FIG. 1

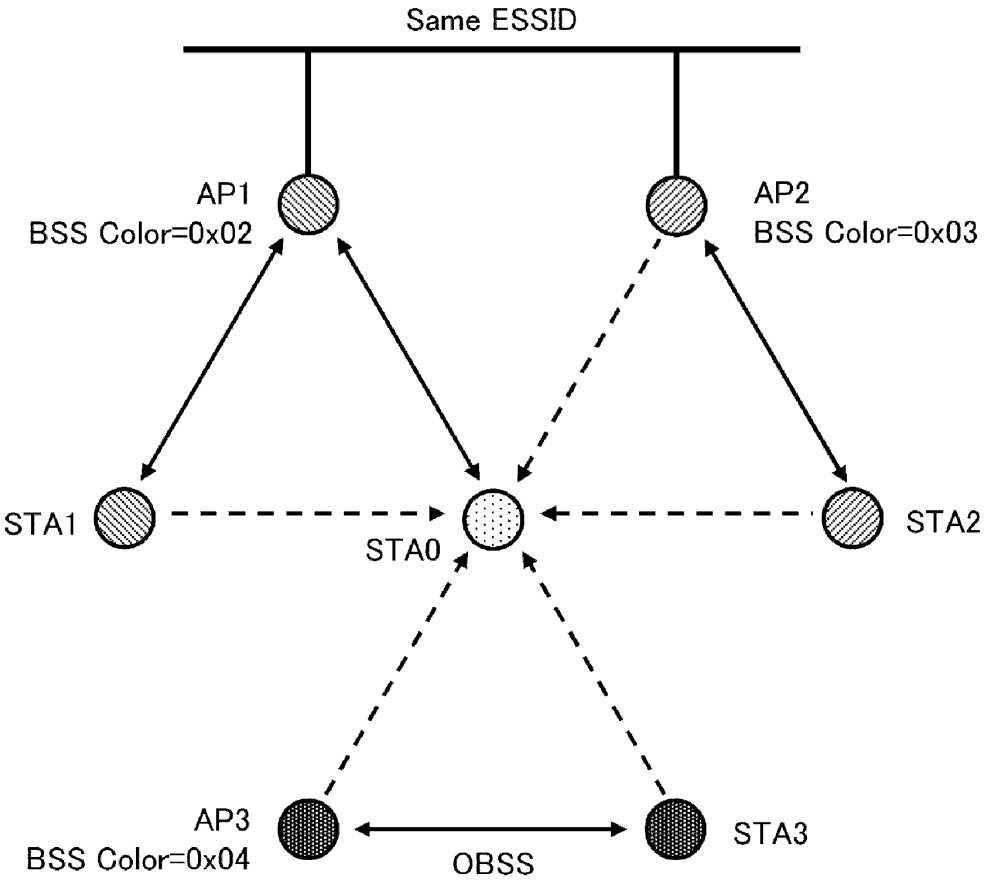


FIG. 2

BSS	BSS Color	ESSID
AP1	Color : 0x02	Same ESS
AP2	Color : 0x03	Same ESS
AP3	Color : 0x04	NO ESS

FIG. 3

(a)

ESSID	BSS Color	ESS Color Mask	ESS BSS Color
Same ESS	0x02 : 00 0010	00 0001	0x03

(b)

Same ESS	0x04 : 00 0100	00 0011	0x05～0x07

(c)

Same ESS	0x09 : 00 1000	00 0111	0x08, 0x0A～0x0F

(d)

Same ESS	0x07 : 00 0111	00 0010	0x05

(e)

Same ESS	0x0A : 00 1010	00 0110	0x08, 0x0C, 0x0E

(f)

Same ESS	0x01 : 00 0001	00 1010	0x03, 0x09, 0x0B

FIG. 4

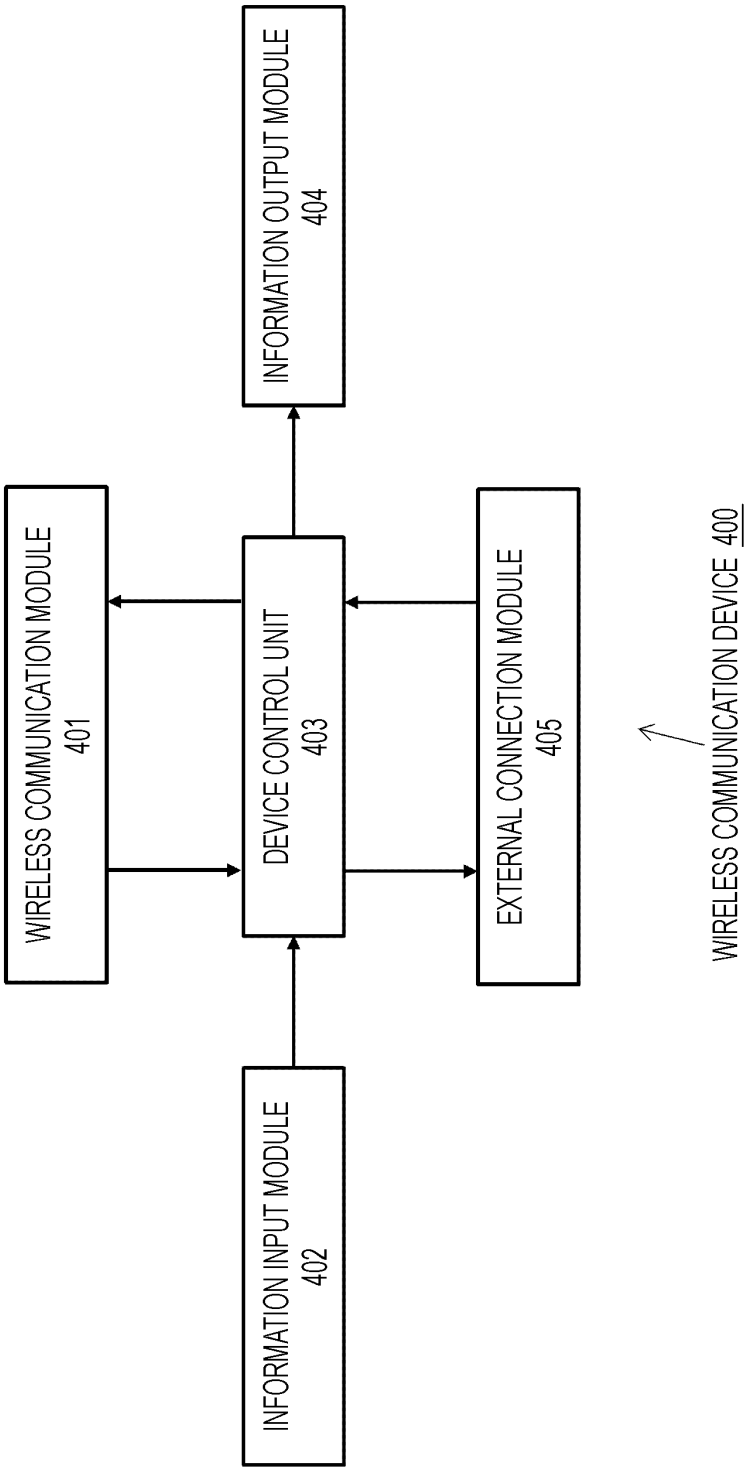

INFORMATION OUTPUT MODULE
404
WIRELESS COMMUNICATION MODULE
401
DEVICE CONTROL UNIT
403
EXTERNAL CONNECTION MODULE
405
INFORMATION INPUT MODULE
402
WIRELESS COMMUNICATION DEVICE 400

FIG. 5

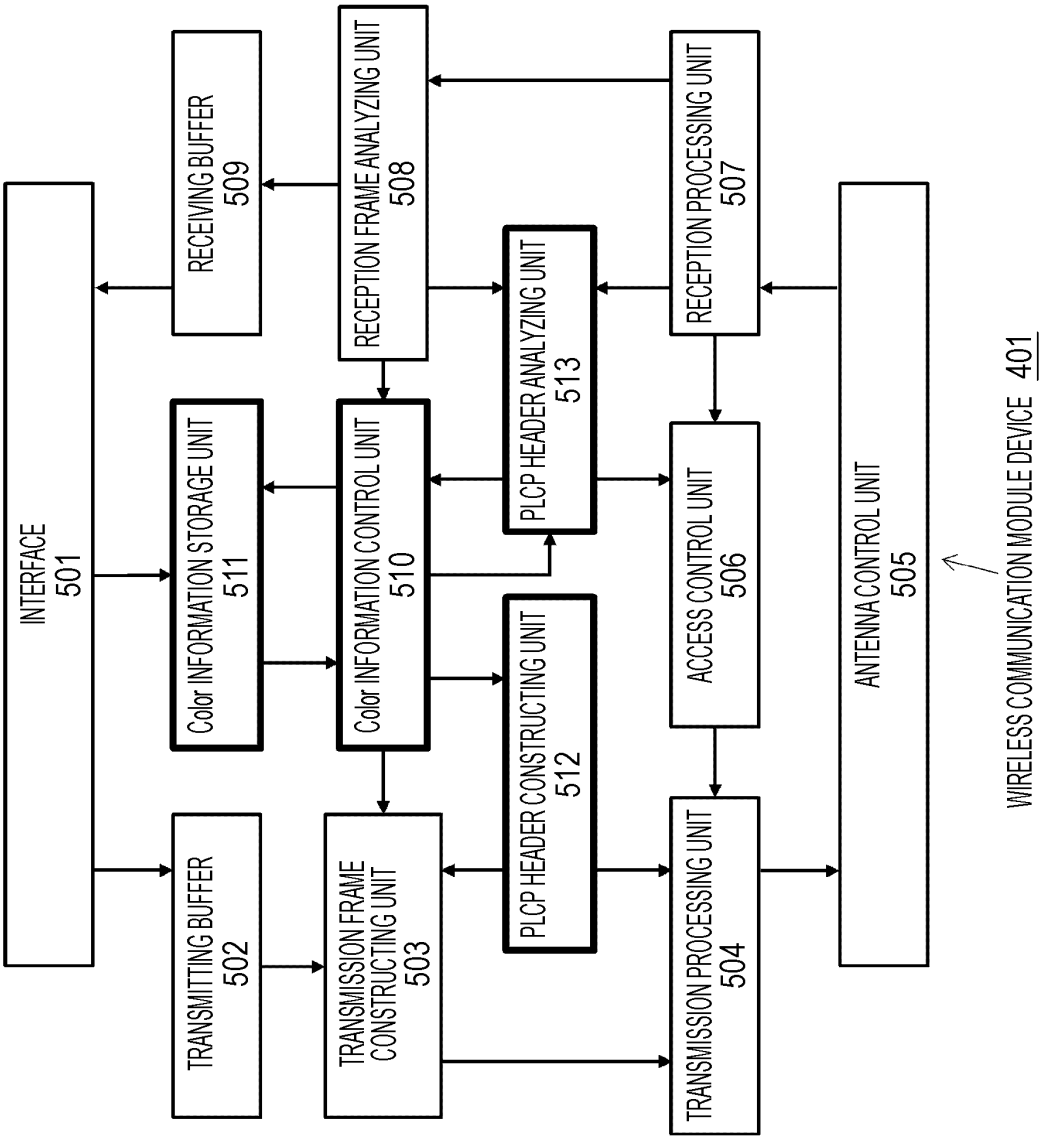

INTERFACE
501
TRANSMITTING BUFFER
502
TRANSMISSION FRAME CONSTRUCTING UNIT
503
TRANSMISSION PROCESSING UNIT
504
ANTENNA CONTROL UNIT
505
ACCESS CONTROL UNIT
506
RECEPTION PROCESSING UNIT
507
RECEPTION FRAME ANALYZING UNIT
508
RECEIVING BUFFER
509
Color INFORMATION CONTROL UNIT
510
Color INFORMATION STORAGE UNIT
511
PLCP HEADER CONSTRUCTING UNIT
512
PLCP HEADER ANALYZING UNIT
513
WIRELESS COMMUNICATION MODULE DEVICE 401

FIG. 6

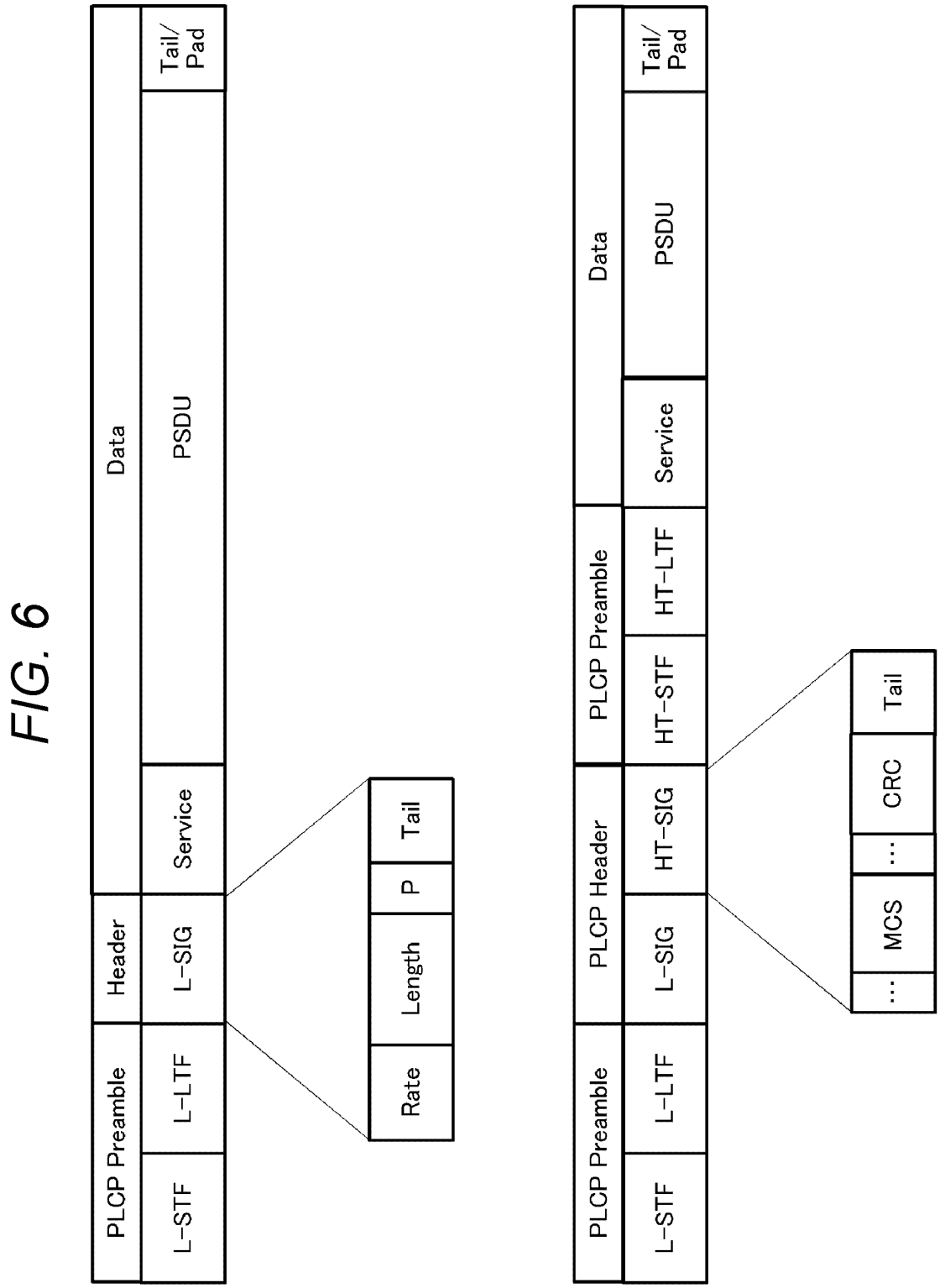

(a)
PLCP Preamble
Header
Data
L-STF
L-LTF
L-SIG
Service
PSDU
Tail/ Pad
Rate
Length
P
Tail
(b)
PLCP Preamble
PLCP Header
Data
L-STF
L-LTF
L-SIG
HT-SIG
HT-STF
HT-LTF
Service
PSDU
Tail/ Pad
...
MCS
...
CRC
Tail

FIG. 7

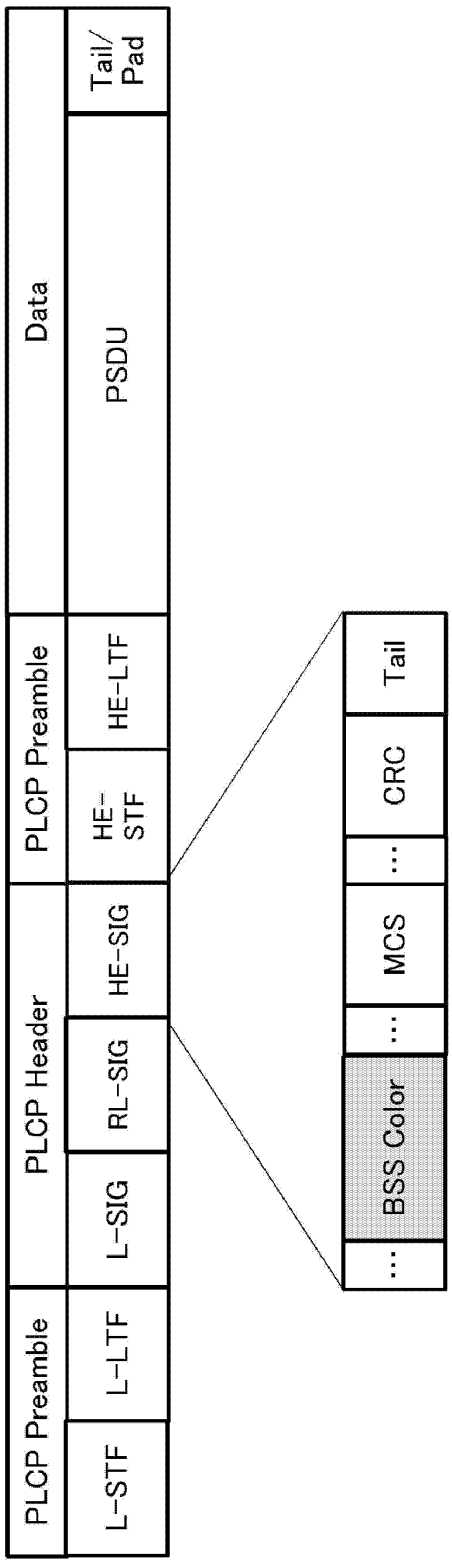

PLCP Preamble
L-STF
L-LTF
PLCP Header
L-SIG
RL-SIG
HE-SIG
PLCP Preamble
HE-STF
HE-LTF
Data
PSDU
Tail/ Pad
...
BSS Color
...
MCS
...
CRC
Tail

FIG. 8

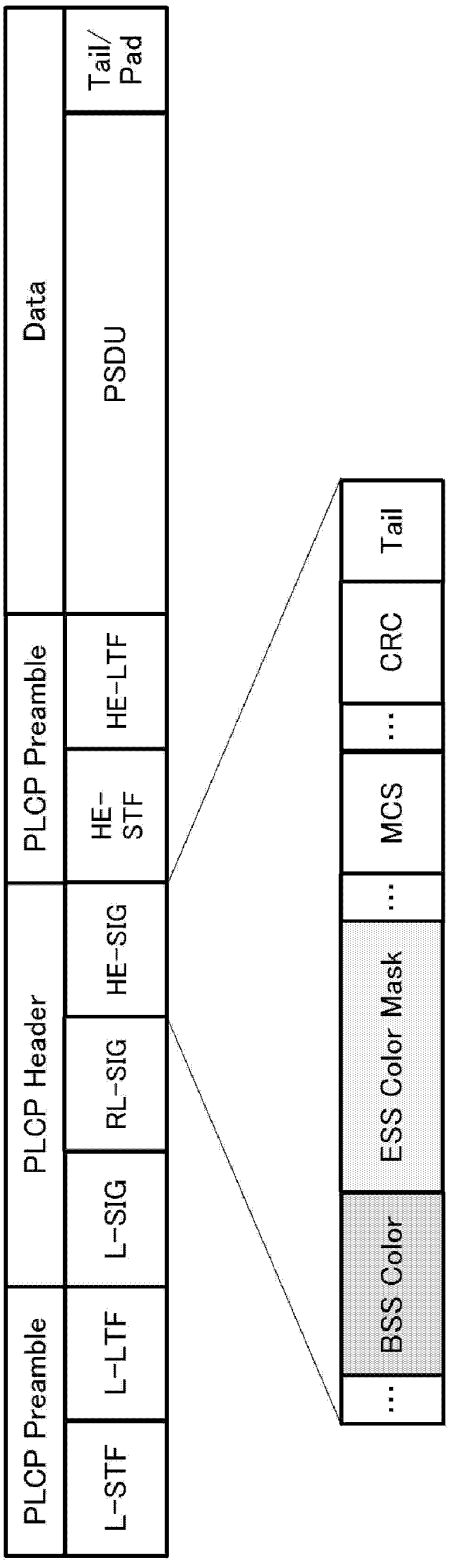

PLCP Preamble
L-STF
L-LTF
PLCP Header
L-SIG
RL-SIG
HE-SIG
PLCP Preamble
HE-STF
HE-LTF
Data
PSDU
Tail/ Pad
...
BSS Color
ESS Color Mask
...
MCS
...
CRC
Tail

FIG. 9

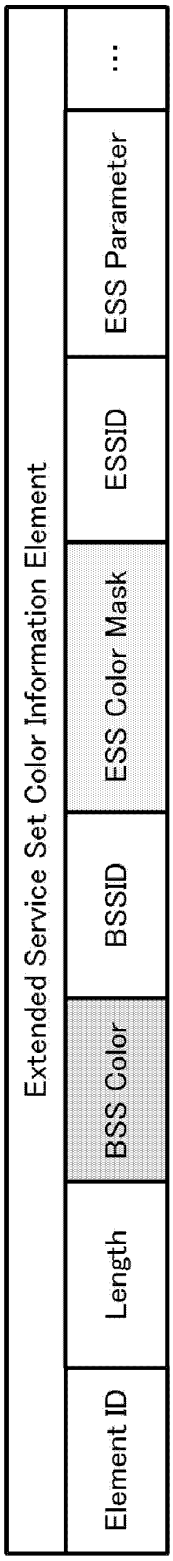

Extended Service Set Color Information Element
Element ID
Length
BSS Color
BSSID
ESS Color Mask
ESSID
ESS Parameter
...

FIG. 10

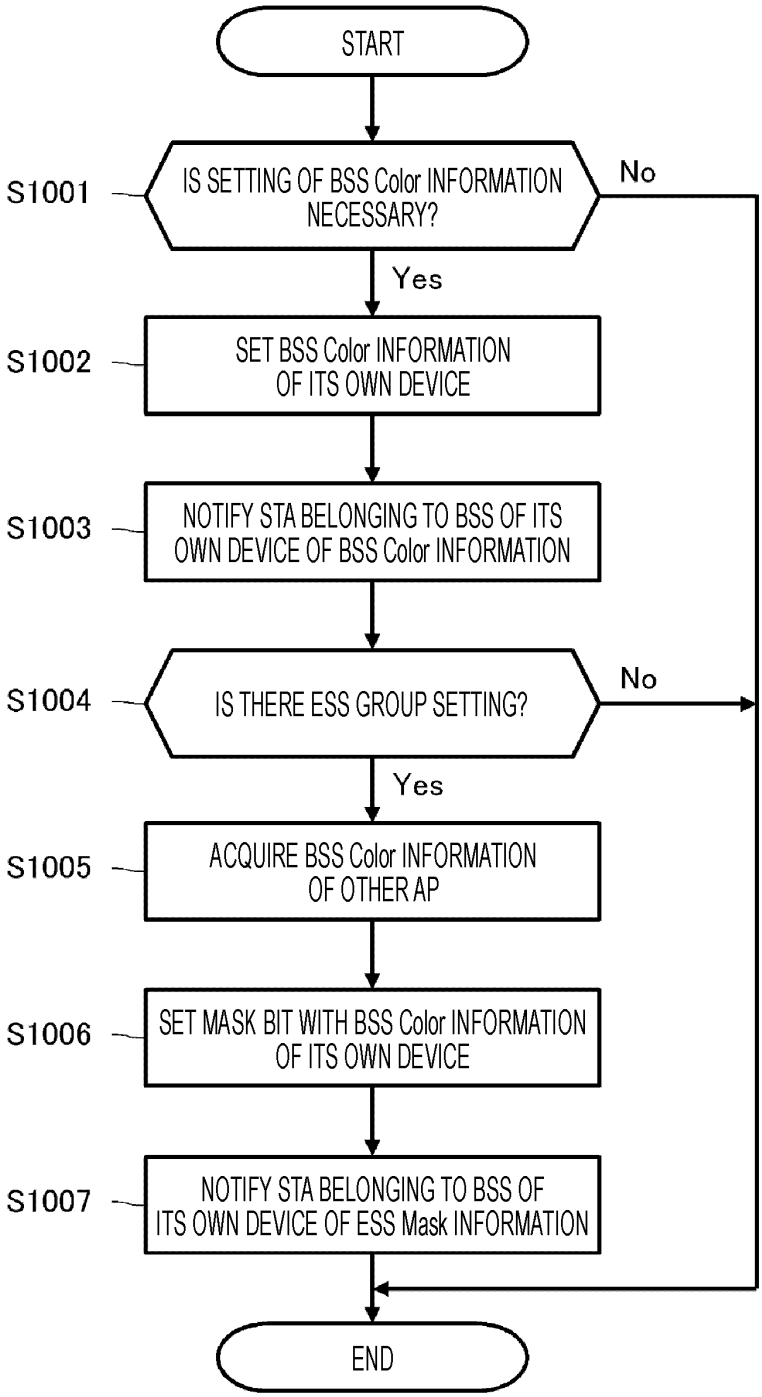

START
S1001
IS SETTING OF BSS Color INFORMATION NECESSARY?
No
Yes
S1002
SET BSS Color INFORMATION OF ITS OWN DEVICE
S1003
NOTIFY STA BELONGING TO BSS OF ITS OWN DEVICE OF BSS Color INFORMATION
S1004
IS THERE ESS GROUP SETTING?
No
Yes
S1005
ACQUIRE BSS Color INFORMATION OF OTHER AP
S1006
SET MASK BIT WITH BSS Color INFORMATION OF ITS OWN DEVICE
S1007
NOTIFY STA BELONGING TO BSS OF ITS OWN DEVICE OF ESS Mask INFORMATION
END

FIG. 11

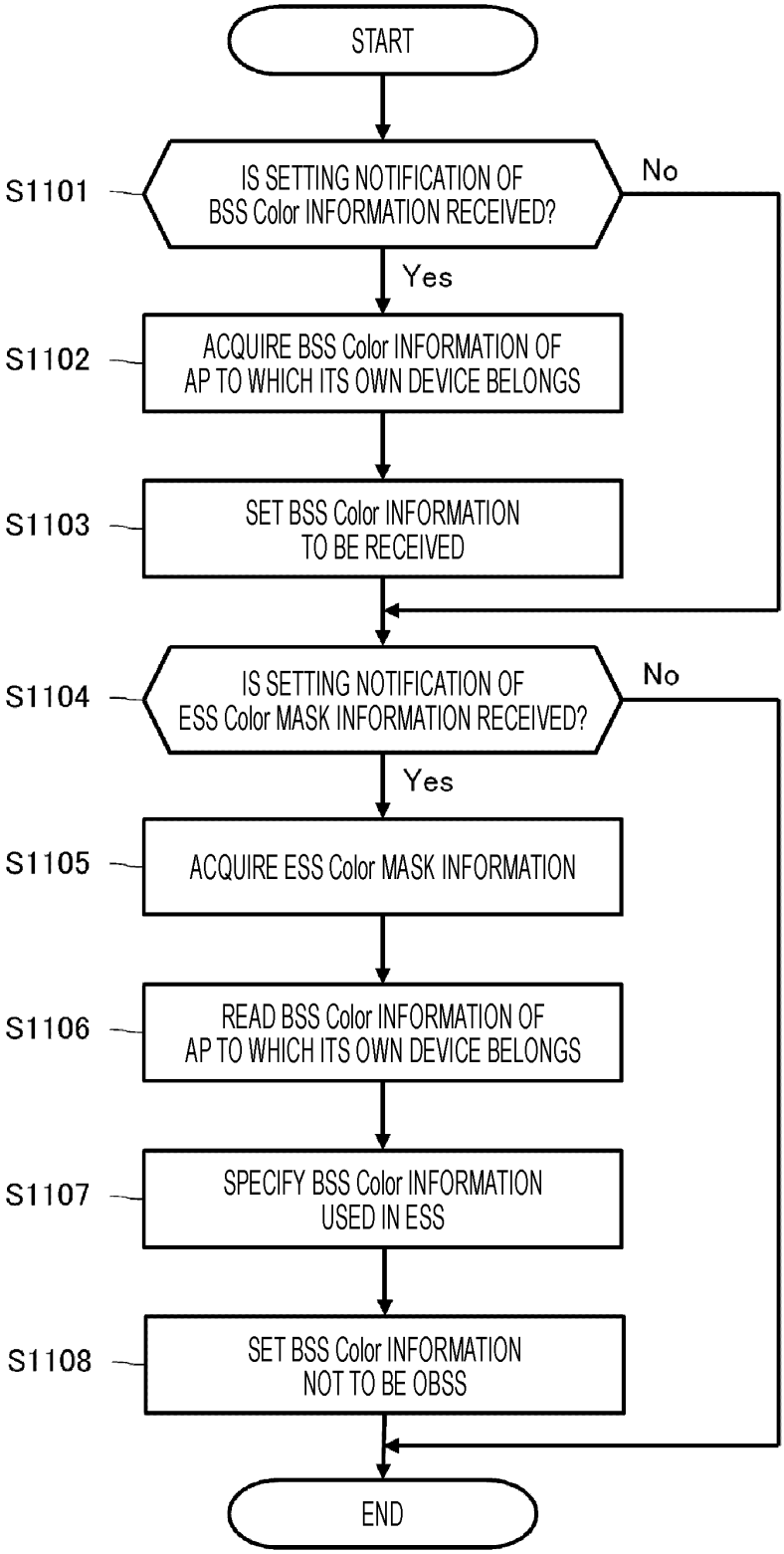

START
S1101
IS SETTING NOTIFICATION OF BSS Color INFORMATION RECEIVED?
No
Yes
S1102
ACQUIRE BSS Color INFORMATION OF AP TO WHICH ITS OWN DEVICE BELONGS
S1103
SET BSS Color INFORMATION TO BE RECEIVED
S1104
IS SETTING NOTIFICATION OF ESS Color MASK INFORMATION RECEIVED?
No
Yes
S1105
ACQUIRE ESS Color MASK INFORMATION
S1106
READ BSS Color INFORMATION OF AP TO WHICH ITS OWN DEVICE BELONGS
S1107
SPECIFY BSS Color INFORMATION USED IN ESS
S1108
SET BSS Color INFORMATION NOT TO BE OBSS
END

FIG. 12

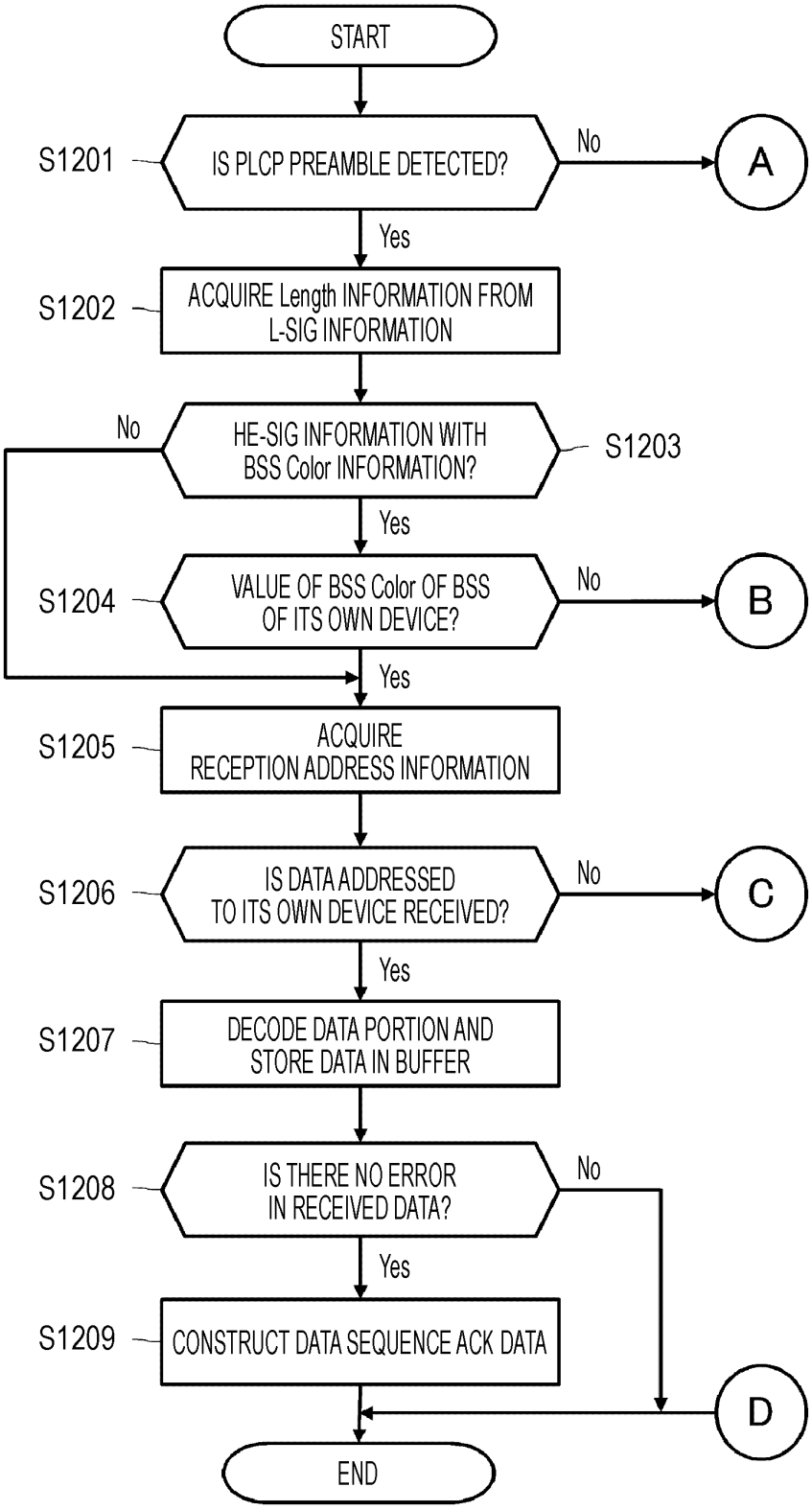
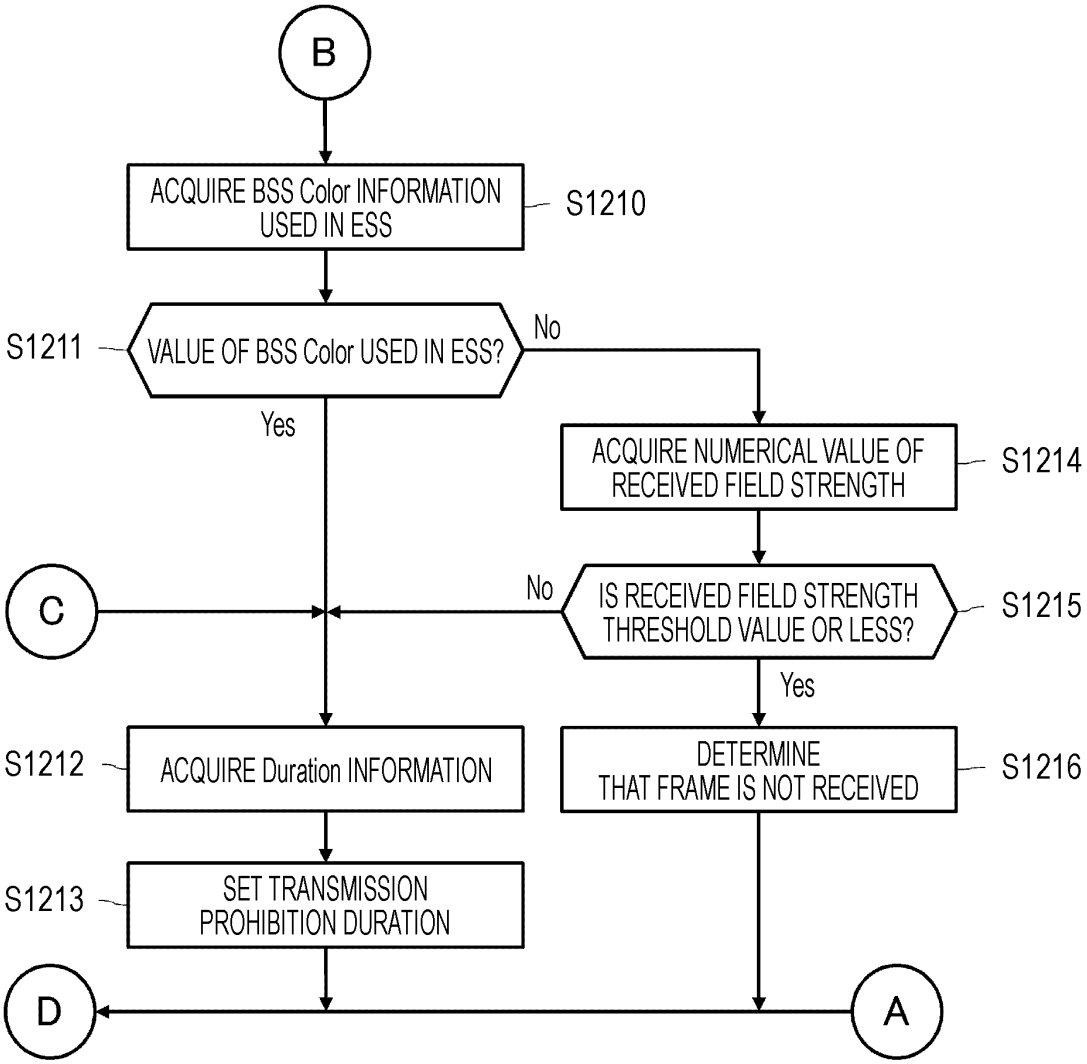

START
S1201
IS PLCP PREAMBLE DETECTED?
No
A
Yes
S1202
ACQUIRE Length INFORMATION FROM L-SIG INFORMATION
No
HE-SIG INFORMATION WITH BSS Color INFORMATION?
S1203
Yes
S1204
VALUE OF BSS Color OF BSS OF ITS OWN DEVICE?
No
B
Yes
S1205
ACQUIRE RECEPTION ADDRESS INFORMATION
S1206
IS DATA ADDRESSED TO ITS OWN DEVICE RECEIVED?
No
C
Yes
S1207
DECODE DATA PORTION AND STORE DATA IN BUFFER
S1208
IS THERE NO ERROR IN RECEIVED DATA?
No
Yes
S1209
CONSTRUCT DATA SEQUENCE ACK DATA
D
END

FIG. 13


B
ACQUIRE BSS Color INFORMATION USED IN ESS
S1210
S1211
VALUE OF BSS Color USED IN ESS?
No
Yes
ACQUIRE NUMERICAL VALUE OF RECEIVED FIELD STRENGTH
S1214
C
No
IS RECEIVED FIELD STRENGTH THRESHOLD VALUE OR LESS?
S1215
Yes
S1212
ACQUIRE Duration INFORMATION
DETERMINE THAT FRAME IS NOT RECEIVED
S1216
S1213
SET TRANSMISSION PROHIBITION DURATION
D
A