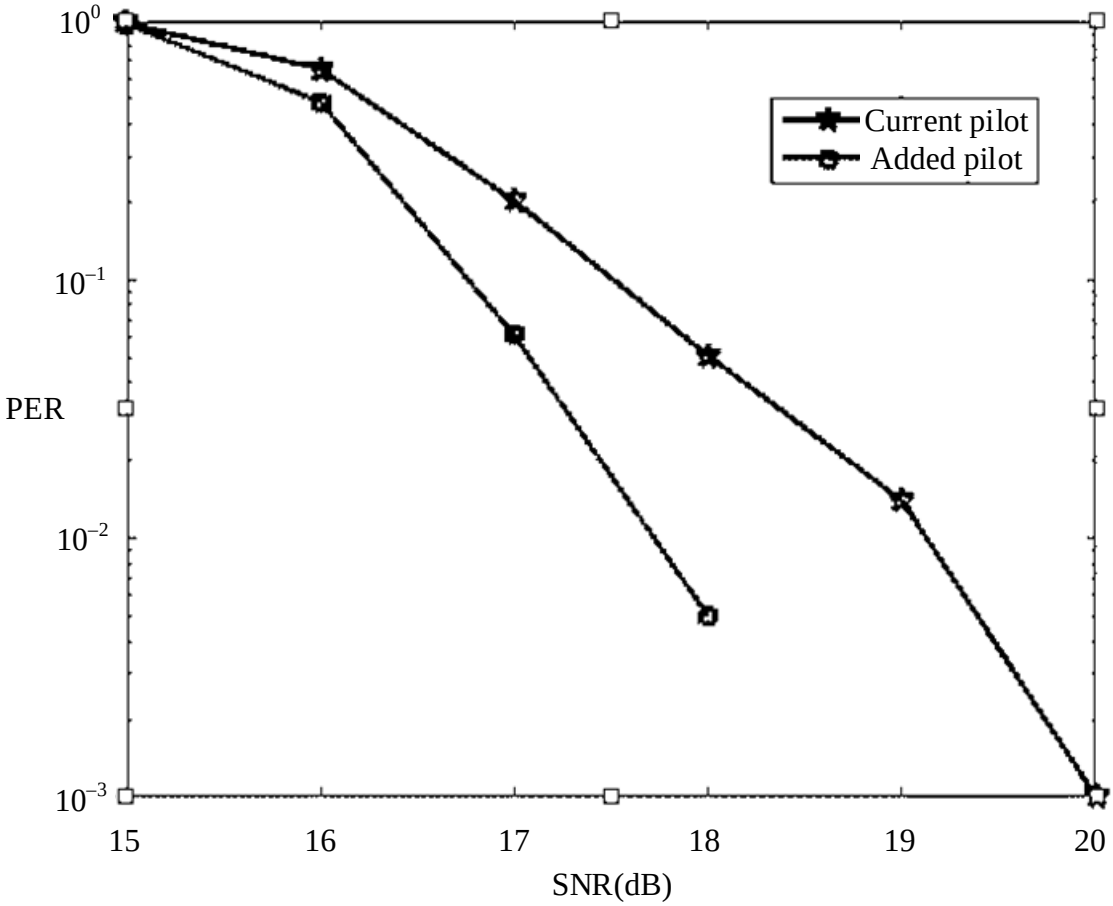

10^0
10^{-1}
10^{-2}
10^{-3}
PER
15
16
17
18
19
20
SNR(dB)
Current pilot
Added pilot

FIG. 4

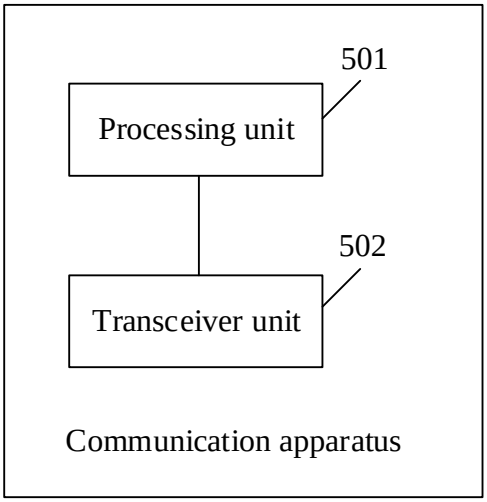

501
Processing unit
502
Transceiver unit
Communication apparatus

FIG. 5

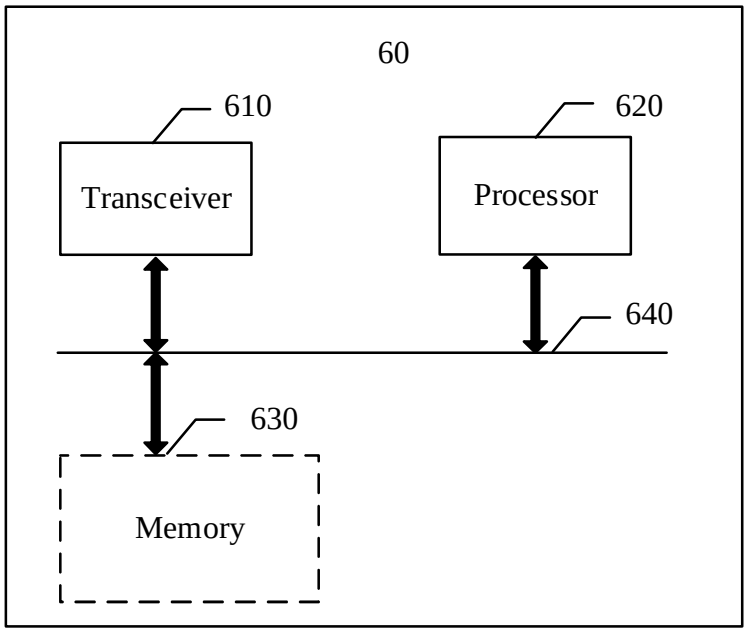

60
610
Transceiver
620
Processor
640
630
Memory

FIG. 6

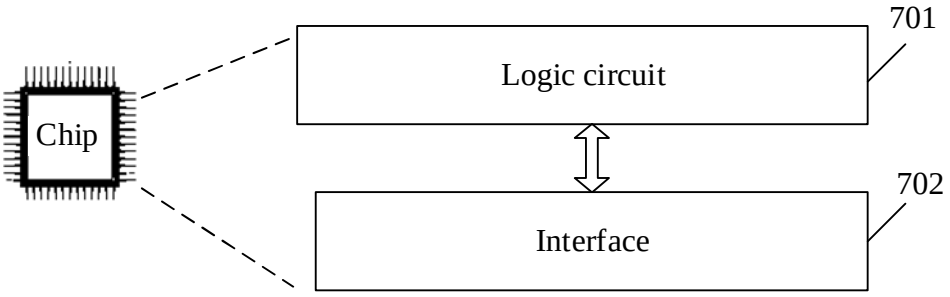

Chip
Logic circuit
701
Interface
702

FIG. 7