

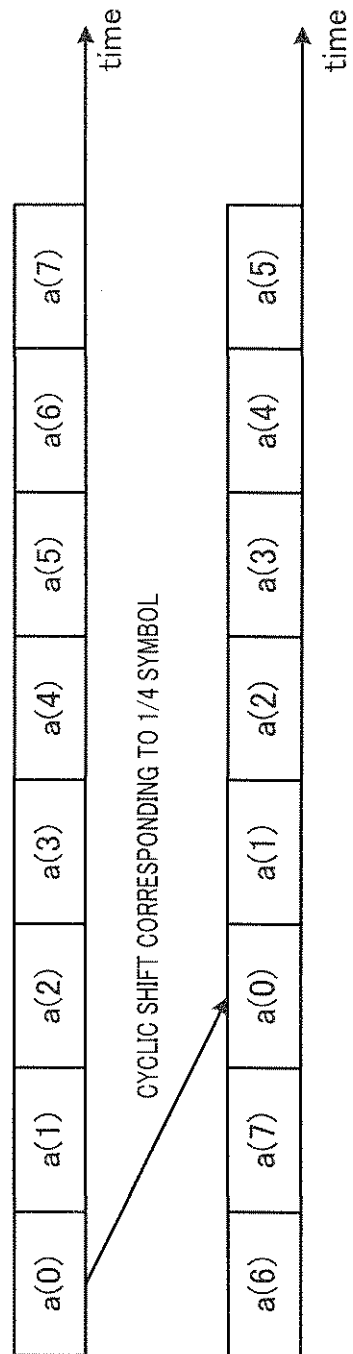


FIG. 1

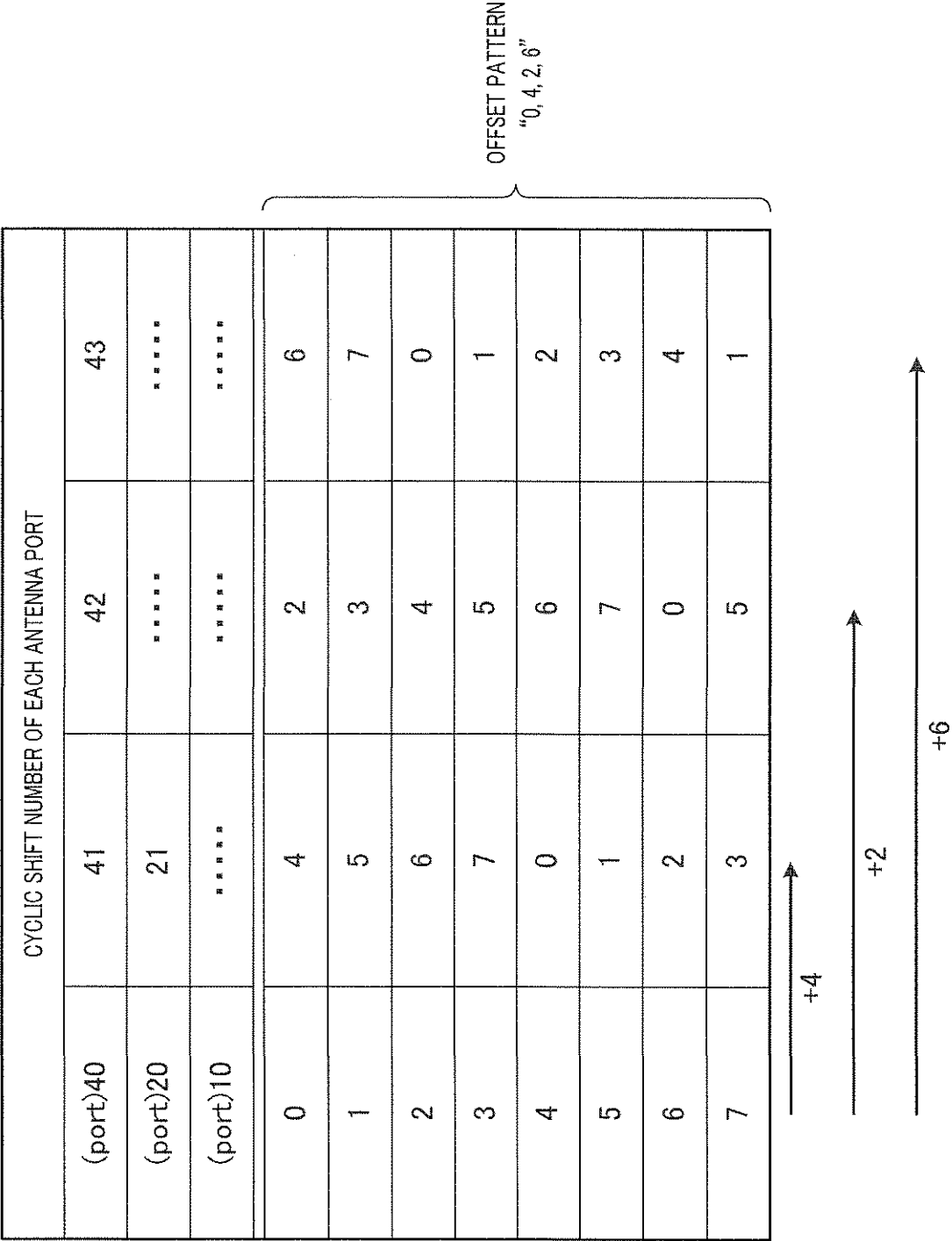


FIG. 2

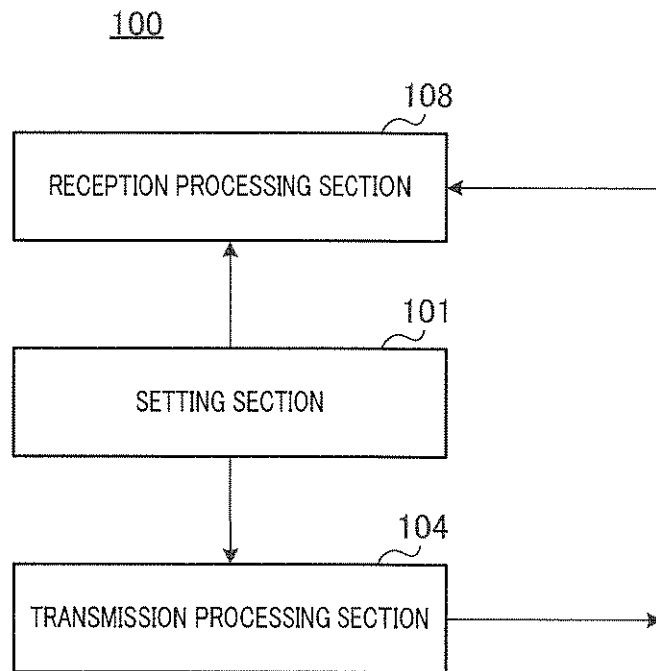


FIG. 3

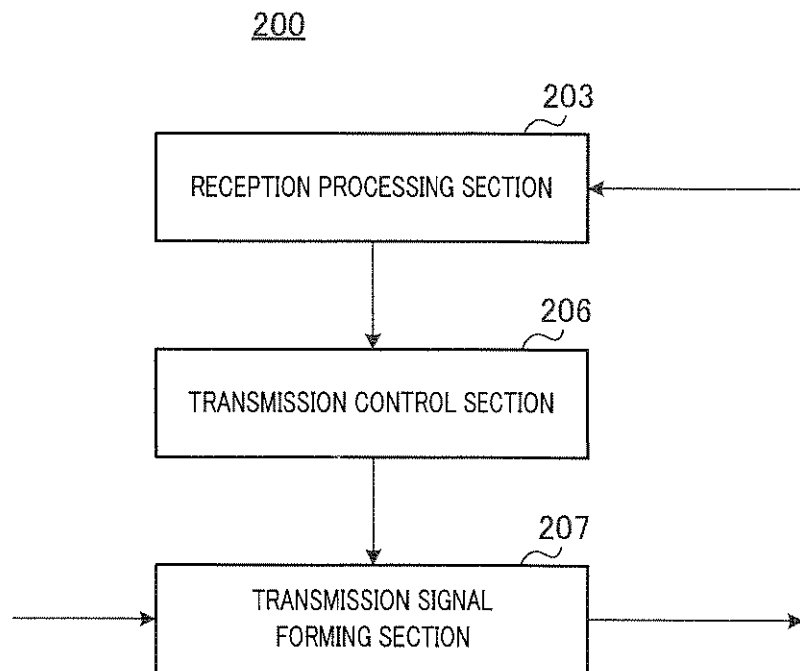


FIG. 4



515

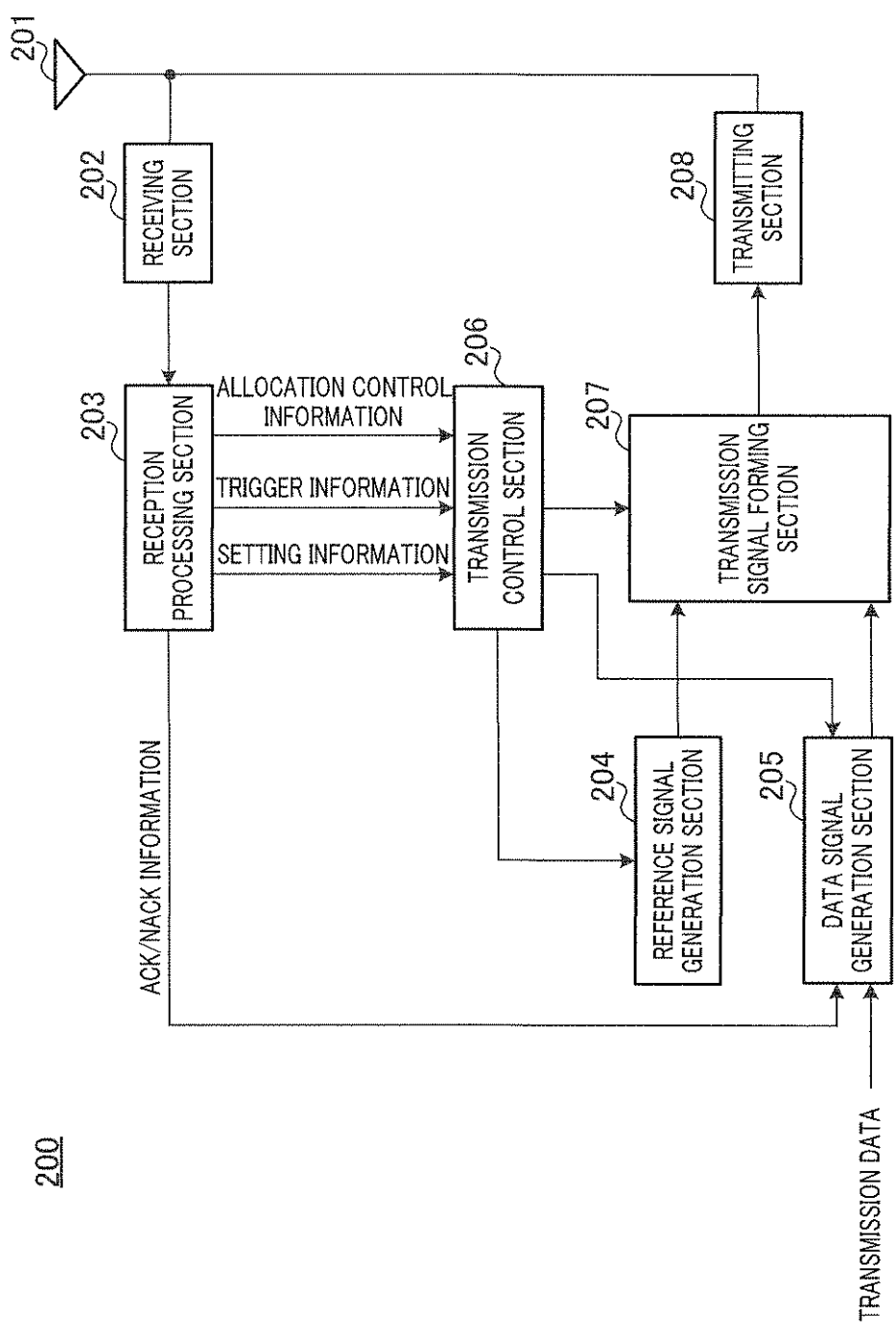


FIG. 6

CYCLIC SHIFT NUMBER OF EACH ANTENNA PORT			
(port)40	41	42	43
(port)20	21		
→ 0	4	2	6
1	5	3	7
2	6	4	0
3	7	5	1
→ 4	2	6	0
5	6	7	0
6	4	0	2
7	0	1	2

PAIR

OFFSET PATTERN
"0, 4, 2, 6"

OFFSET PATTERN
DIFFERENT FROM "0, 4, 2, 6"

FIG. 7

CYCLIC SHIFT NUMBER OF EACH ANTENNA PORT			
(port)40	41	42	43
(port)20	21	*****	*****
0	4	2	6
1	5	3	7
2	6	4	0
3	7	5	1
4	3	2	1
5	6	7	0
6	5	4	3
7	0	1	2

OFFSET PATTERN
"0, 4, 2, 6"

"0, 1, 2, 3" OR "0, -1, -2, -3"

FIG. 8

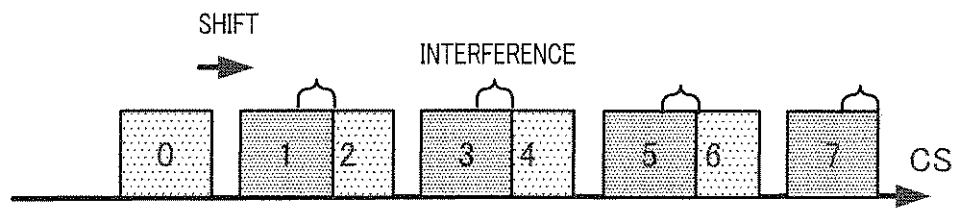


FIG. 9

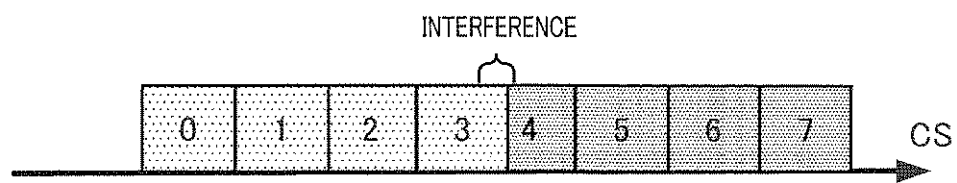


FIG. 10

CYCLIC SHIFT NUMBER OF EACH ANTENNA PORT				
(port)40	41	42	43	
(port)20	21	*****	*****	
0	4	2	6	OFFSET PATTERN "0, 4, 2, 6"
1	5	3	7	
2	6	4	0	
3	7	5	1	
4	3	1	2	OFFSET PATTERN "0, 1, 2, 3" NOT IN PARTICULAR ORDER
5	6	0	7	
6	5	3	4	
7	0	2	1	

FIG. 11

CYCLIC SHIFT NUMBER OF EACH ANTENNA PORT				
(port)40	41	42	43	
(port)20	21	*****	*****	
→ 0	4	2	6	OFFSET PATTERN "0, 4, 2, 6"
5	1	7	3	
2	6	4	0	
7	3	1	5	
4	5	6	7	"0, 1, 2, 3" OR "0, -1, -2, -3"
→ 1	0	7	6	
6	7	0	1	
3	2	1	0	

FIG. 12

CYCLIC SHIFT NUMBER OF EACH ANTENNA PORT				
(port)40	41	42	43	
(port)20	21			
0	4	2	6	
5	1	7	3	
2	6	4	0	
7	3	5	1	
4	5	6	7	
1	0	7	6	
6	7	0	1	
3	2	1	0	

OFFSET PATTERN
"0, 4, 2, 6"

"0, 1, 2, 3" OR "0, -1, -2, -3"

FIG. 13

CYCLIC SHIFT NUMBER OF EACH ANTENNA PORT				
(port)40	41	42	43	
(port)20	21	*****	*****	
0	4	2	6	OFFSET PATTERN "0, 4, 2, 6"
1	5	3	7	
2	6	4	0	
3	7	5	1	
4	0	5	1	OFFSET PATTERN "0, 4, 1, 5"
5	1	6	2	
6	2	7	3	
7	3	0	4	

FIG. 14

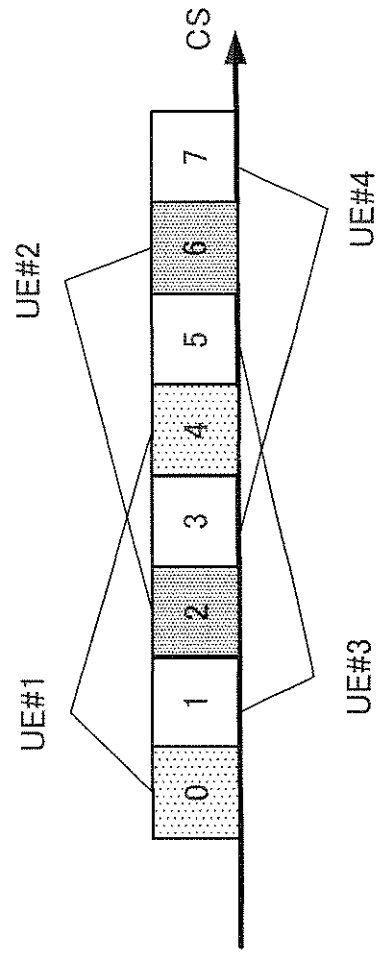


FIG. 15

CYCLIC SHIFT NUMBER OF EACH ANTENNA PORT			
(port)40	41	42	43
(port)20	21	*****	*****
0	4	2	6
1	5	3	7
2	6	4	0
3	7	5	1
4	7	2	6
5	0	3	7
6	1	4	0
7	2	5	1

OFFSET PATTERN
"0, 4, 2, 6"

OFFSET PATTERN
"0, 3, A, B"

FIG. 16

CYCLIC SHIFT NUMBER OF EACH ANTENNA PORT				
(port)40	41	42	43	
(port)20	21	*****	*****	
0	4	2	6	OFFSET PATTERN "0, 4, 2, 6"
1	5	3	7	
2	6	4	0	
3	7	5	1	
4	6	0	2	OFFSET PATTERN "0, 2, A, B"
5	7	1	3	
6	0	2	4	
7	1	3	5	

FIG. 17

CYCLIC SHIFT NUMBER OF EACH ANTENNA PORT			
(port)40	41	42	43
(port)20	21		
0	4	2	6
1	5	3	7
2	6	4	5
3	7	5	6
4	6	0	2
5	7	1	3
6	5	4	3
7	0	1	2

OFFSET PATTERN

"0, 4, 2, 6"

"0, 1, 2, 3"

"0, 2, 4, 6"

"0, -1, -2, -3"

DIFFERENT OFFSET PATTERNS

FIG. 18

CYCLIC SHIFT NUMBER				
(port)40	41	42	43	
(port)20	21	*****	*****	
0	4	2	6	IDENTICAL CYCLIC SHIFT AMOUNT
1	5	3	7	
2	6	4	0	
3	7	5	1	
4	0	6	2	
5	1	7	3	
6	2	0	4	
7	3	5	1	

FIG. 19

CYCLIC SHIFT NUMBER OF EACH ANTENNA PORT				SRS ARRANGEMENT OF EACH ANTENNA PORT			
(port)40	41	42	43	(port)40	41	42	43
(port)20	21	*****	*****	(port)20	21	*****	*****
0	4	2	6	FREQUENCY 1			
1	5	3	7	FREQUENCY 1			
2	6	4	0	FREQUENCY 1			
3	7	5	1	FREQUENCY 1			
4	0	6	2	FREQUENCY 1	FREQUENCY 1	FREQUENCY 2	FREQUENCY 2
5	1	7	3	FREQUENCY 1	FREQUENCY 1	FREQUENCY 2	FREQUENCY 2
6	2	0	4	FREQUENCY 1	FREQUENCY 1	FREQUENCY 2	FREQUENCY 2
7	3	5	1	FREQUENCY 1	FREQUENCY 1	FREQUENCY 2	FREQUENCY 2

FREQUENCY 1
ONLY

FREQUENCIES 1 AND 2
ARE USED

FIG. 20

CYCLIC SHIFT NUMBER OF EACH ANTENNA PORT					SRS ARRANGEMENT OF EACH ANTENNA PORT			
(port)40	41	42	43		(port)40	41	42	43
(port)20	21	*****	*****		(port)20	21	*****	*****
0	4	2	6		FREQUENCY 1			
1	5	3	7		FREQUENCY 1			
2	6	4	0		FREQUENCY 1			
3	7	5	1		FREQUENCY 1			
4	0	6	2		FREQUENCY 1	FREQUENCY 2	FREQUENCY 1	FREQUENCY 2
5	1	7	3		FREQUENCY 1	FREQUENCY 2	FREQUENCY 1	FREQUENCY 2
6	2	0	4		FREQUENCY 1	FREQUENCY 2	FREQUENCY 1	FREQUENCY 2
7	3	5	1		FREQUENCY 1	FREQUENCY 2	FREQUENCY 1	FREQUENCY 2

FREQUENCY 1
ONLY

FREQUENCIES 1 AND 2
ARE USED

FIG. 21