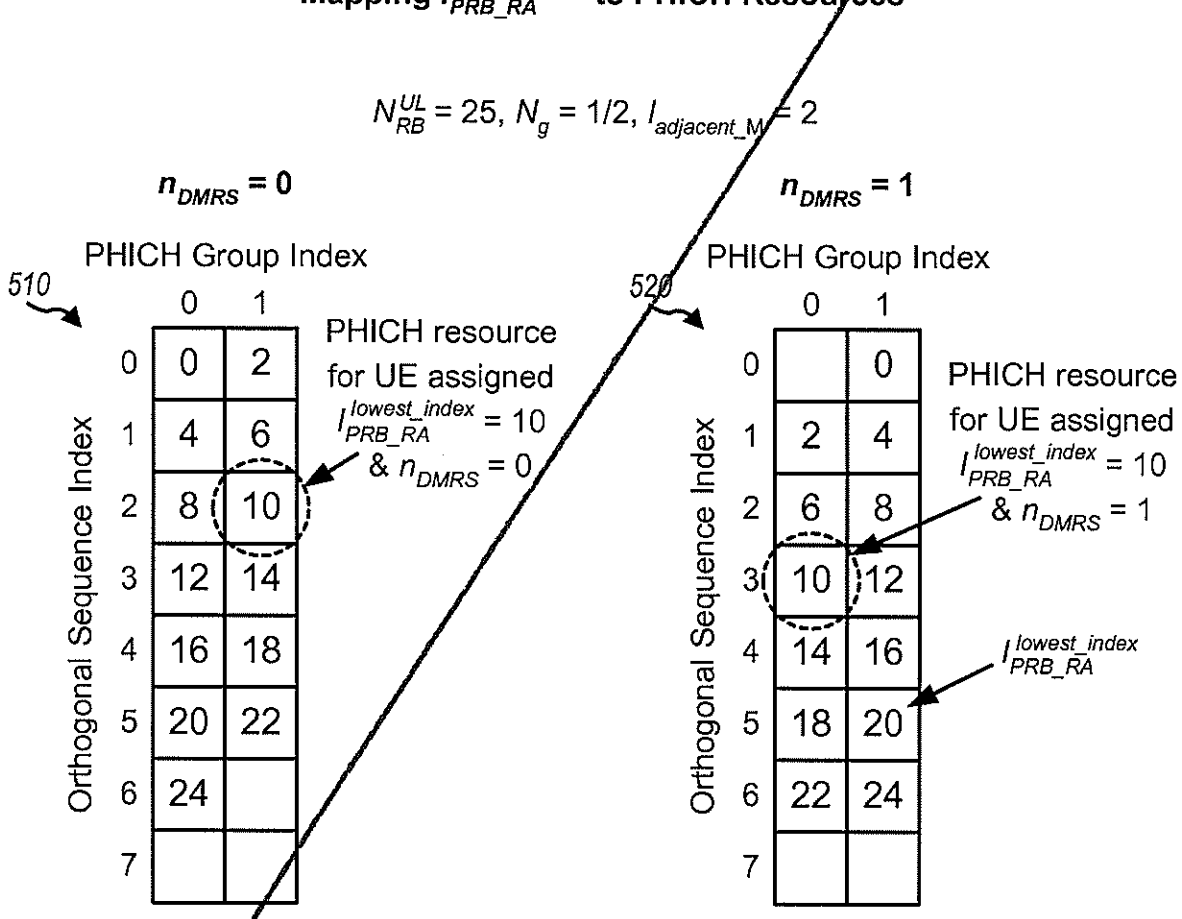

Mapping $I_{PRB_RA}^{lowest_index}$ to PHICH Resources
$N_{RB}^{UL} = 25$, $N_g = 1/2$, $I_{adjacent_M} = 2$
$n_{DMRS} = 0$
PHICH Group Index
510
0 1
0 0 2
1 4 6
2 8 10
3 12 14
4 16 18
5 20 22
6 24
7
Orthogonal Sequence Index
PHICH resource for UE assigned $I_{PRB_RA}^{lowest_index} = 10$ & $n_{DMRS} = 0$
$n_{DMRS} = 1$
PHICH Group Index
520
0 1
0 0
1 2 4
2 6 8
3 10 12
4 14 16
5 18 20
6 22 24
7
Orthogonal Sequence Index
PHICH resource for UE assigned $I_{PRB_RA}^{lowest_index} = 10$ & $n_{DMRS} = 1$
$I_{PRB_RA}^{lowest_index}$

FIG. 5

Mapping $I_{PRB_RA}^{lowest_index}$ to PHICH Resources

$N_{RB}^{UL} = 25$, $N_g = 2$, $I_{adjacent_M} = 1$

610

$n_{DMRS} = 0$

Orthogonal Sequence Index \ PHICH Group Index	0	1	2	3	4	5	6
0	0	1	2	3	4	5	6
1	7	8	9	10	11	12	13
2	14	15	16	17	18	19	20
3	21	22	23	24			
4							
5							
6							
7							

620

$n_{DMRS} = 1$

Orthogonal Sequence Index \ PHICH Group Index	0	1	2	3	4	5	6
0							
1							
2							
3							
4				24	23	22	21
5	20	19	18	17	16	15	14
6	13	12	11	10	9	8	7
7	6	5	4	3	2	1	0

630

$n_{DMRS} = 2$

Orthogonal Sequence Index \ PHICH Group Index	0	1	2	3	4	5	6
0		0	1	2	3	4	5
1	6	7	8	9	10	11	12
2	13	14	15	16	17	18	19
3	20	21	22	23	24		
4							
5							
6							
7							

640

$n_{DMRS} = 3$

Orthogonal Sequence Index \ PHICH Group Index	0	1	2	3	4	5	6
0							
1							
2							
3							
4			24	23	22	21	20
5	19	18	17	16	15	14	13
6	12	11	10	9	8	7	6
7	5	4	3	2	1	0	

FIG. 6

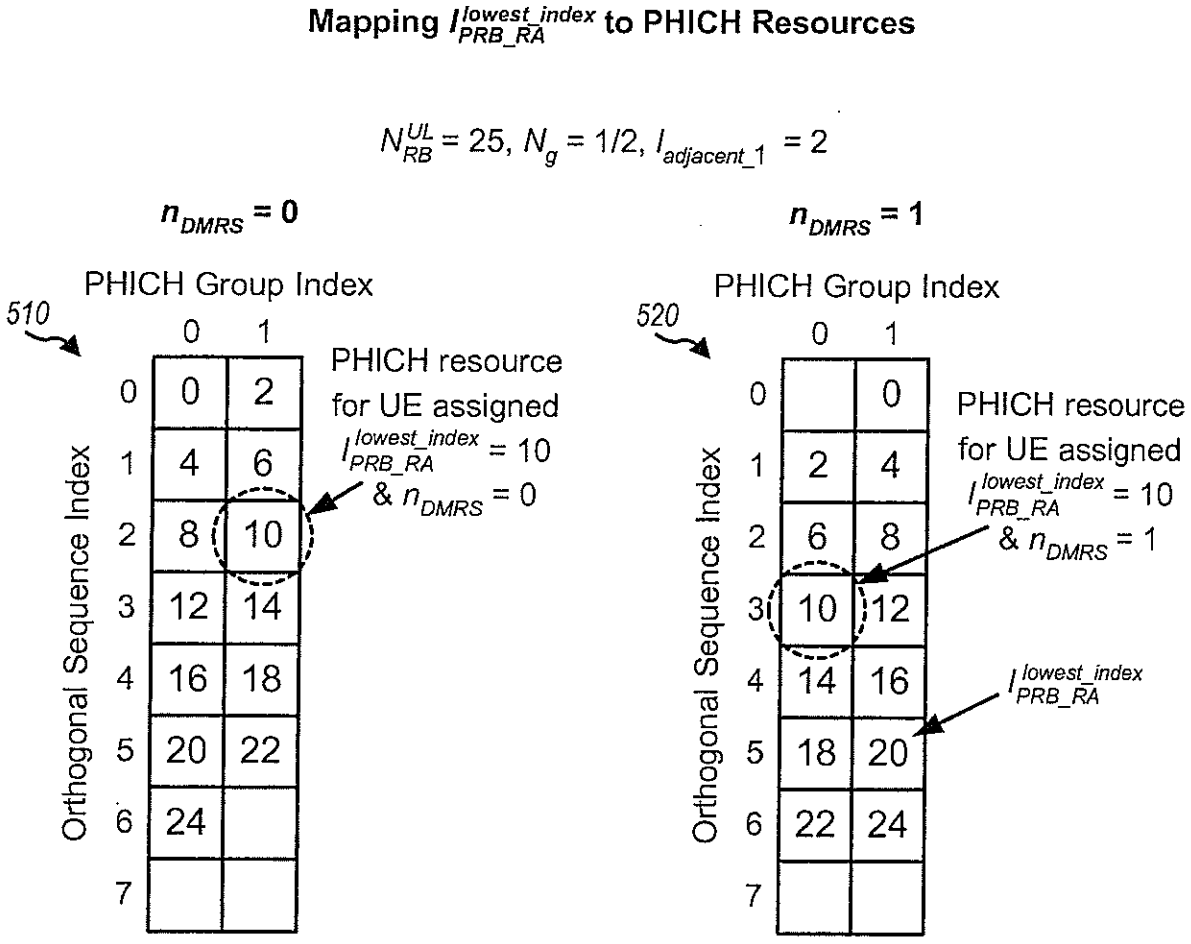

Mapping $I_{PRB_RA}^{lowest_index}$ to PHICH Resources
$N_{RB}^{UL} = 25$, $N_g = 1/2$, $I_{adjacent_1} = 2$
$n_{DMRS} = 0$
PHICH Group Index
510
0 1
0 0 2
1 4 6
2 8 10
3 12 14
4 16 18
5 20 22
6 24
7
Orthogonal Sequence Index
PHICH resource for UE assigned $I_{PRB_RA}^{lowest_index} = 10$ & $n_{DMRS} = 0$
$n_{DMRS} = 1$
PHICH Group Index
520
0 1
0 0
1 2 4
2 6 8
3 10 12
4 14 16
5 18 20
6 22 24
7
Orthogonal Sequence Index
PHICH resource for UE assigned $I_{PRB_RA}^{lowest_index} = 10$ & $n_{DMRS} = 1$
$I_{PRB_RA}^{lowest_index}$

FIG. 5

Mapping $I_{PRB_RA}^{lowest_index}$ to PHICH Resources

$N_{RB}^{UL} = 25$, $N_g = 2$, $I_{adjacent_1} = 1$

610

$n_{DMRS} = 0$

Orthogonal Sequence Index \ PHICH Group Index	0	1	2	3	4	5	6
0	0	1	2	3	4	5	6
1	7	8	9	10	11	12	13
2	14	15	16	17	18	19	20
3	21	22	23	24			
4							
5							
6							
7							

620

$n_{DMRS} = 1$

Orthogonal Sequence Index \ PHICH Group Index	0	1	2	3	4	5	6
0							
1							
2							
3							
4				24	23	22	21
5	20	19	18	17	16	15	14
6	13	12	11	10	9	8	7
7	6	5	4	3	2	1	0

630

$n_{DMRS} = 2$

Orthogonal Sequence Index \ PHICH Group Index	0	1	2	3	4	5	6
0		0	1	2	3	4	5
1	6	7	8	9	10	11	12
2	13	14	15	16	17	18	19
3	20	21	22	23	24		
4							
5							
6							
7							

640

$n_{DMRS} = 3$

Orthogonal Sequence Index \ PHICH Group Index	0	1	2	3	4	5	6
0							
1							
2							
3							
4			24	23	22	21	20
5	19	18	17	16	15	14	13
6	12	11	10	9	8	7	6
7	5	4	3	2	1	0	

FIG. 6