

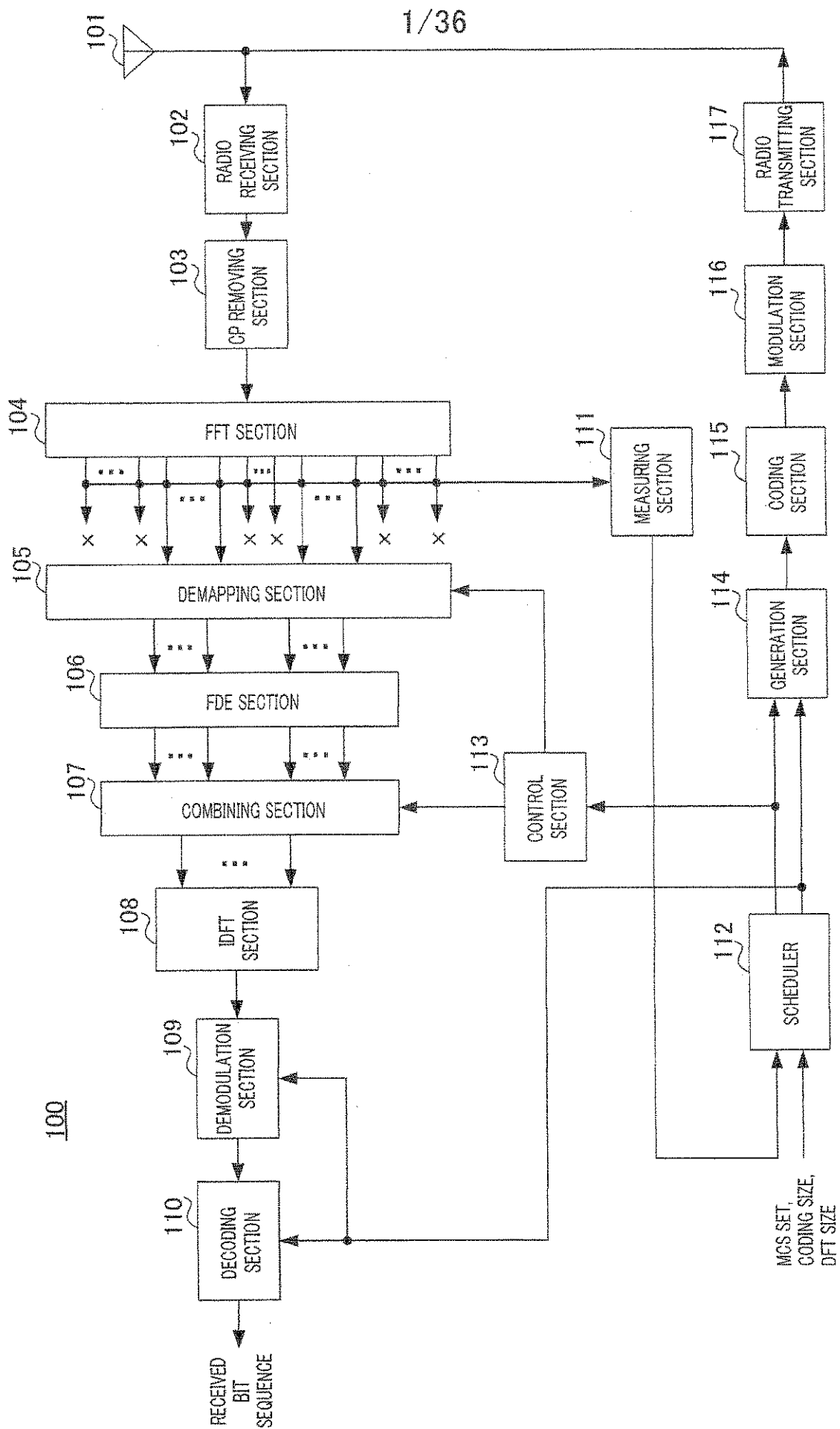


FIG.1

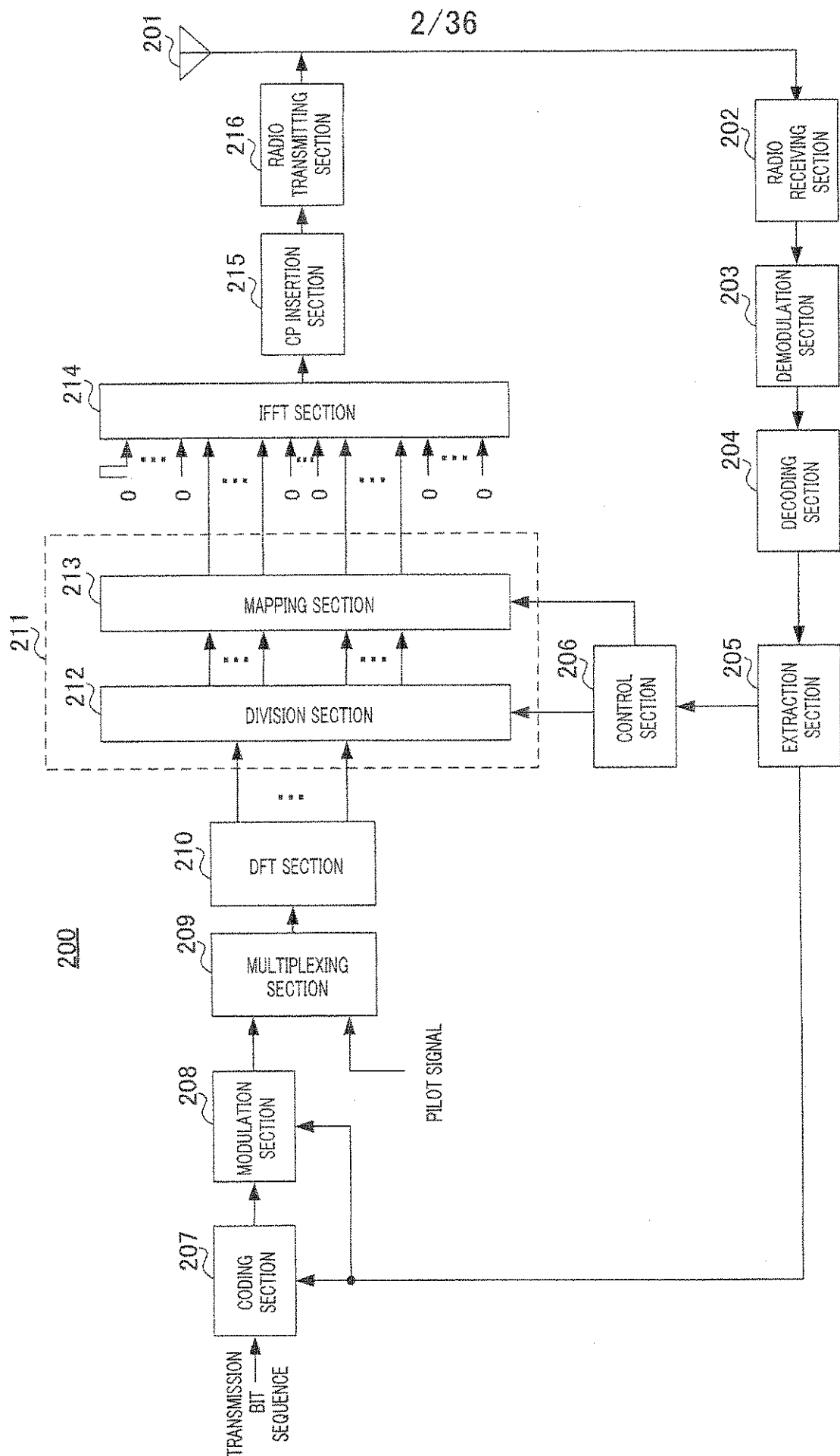


FIG.2

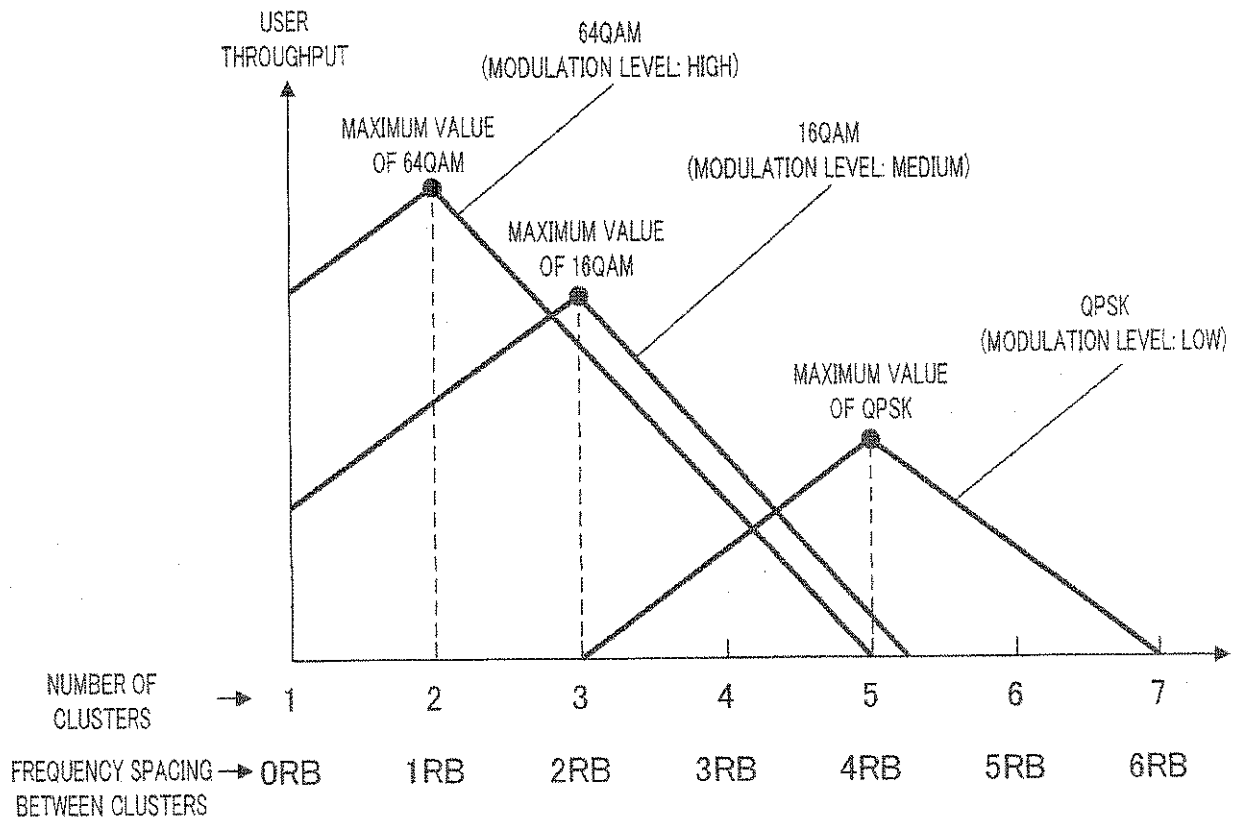


FIG.3A

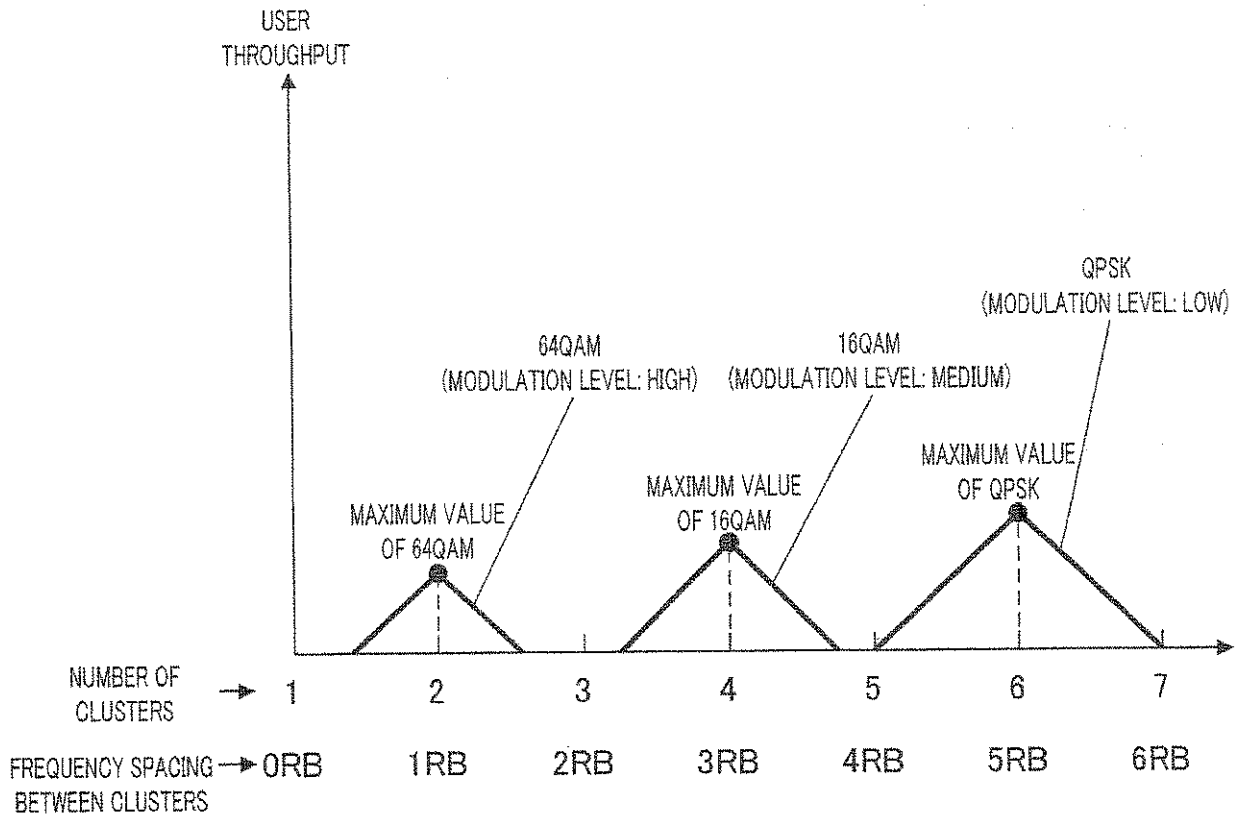


FIG.3B

MODULATION LEVEL	NUMBER OF CLUSTERS	CLUSTER SIZE (BANDWIDTH PER CLUSTER)
QPSK (MODULATION LEVEL: LOW)	HIGH	NARROW
16QAM (MODULATION LEVEL: MEDIUM)	MEDIUM	MEDIUM
64QAM (MODULATION LEVEL: HIGH)	LOW	WIDE

FIG.4

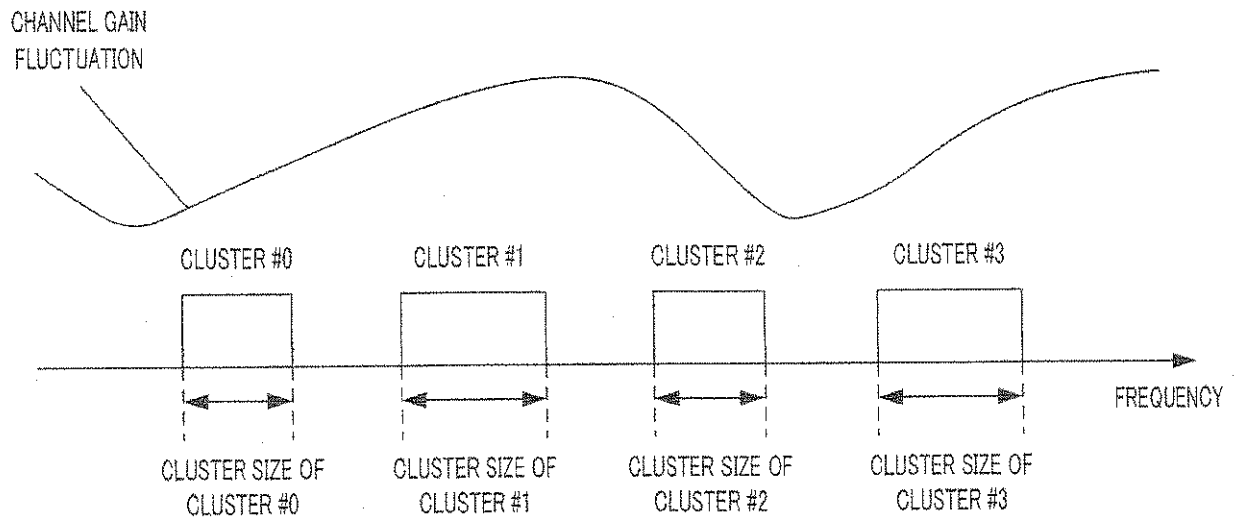


FIG.5A

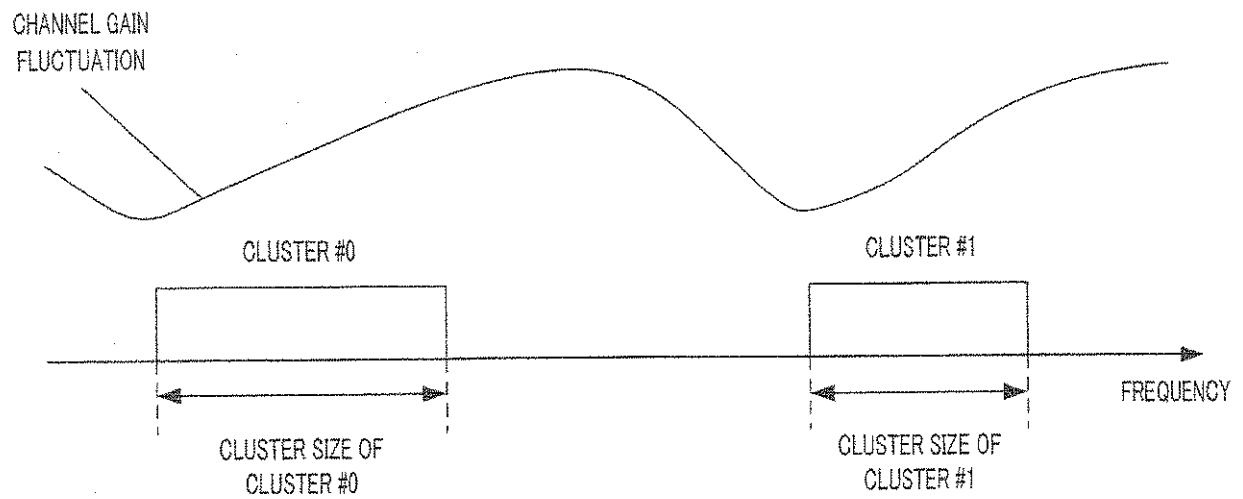


FIG.5B

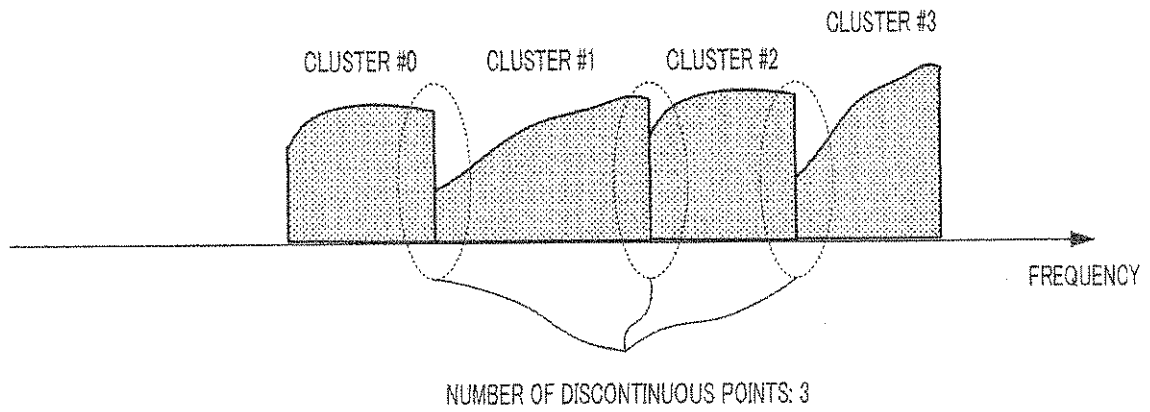


FIG. 6A

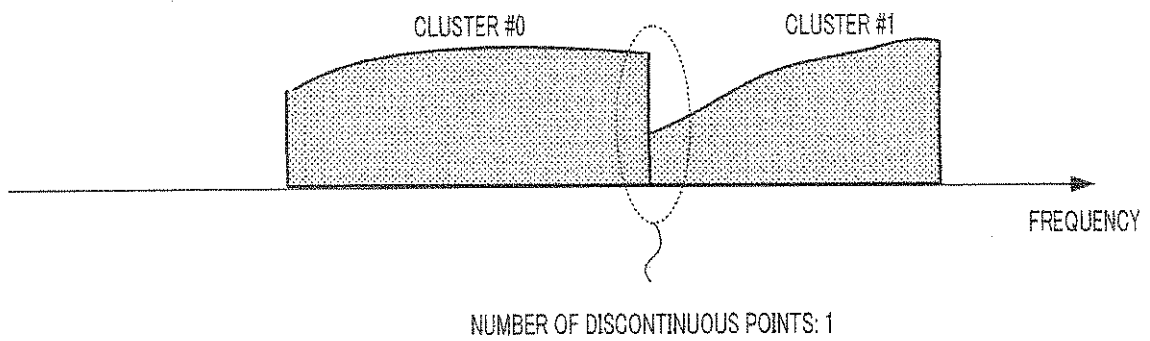


FIG. 6B

MODULATION LEVEL	CLUSTER SPACING (FREQUENCY SPACING BETWEEN CLUSTERS)
QPSK (MODULATION LEVEL: LOW)	WIDE
16QAM (MODULATION LEVEL: MEDIUM)	MEDIUM
64QAM (MODULATION LEVEL: HIGH)	NARROW

FIG.7

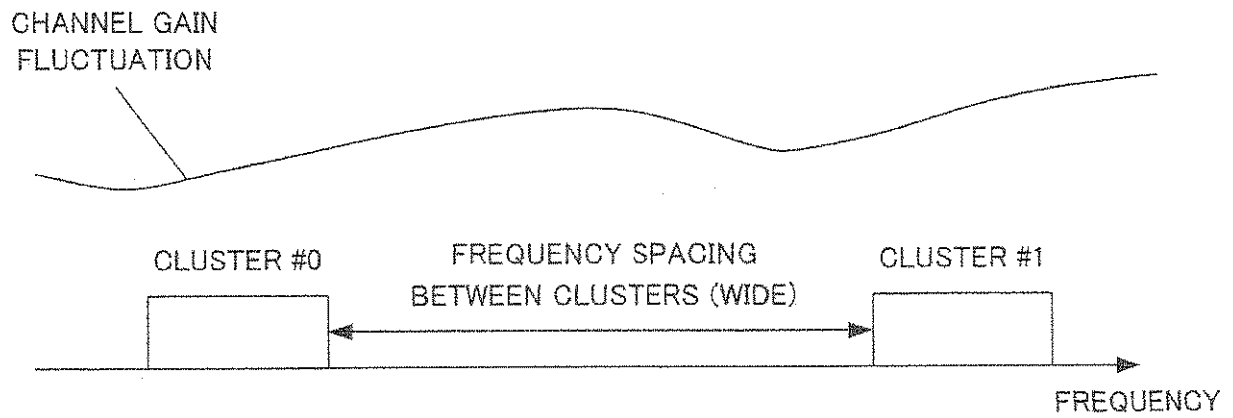


FIG.8A

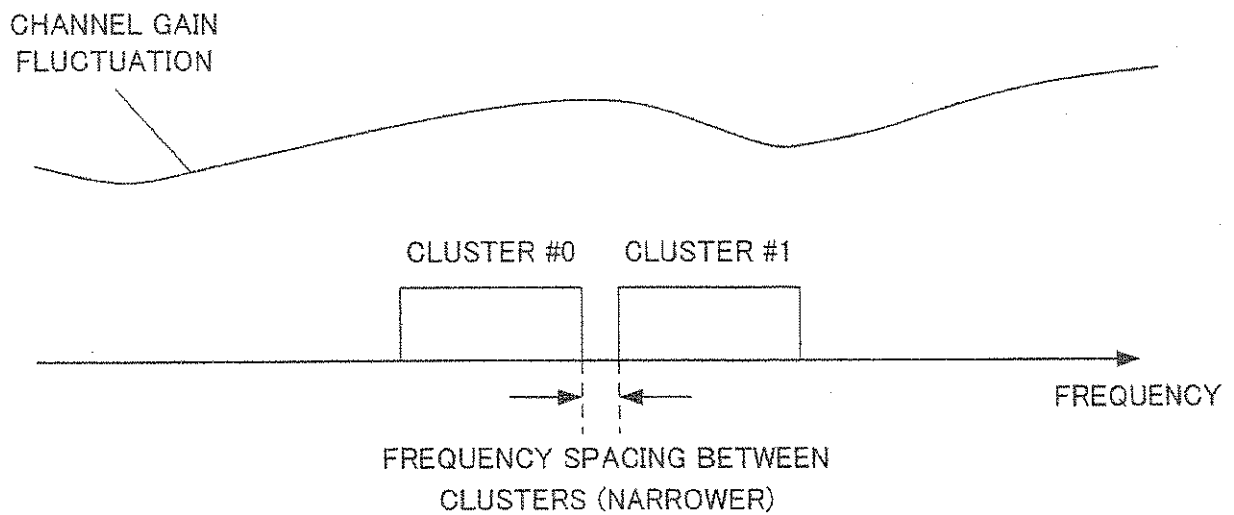


FIG.8B

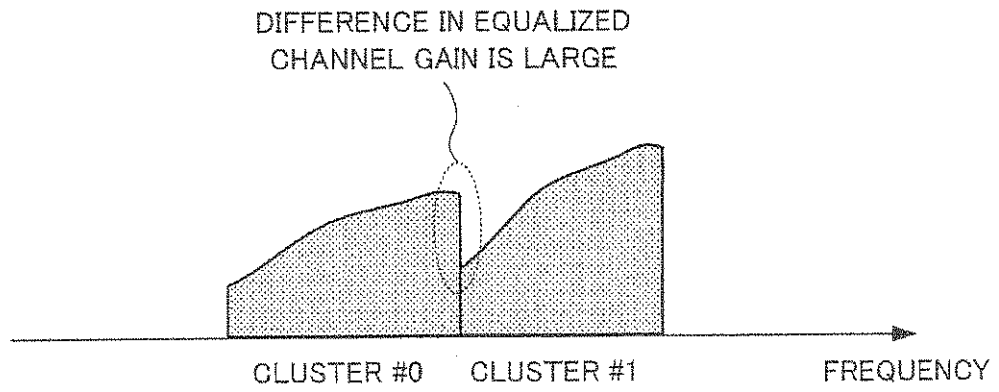


FIG.9A

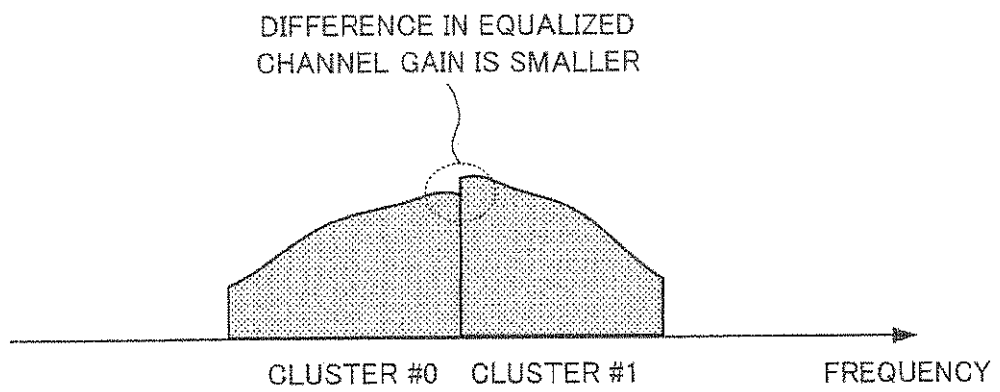


FIG.9B

CODING SIZE (THE NUMBER OF ALLOCATED RBS)	NUMBER OF CLUSTERS	CLUSTER SIZE (BANDWIDTH PER CLUSTER)
LARGE (THE NUMBER OF ALLOCATED RBS: HIGH)	HIGH	NARROW
MEDIUM (THE NUMBER OF ALLOCATED RBS: MEDIUM)	MEDIUM	MEDIUM
SMALL (THE NUMBER OF ALLOCATED RBS: LOW)	LOW	WIDE

FIG.10

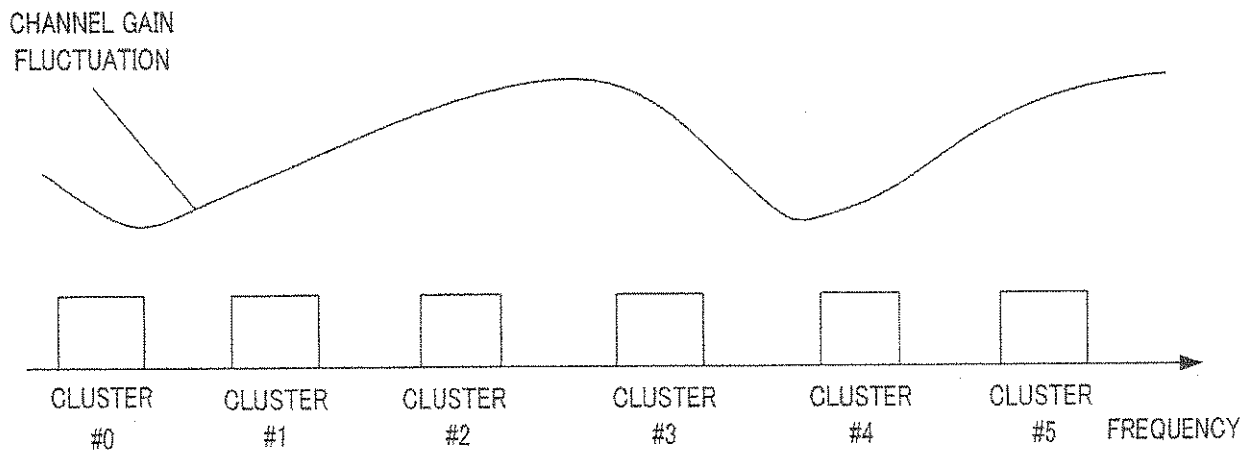


FIG. 11A

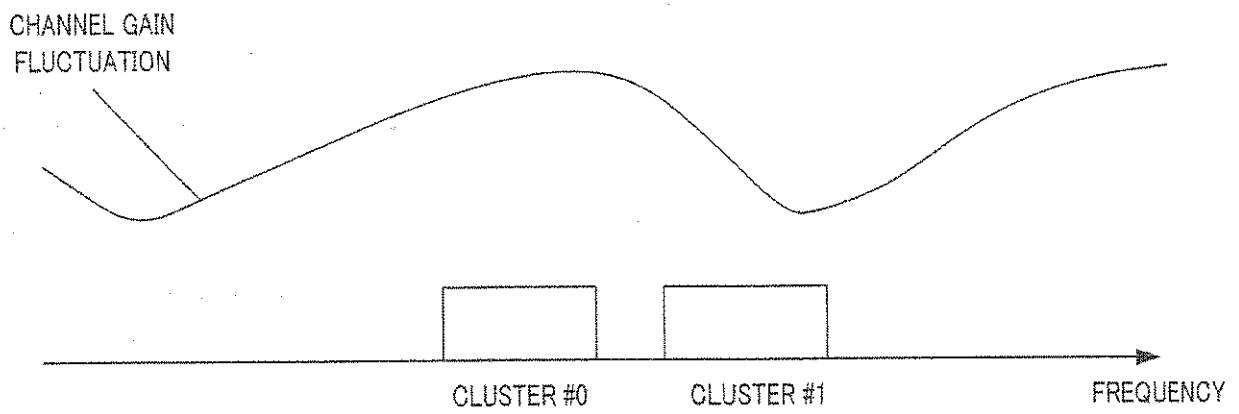


FIG. 11B

CODING SIZE (THE NUMBER OF ALLOCATED RBS)	CLUSTER SPACING (FREQUENCY SPACING BETWEEN CLUSTERS)
LARGE (THE NUMBER OF ALLOCATED RBS: HIGH)	WIDE
MEDIUM (THE NUMBER OF ALLOCATED RBS: MEDIUM)	MEDIUM
SMALL (THE NUMBER OF ALLOCATED RBS: LOW)	NARROW

FIG.12

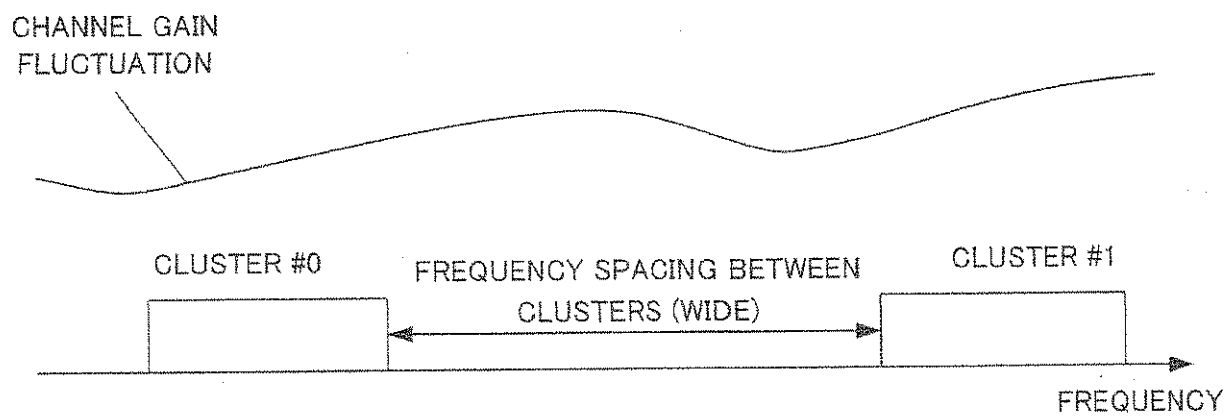


FIG.13A

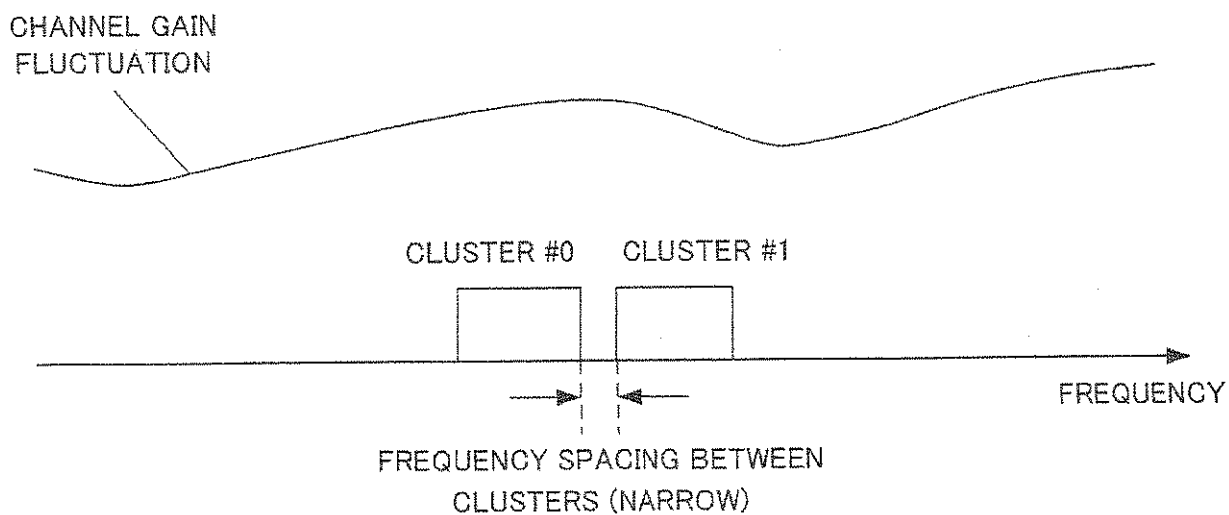


FIG.13B

CODING RATE	NUMBER OF CLUSTERS	CLUSTER SIZE (BANDWIDTH PER CLUSTER)
LOW	HIGH	NARROW
MEDIUM	MEDIUM	MEDIUM
HIGH	LOW	WIDE

FIG.14

CODING RATE	CLUSTER SPACING (FREQUENCY SPACING BETWEEN CLUSTERS)
LOW	WIDE
MEDIUM	MEDIUM
HIGH	NARROW

FIG.15

MODULATION LEVEL (A)	NUMBER OF CLUSTERS (X)
BPSK~QPSK	4
8PSK~16QAM	3
32QAM~64QAM	2
128QAM~256QAM	1

FIG.16A

MODULATION LEVEL (A)	NUMBER OF CLUSTERS (X)	
	METHOD 1	METHOD 2
BPSK(A=0)	$X \leq 4$	$2 \leq X \leq 4$
QPSK(A=1)	$X \leq 4$	$2 \leq X \leq 4$
16QAM(A=2)	$X \leq 2$	$1 \leq X \leq 2$
64QAM(A=3)	$X \leq 1$	$1 \leq X \leq 1$

FIG.16B

MODULATION LEVEL (A)	CLUSTER SIZE (Y)	
	METHOD 1	METHOD 2
BPSK~QPSK	$B_0 \leq Y$ OR (ARBITRARY)	$B_0 \leq Y \leq B_2$
8PSK~16QAM	$B_1 \leq Y$	$B_1 \leq Y \leq B_4$
32QAM~64QAM	$B_2 \leq Y$	$B_3 \leq Y \leq B_6$
128QAM~256QAM	$B_3 \leq Y$	$B_5 \leq Y$

FIG.16C

MODULATION LEVEL (A)	CLUSTER SIZE (Y)
BPSK(A=0)	$B/X_0 \leq Y$ OR (ARBITRARY)
QPSK(A=1)	$B/X_1 = Y$
16QAM(A=2)	$B/X_2 = Y$
64QAM(A=3)	$B/X_3 = Y$

FIG.16D

MODULATION LEVEL (A)	CLUSTER SPACING (Z)
BPSK~QPSK	$Z \leq B'_0$ OR (ARBITRARY)
8PSK~16QAM	$Z \leq B'_1$
32QAM~64QAM	$Z \leq B'_2$
128QAM~256QAM	$Z \leq B'_3$

FIG.16E

CODING SIZE (N)	NUMBER OF CLUSTERS (X)
~100	1
101~500	2
501~1000	3
1001~	4

FIG.17A

CODING SIZE (N)	CLUSTER SIZE (Y)	
	METHOD 1	METHOD 2
~100	$B_3 \leq Y$	$B_5 \leq Y$
101~500	$B_2 \leq Y$	$B_3 \leq Y \leq B_6$
501~1000	$B_1 \leq Y$	$B_1 \leq Y \leq B_4$
1001~	$B_0 \leq Y$ OR (ARBITRARY)	$B_0 \leq Y \leq B_2$

FIG.17B

CODING SIZE (N)	CLUSTER SIZE (Y)
~100	$B/X_0=Y$
101~500	$B/X_1=Y$
501~1000	$B/X_2=Y$
1001~	$B/X_3 \leq Y$ OR (ARBITRARY)

FIG.17C

CODING SIZE (N)	CLUSTER SPACING (Z)
~100	$Z \leq B'_3$
101~500	$Z \leq B'_2$
501~1000	$Z \leq B'_1$
1001~	$Z \leq B'_0$ OR (ARBITRARY)

FIG.17D

CODING RATE (R)	NUMBER OF CLUSTERS (X)
$R \leq 1/3$	4
$1/3 < R \leq 1/2$	3
$1/2 < R \leq 2/3$	2
$2/3 < R$	1

FIG.18A

CODING RATE (R)	CLUSTER SIZE (Y)	
	METHOD 1	METHOD 2
$R \leq 1/3$	$B_0 \leq Y$ OR (ARBITRARY)	$B_0 \leq Y \leq B_2$
$1/3 < R \leq 1/2$	$B_1 \leq Y$	$B_1 \leq Y \leq B_4$
$1/2 < R \leq 2/3$	$B_2 \leq Y$	$B_3 \leq Y \leq B_6$
$2/3 < R$	$B_3 \leq Y$	$B_5 \leq Y$

FIG.18B

CODING RATE (R)	CLUSTER SIZE (Y)
$R \leq 1/3$	$B/X_0 \leq Y$ OR (ARBITRARY)
$1/3 < R \leq 1/2$	$B/X_1 = Y$
$1/2 < R \leq 2/3$	$B/X_2 = Y$
$2/3 < R$	$B/X_3 = Y$

FIG.18C

CODING RATE (R)	CLUSTER SPACING (Z)
$R \leq 1/3$	$Z \leq B'_0$ OR (ARBITRARY)
$1/3 < R \leq 1/2$	$Z \leq B'_1$
$1/2 < R \leq 2/3$	$Z \leq B'_2$
$2/3 < R$	$Z \leq B'_3$

FIG.18D

MCS SET	MODULATION LEVEL (A)	CODING RATE (R)	NUMBER OF CLUSTERS (X)
0	QPSK	1/8	4
1	QPSK	1/3	3
2	QPSK	1/2	3
3	16QAM	1/3	2
4	16QAM	1/2	2
5	16QAM	2/3	1
6	64QAM	1/2	1
7	64QAM	2/3	1

FIG.19A

MCS SET	MODULATION LEVEL (A)	CODING RATE (R)	CLUSTER SIZE (Y)	
			METHOD 1	METHOD 2
0	QPSK	1/8	$B_0 \leq Y$ OR (ARBITRARY)	$B_0 \leq Y \leq B_2$
1	QPSK	1/3	$B_1 \leq Y$	$B_1 \leq Y \leq B_4$
2	QPSK	1/2	$B_2 \leq Y$	$B_3 \leq Y \leq B_6$
3	16QAM	1/3	$B_3 \leq Y$	$B_5 \leq Y \leq B_8$
4	16QAM	1/2	$B_4 \leq Y$	$B_7 \leq Y \leq B_{10}$
5	16QAM	2/3	$B_5 \leq Y$	$B_9 \leq Y \leq B_{12}$
6	64QAM	1/2	$B_6 \leq Y$	$B_{11} \leq Y \leq B_{14}$
7	64QAM	2/3	$B_7 \leq Y$	$B_{13} \leq Y$

FIG.19B

MCS SET	MODULATION LEVEL (A)	CODING RATE (R)	CLUSTER SPACING (Z)
0	QPSK	1/8	$Z \leq B'_0$ OR (ARBITRARY)
1	QPSK	1/3	$Z \leq B'_1$
2	QPSK	1/2	$Z \leq B'_2$
3	16QAM	1/3	$Z \leq B'_3$
4	16QAM	1/2	$Z \leq B'_4$
5	16QAM	2/3	$Z \leq B'_5$
6	64QAM	1/2	$Z \leq B'_6$
7	64QAM	2/3	$Z \leq B'_7$

FIG.19C

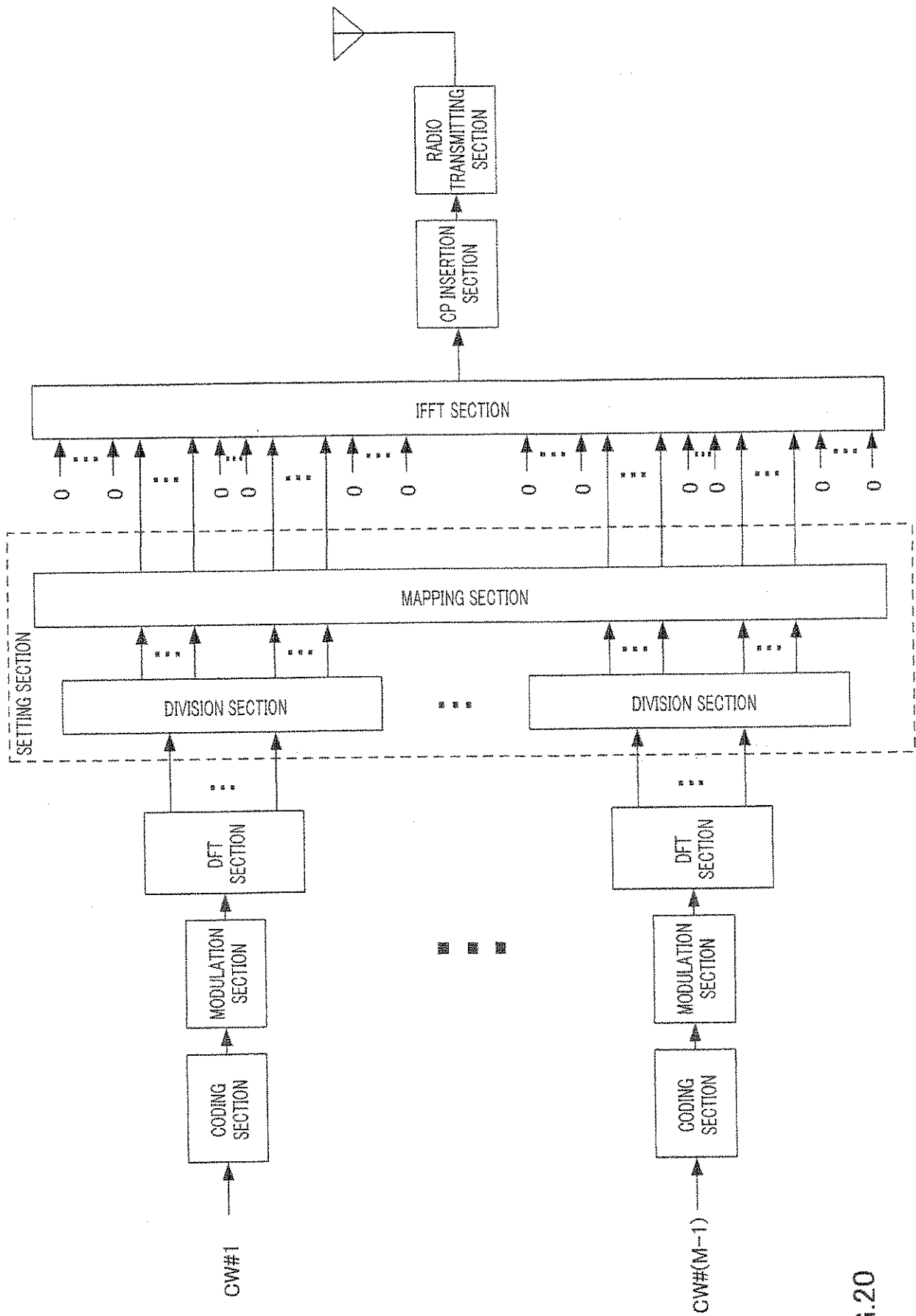


FIG. 20

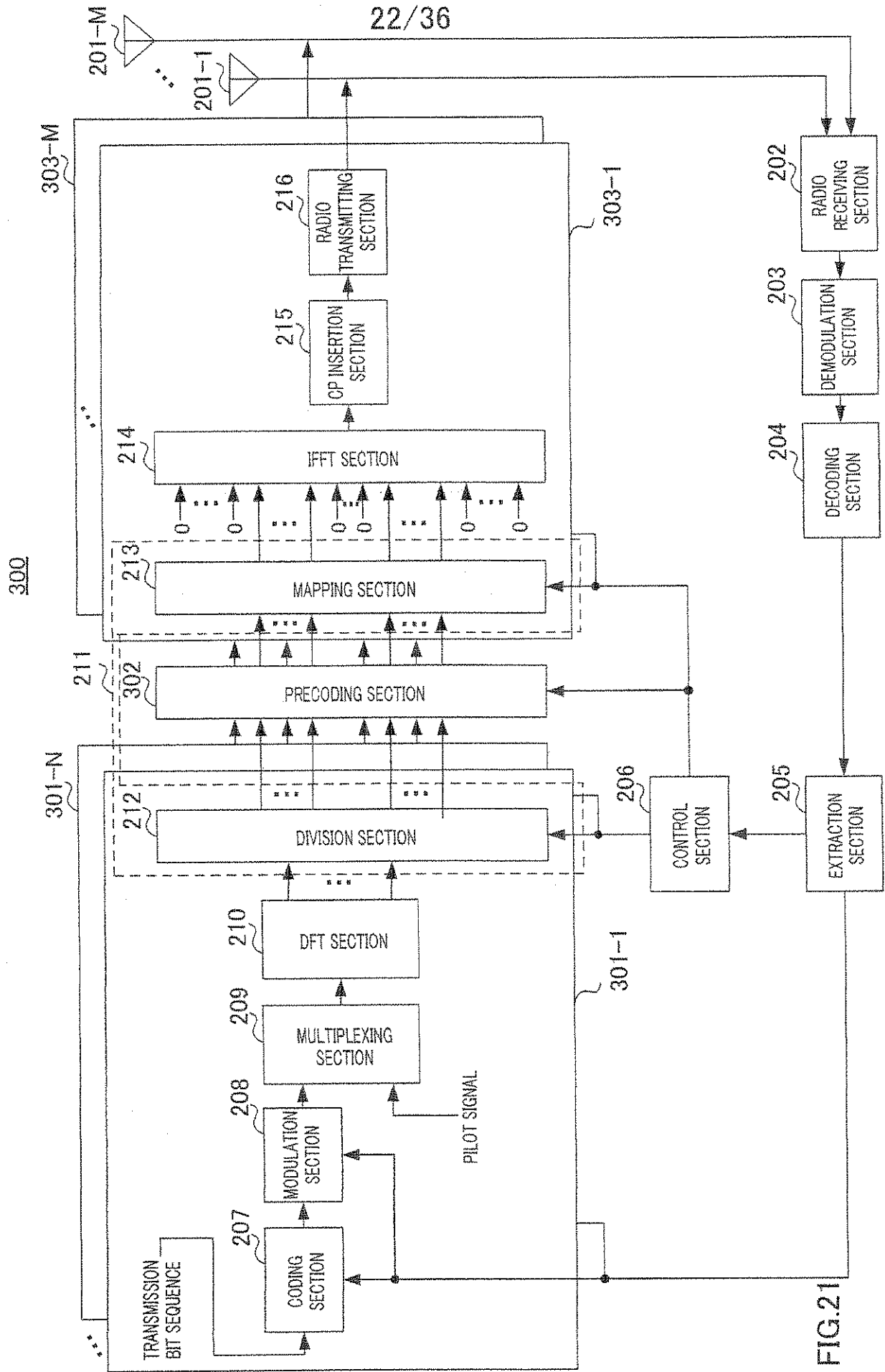


FIG. 21

RANK INDEX	NUMBER OF CLUSTERS	CLUSTER SIZE (BANDWIDTH PER CLUSTER)
LOW	HIGH	NARROW
MEDIUM	MEDIUM	MEDIUM
HIGH	LOW	WIDE

FIG.22

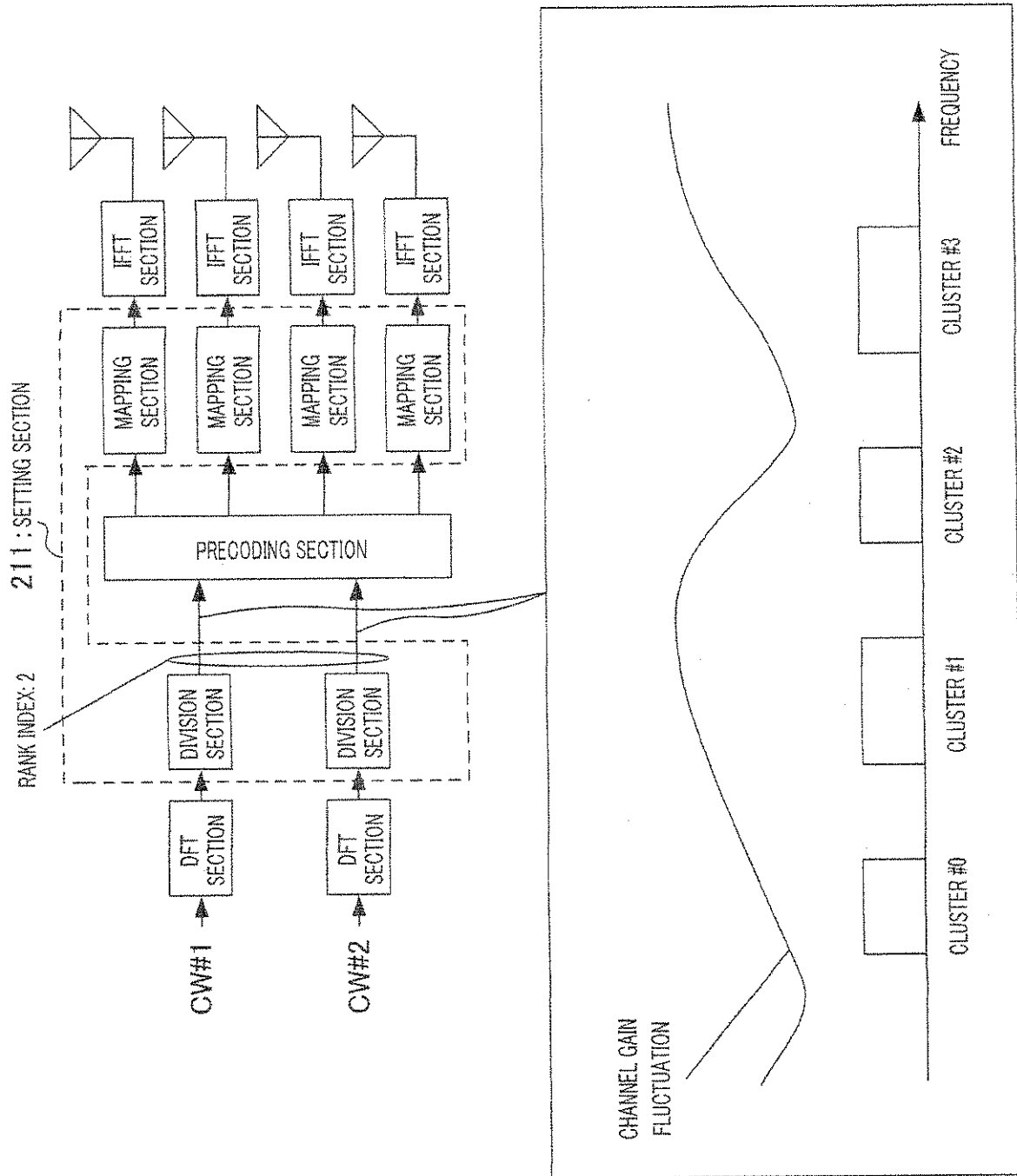


FIG.23A

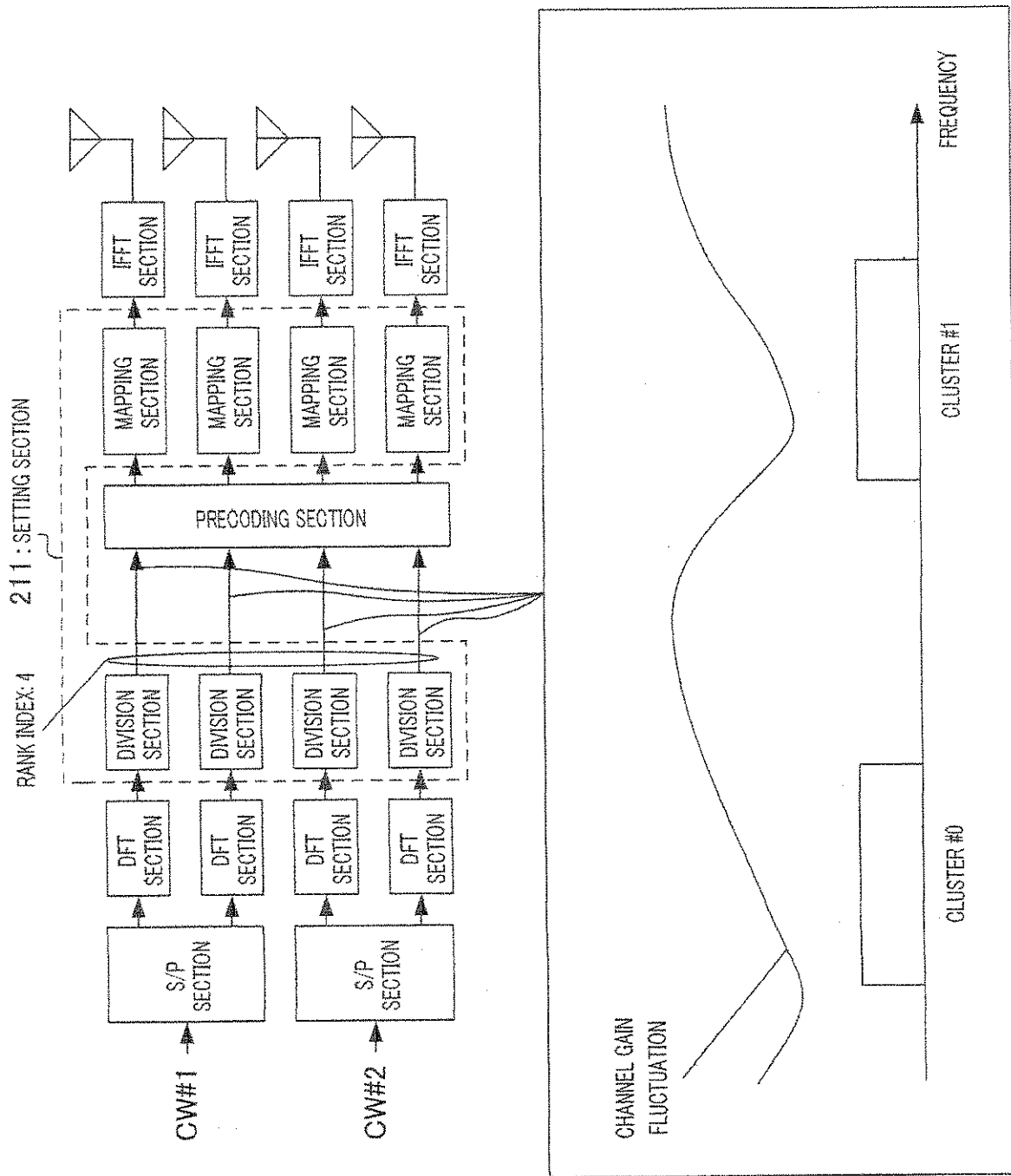


FIG.23B

RANK INDEX	CLUSTER SPACING (FREQUENCY SPACING BETWEEN CLUSTERS)
LOW	WIDE
MEDIUM	MEDIUM
HIGH	NARROW

FIG.24

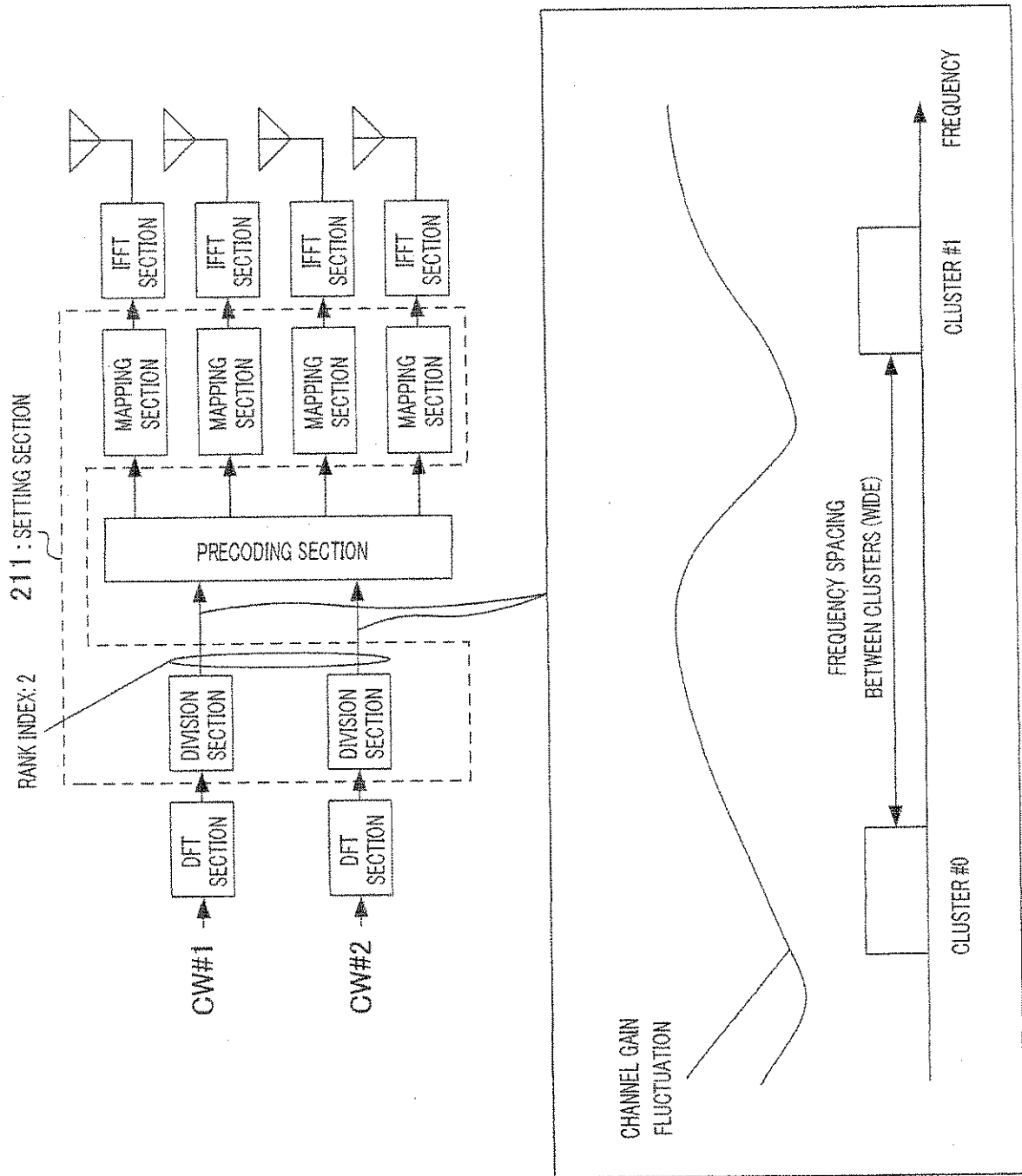


FIG.25A

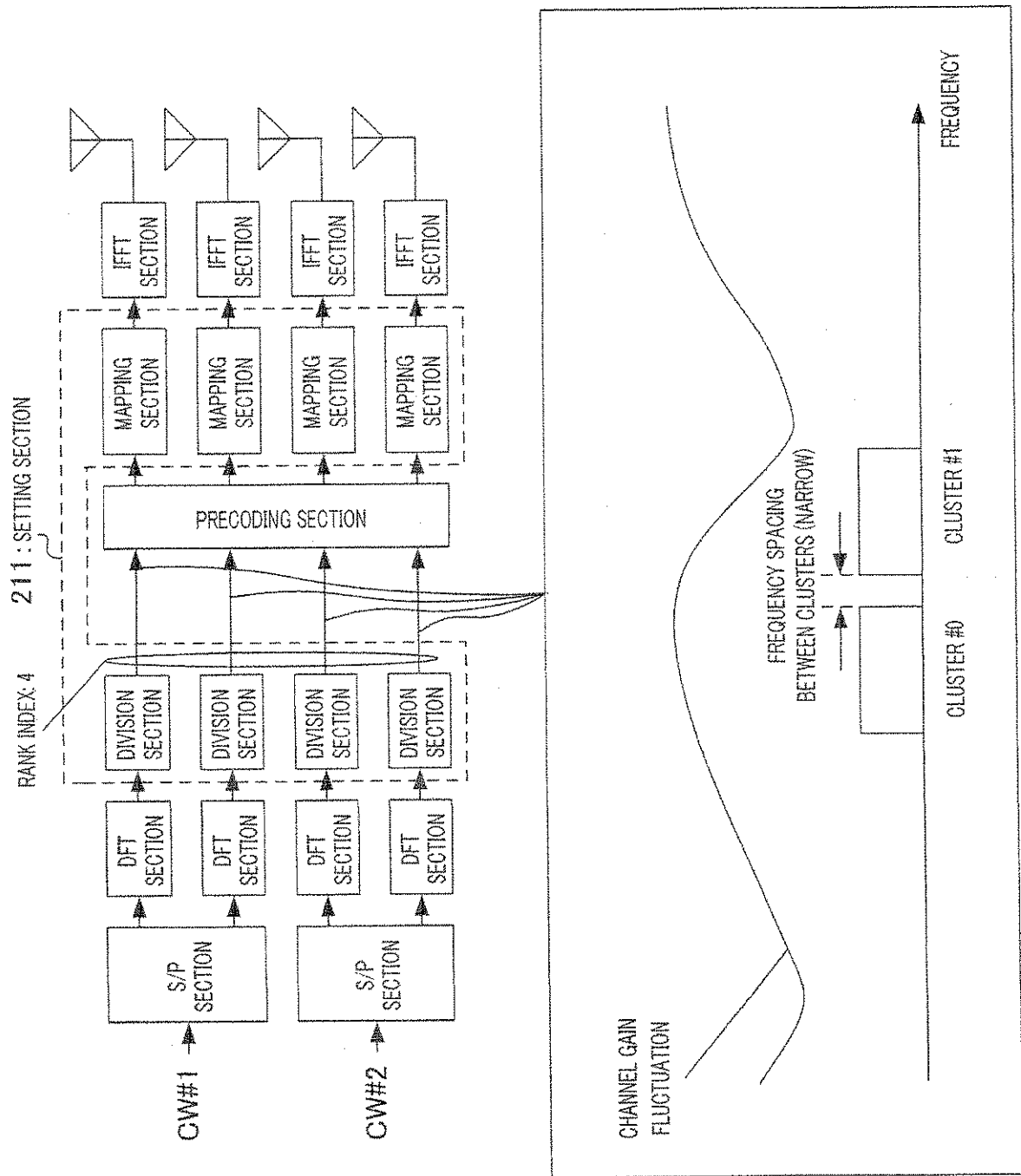


FIG.25B

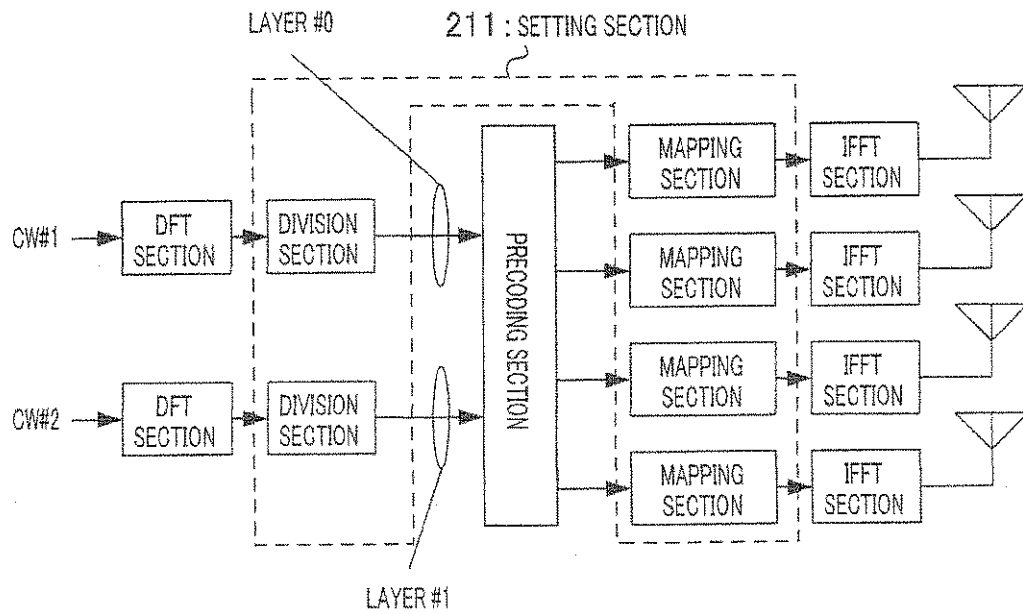


FIG.26A

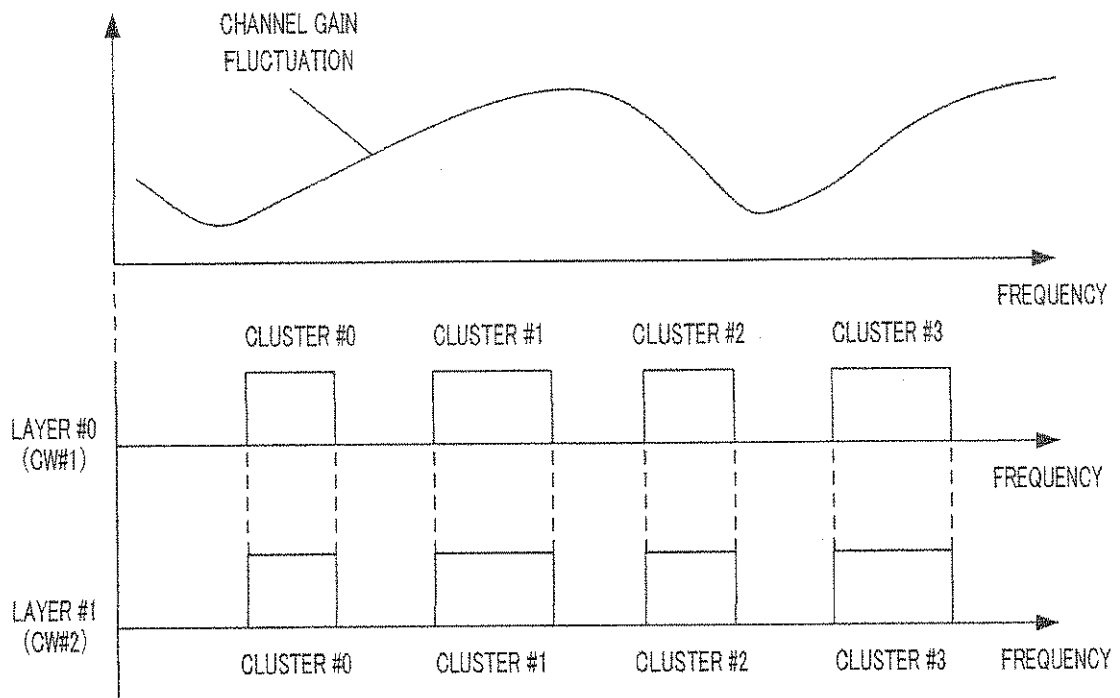


FIG.26B

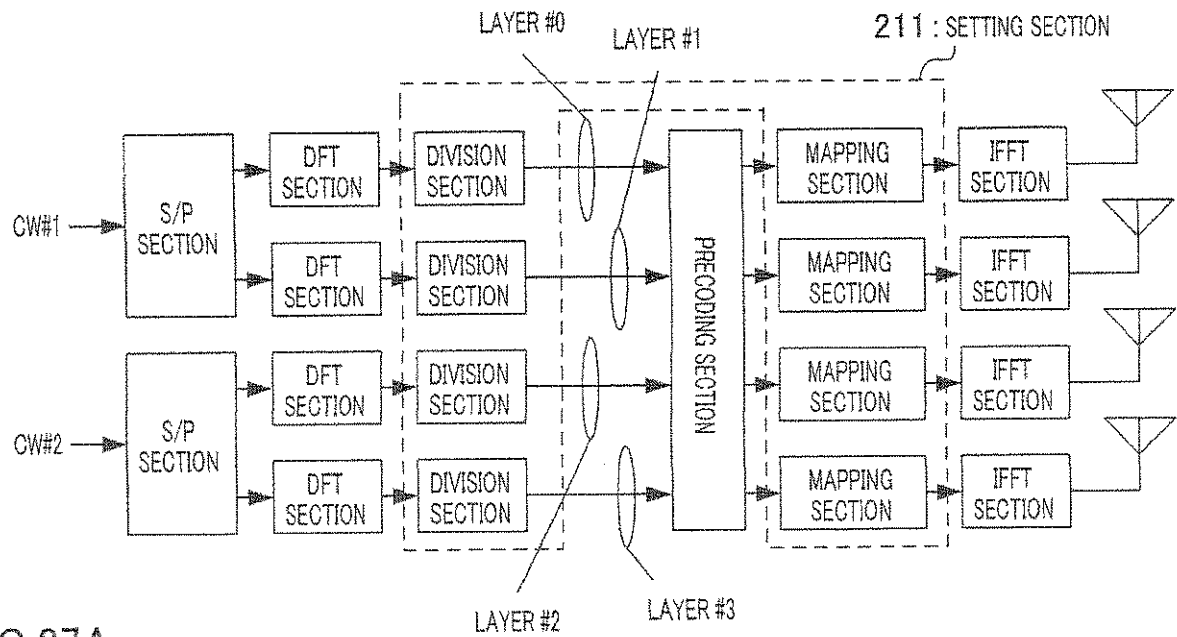


FIG.27A

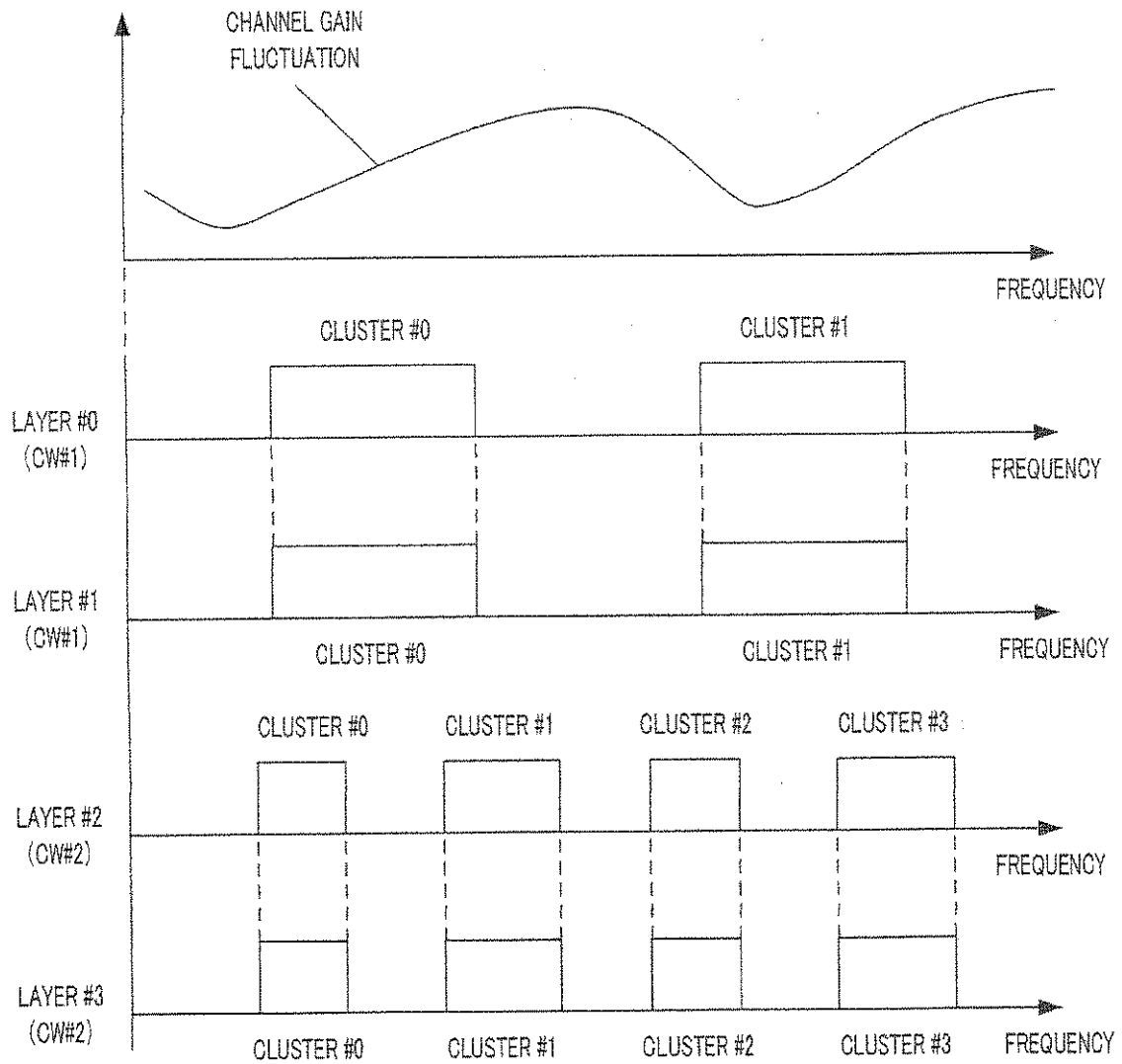


FIG.27B

TRANSMISSION RATE (MCS SET)	NUMBER OF CLUSTERS	CLUSTER SIZE (BANDWIDTH PER CLUSTER)
LOW	HIGH	NARROW
MEDIUM	MEDIUM	MEDIUM
HIGH	LOW	WIDE

FIG.28

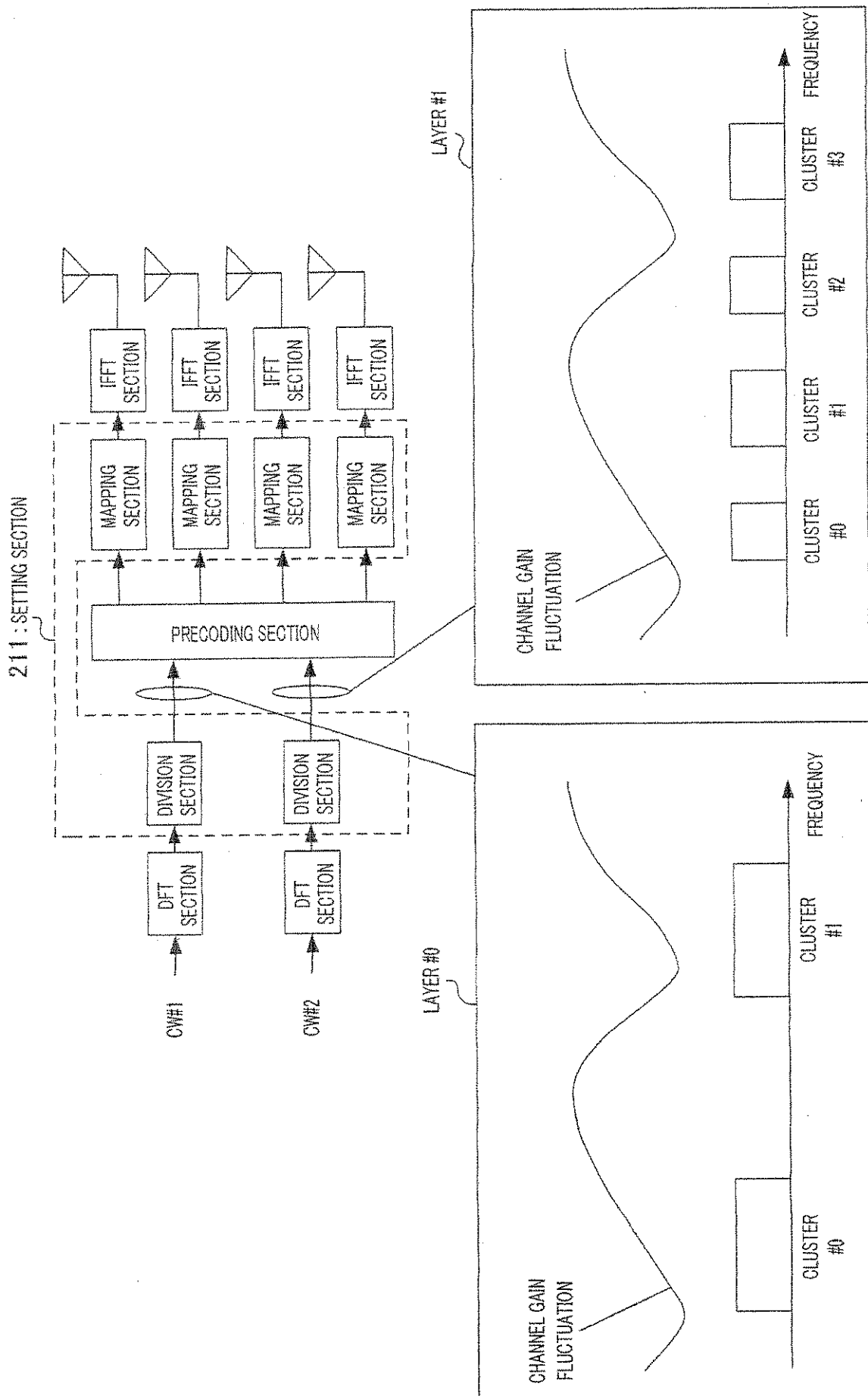


FIG.29

TRANSMISSION RATE (MCS SET)	CLUSTER SPACING (FREQUENCY SPACING BETWEEN CLUSTERS)
LOW	WIDE
MEDIUM	MEDIUM
HIGH	NARROW

FIG.30

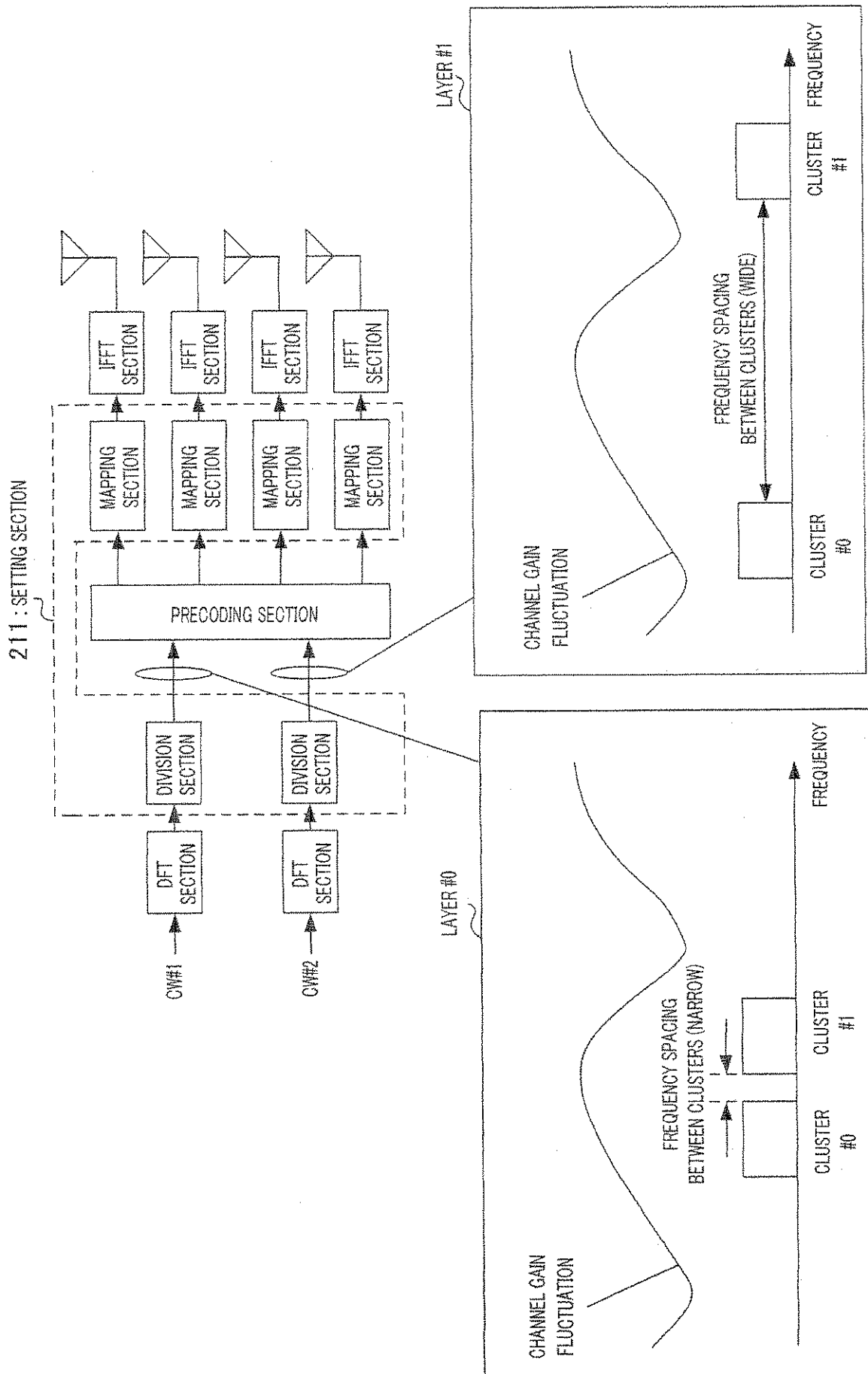


FIG.31

RANK INDEX (RI)	NUMBER OF CLUSTERS (X)
1	4
2	3
3	2
4	1

FIG.32A

RANK INDEX (RI)	NUMBER OF CLUSTERS (X)	
	METHOD 1	METHOD 2
1	$X \leq 4$	$2 \leq X \leq 4$
2	$X \leq 3$	$2 \leq X \leq 3$
3	$X \leq 2$	$1 \leq X \leq 2$
4	$X \leq 1$	$1 \leq X \leq 1$

FIG.32B

RANK INDEX (RI)	CLUSTER SIZE (Y)	
	METHOD 1	METHOD 2
1~2	$B_0 \leq Y$ OR (ARBITRARY)	$B_0 \leq Y \leq B_2$
3~4	$B_1 \leq Y$	$B_1 \leq Y \leq B_4$
5~6	$B_2 \leq Y$	$B_3 \leq Y \leq B_6$
7~8	$B_3 \leq Y$	$B_5 \leq Y$

FIG.32C

RANK INDEX (RI)	CLUSTER SIZE (Y)
1	$B/X_0 \leq Y$ OR (ARBITRARY)
2	$B/X_1 = Y$
3	$B/X_2 = Y$
4	$B/X_3 = Y$

FIG.32D

RANK INDEX (RI)	CLUSTER SPACING (Z)
1	$Z \leq B'_0$ OR (ARBITRARY)
2	$Z \leq B'_1$
3	$Z \leq B'_2$
4	$Z \leq B'_3$

FIG.32E