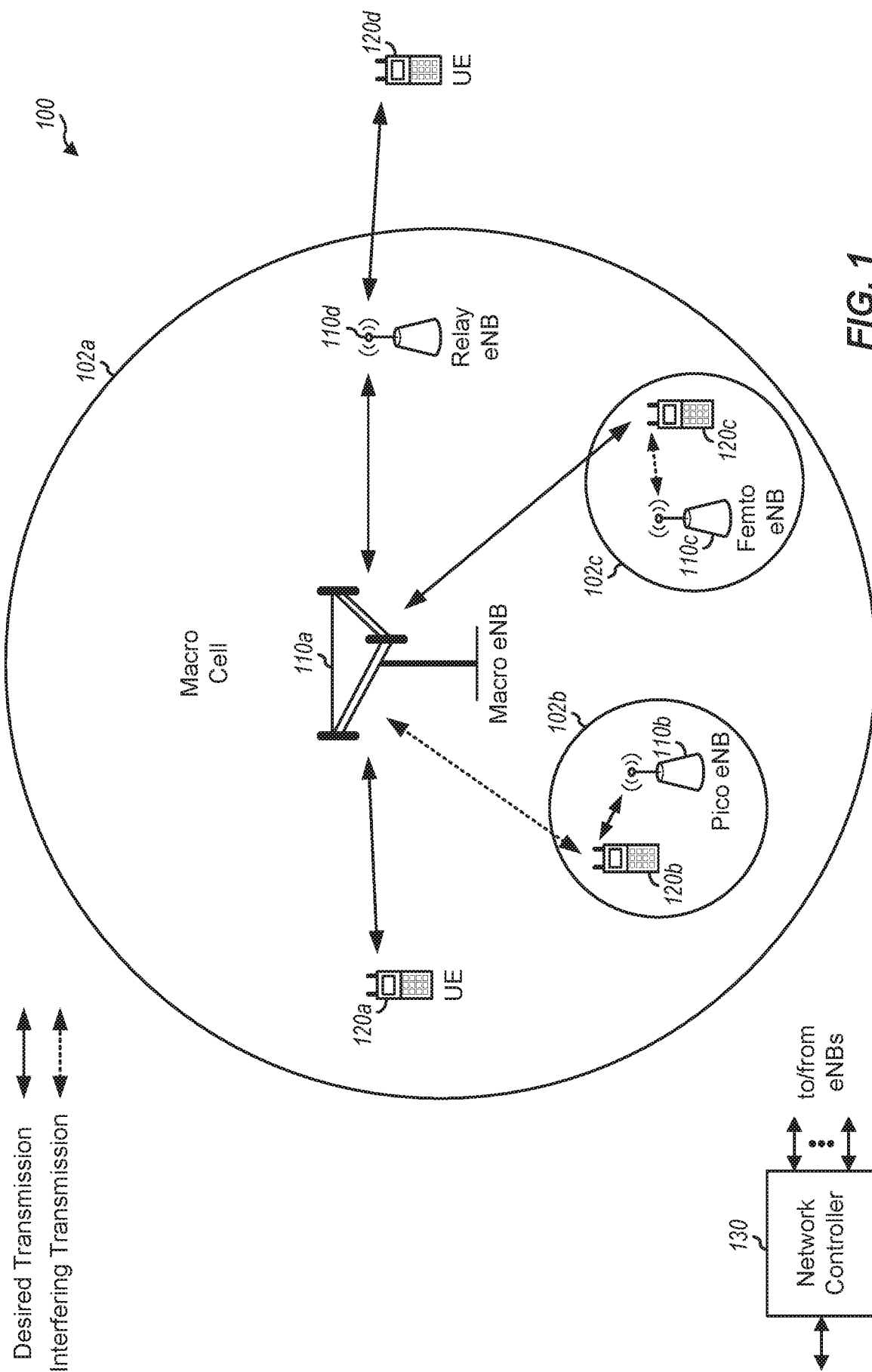


1/21



2/21

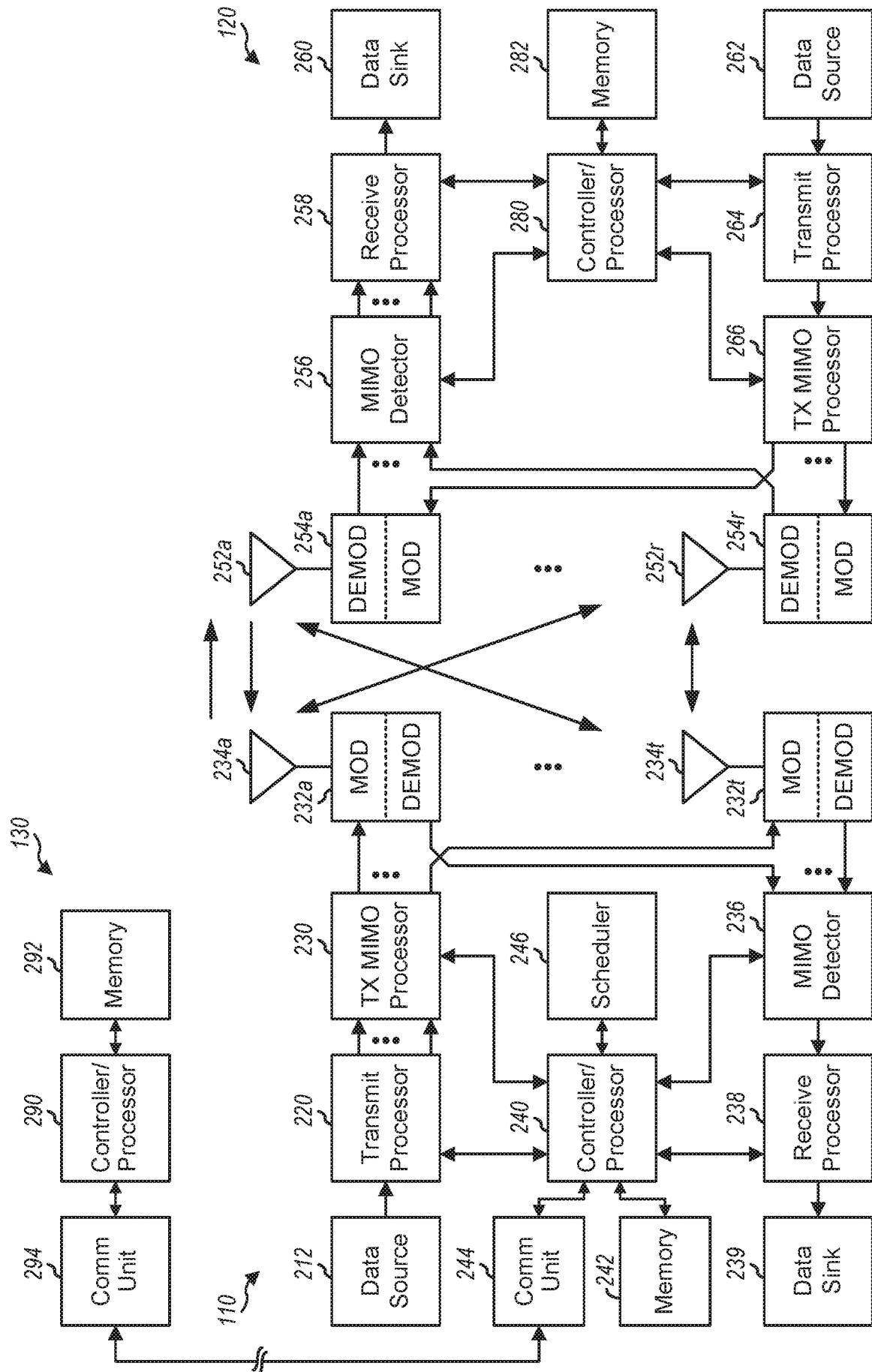
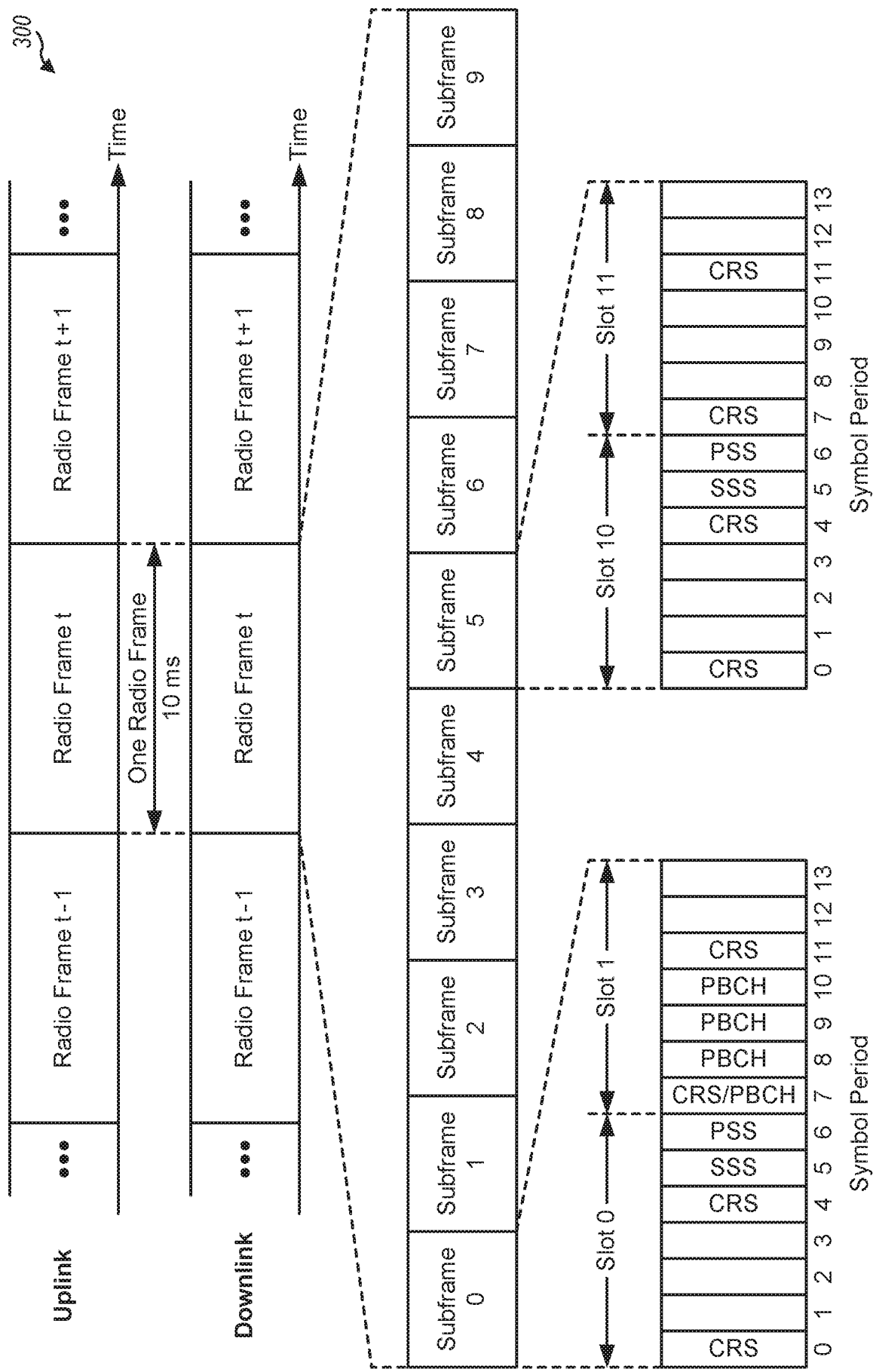


FIG. 2



CRS = Cell-Specific Reference Signal

PPBCH = Physical Broadcast Channel

364

PSS = Primary Synchronization Signal

SSS = Secondary Synchronization Signal

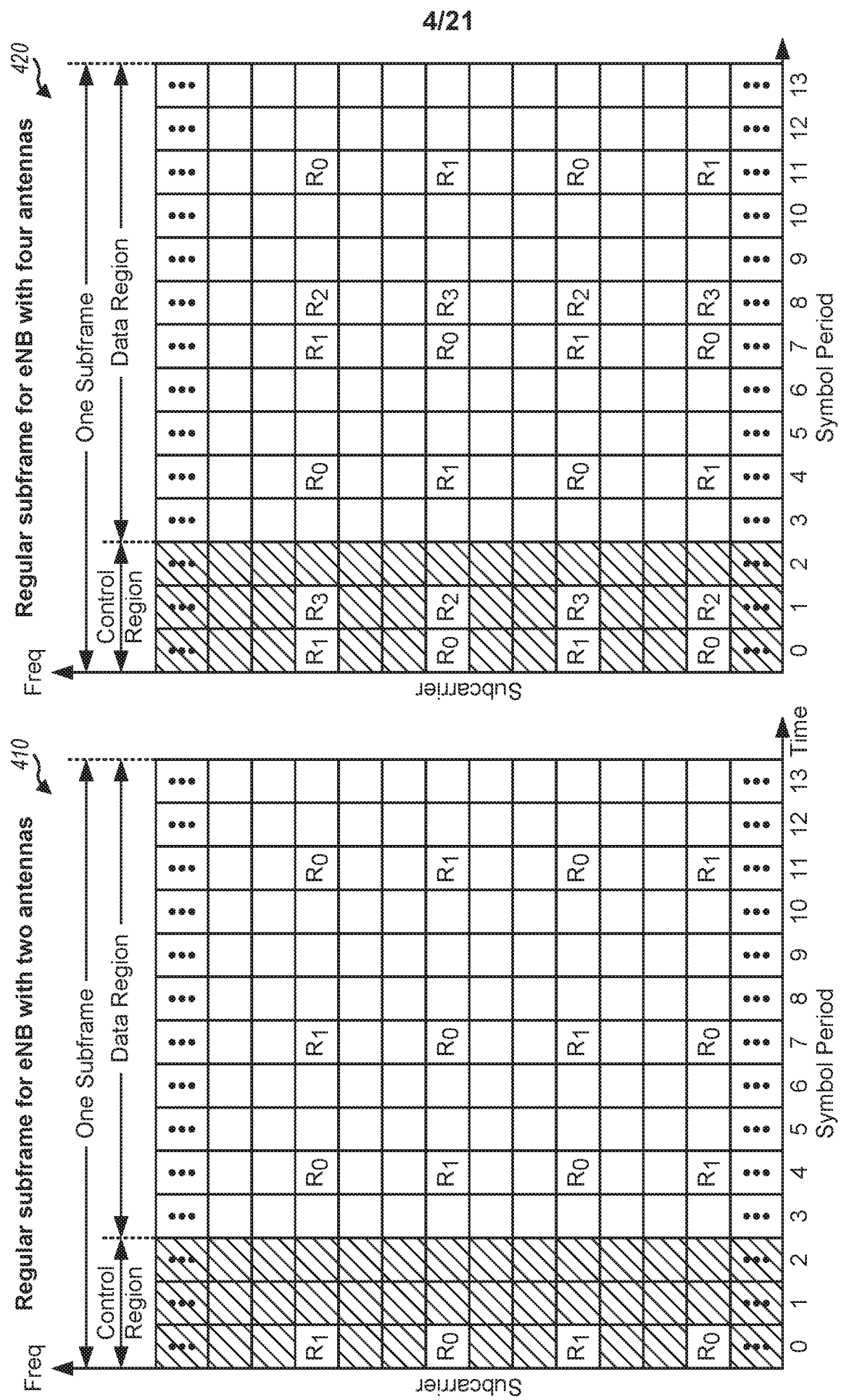
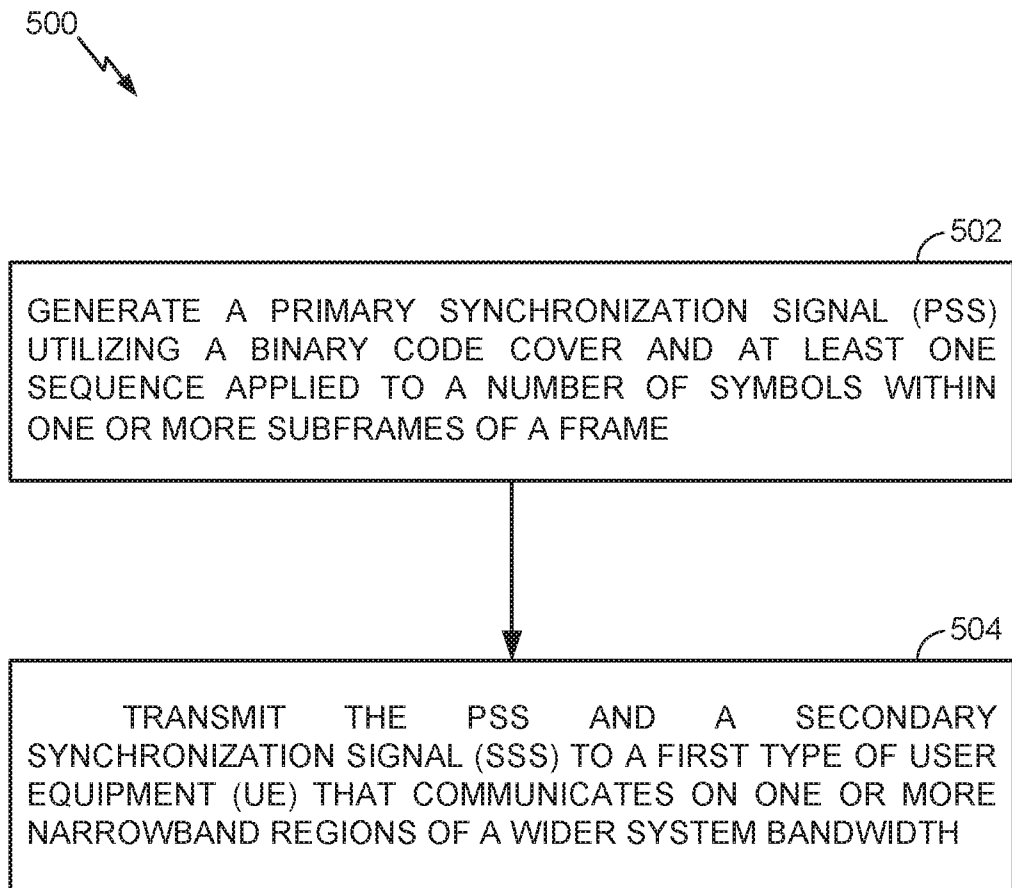
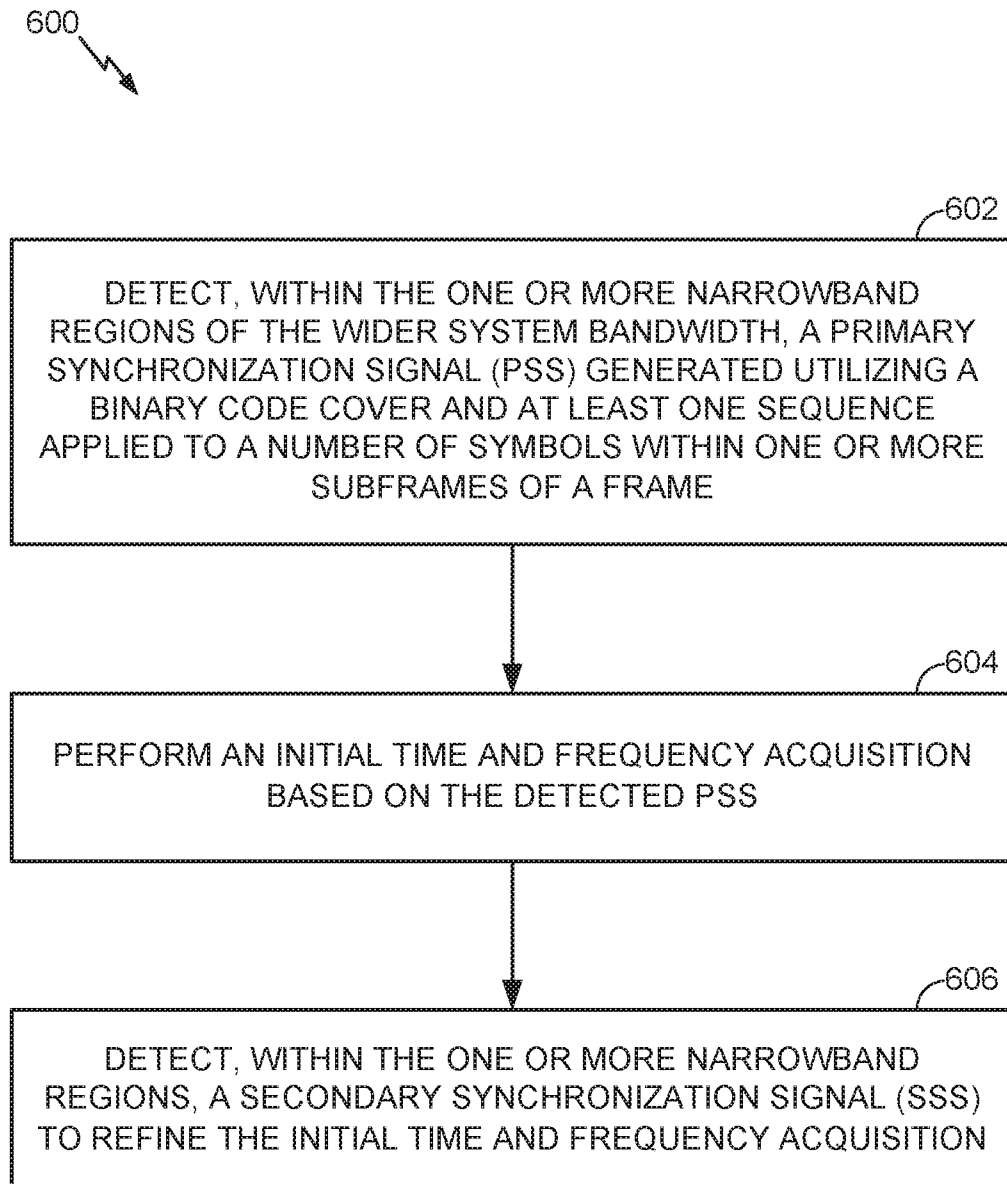


FIG. 4

5/21

**FIG. 5**

6/21

**FIG. 6**

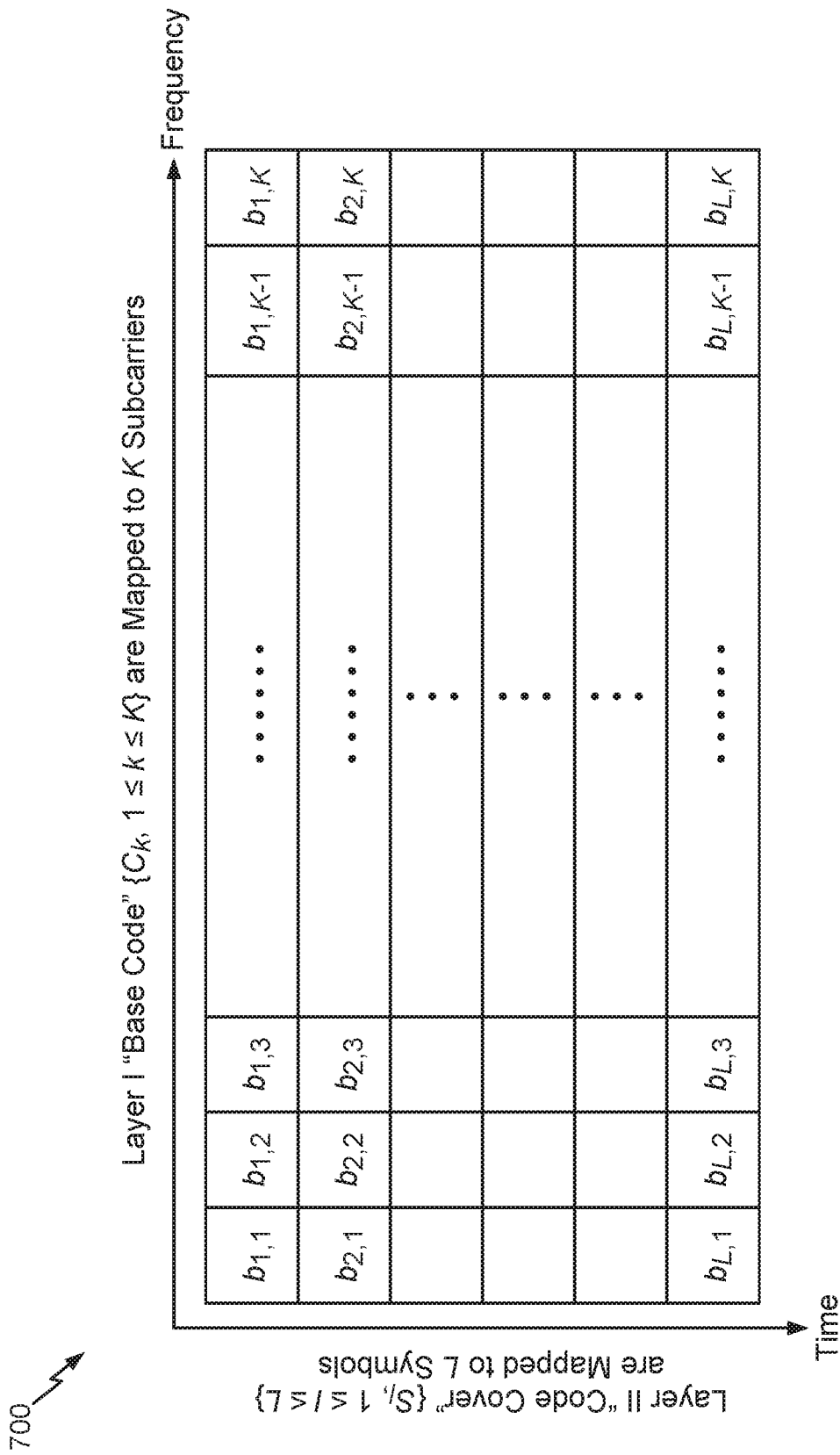


FIG. 7

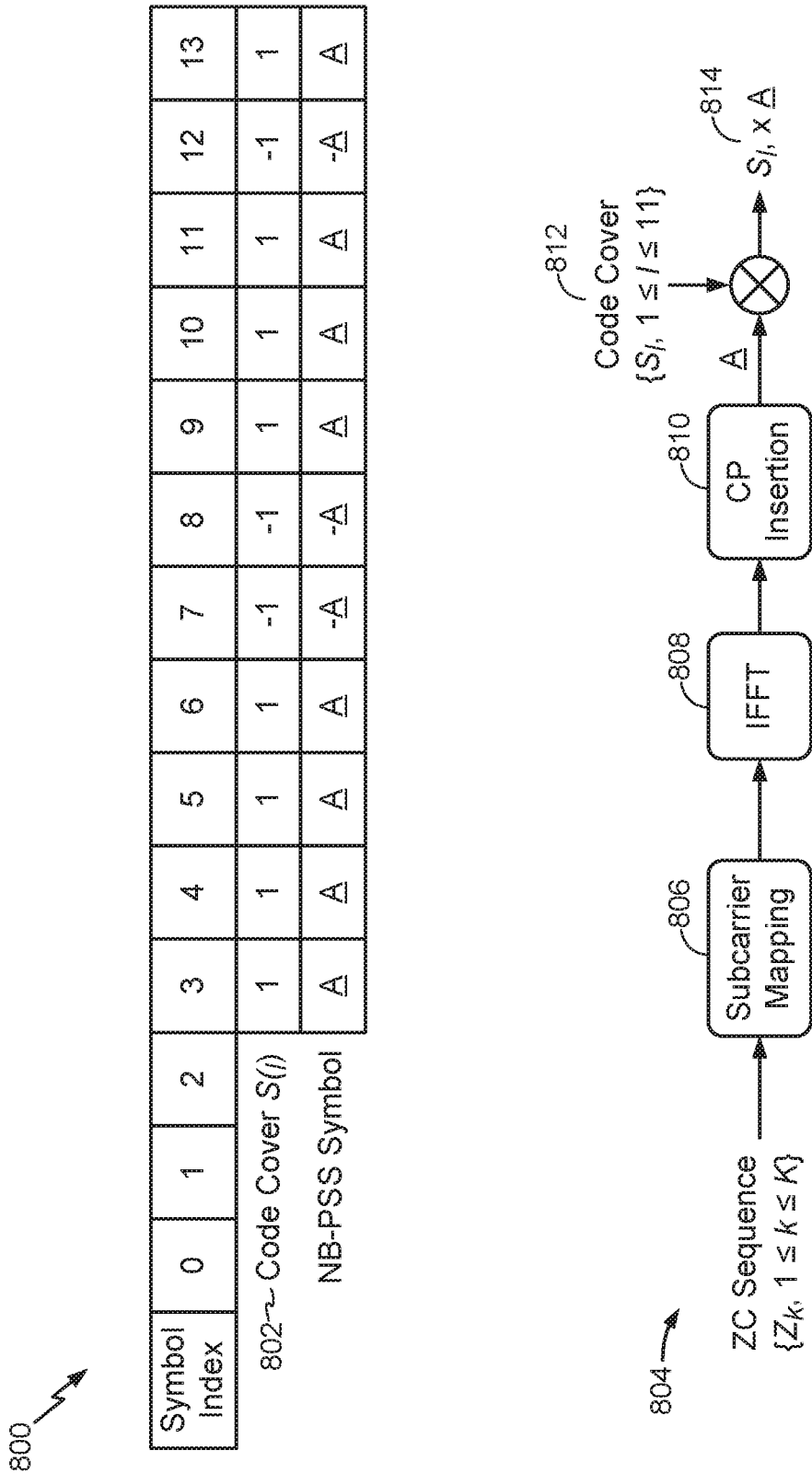


FIG. 8

900 ↗

| LTE Symbol                               | 0         | 1         | 2         | 3         | 4         | 5         | 6         | 7              | 8             | 9              | 10              | 11              | 12              | 13              |
|------------------------------------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|----------------|---------------|----------------|-----------------|-----------------|-----------------|-----------------|
| 902~ Code Cover $S(l)$                   |           |           |           |           |           |           |           |                |               |                |                 |                 |                 |                 |
| 904~ NB-PSS Base Sequence                |           |           |           |           |           |           |           |                |               |                |                 |                 |                 |                 |
| 906~ Time Domain Cyclic Shift (1.92 MHz) |           |           |           |           |           |           |           |                |               |                |                 |                 |                 |                 |
| 908~ Freq. Domain Phase Rot. (1.92 MHz)  |           |           |           |           |           |           |           |                |               |                |                 |                 |                 |                 |
|                                          | 1         | 1         | 1         | 1         | 1         | 1         | 1         | -1             | -1            | 1              | 1               | 1               | -1              | 1               |
|                                          | $\{Z_k\}$ | $\{Z_k\}$ | $\{Z_k\}$ | $\{Z_k\}$ | $\{Z_k\}$ | $\{Z_k\}$ | $\{Z_k\}$ | $\{Z_k\}$      | $\{Z_k\}$     | $\{Z_k\}$      | $\{Z_k\}$       | $\{Z_k\}$       | $\{Z_k\}$       | $\{Z_k\}$       |
|                                          | 0         | 0         | 0         | 0         | 0         | 0         | 0         | -1             | -1            | -1             | -1              | -1              | -1              | -1              |
|                                          | 0         | 0         | 0         | 0         | 0         | 0         | 0         | $\theta_{7,k}$ | $\theta_{6k}$ | $\theta_{9,k}$ | $\theta_{10,k}$ | $\theta_{11,k}$ | $\theta_{12,k}$ | $\theta_{13,k}$ |

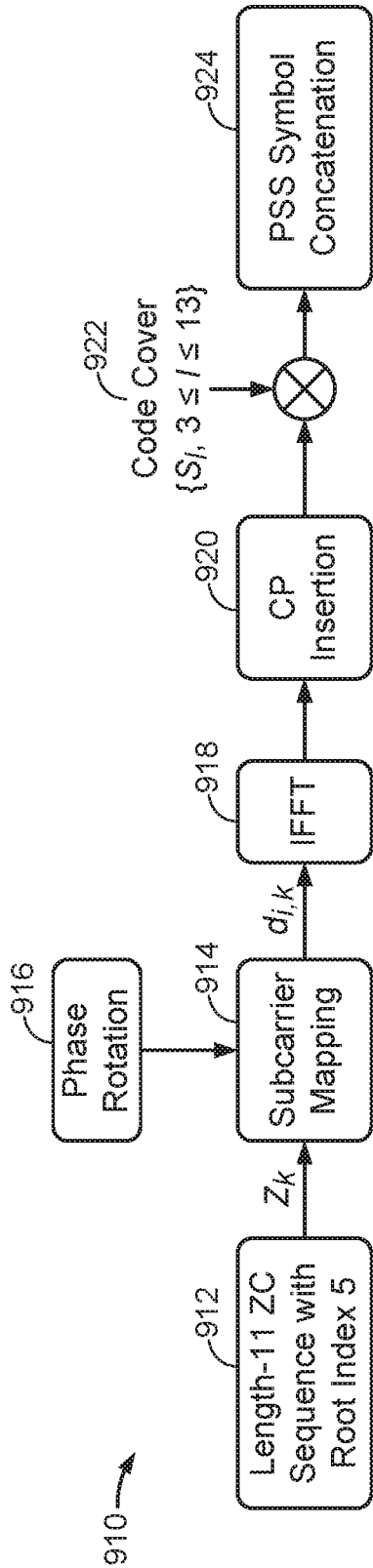


FIG. 9

900A ↗

902A ~

| LTE Symbol           | 0 | 1 | 2 | 3        | 4        | 5        | 6        | 7        | 8        | 9        | 10       | 11       | 12          | 13          |
|----------------------|---|---|---|----------|----------|----------|----------|----------|----------|----------|----------|----------|-------------|-------------|
| 904A ~ Root Index    |   |   |   | $u_1$    | $u_2$    | $u_3$    | $u_4$    | $u_5$    | $u_6$    | $u_7$    | $u_8$    | $u_9$    | $u_{10}$    | $u_{11}$    |
| 906A ~ Cyclic Shift  |   |   |   | $\eta_1$ | $\eta_2$ | $\eta_3$ | $\eta_4$ | $\eta_5$ | $\eta_6$ | $\eta_7$ | $\eta_8$ | $\eta_9$ | $\eta_{10}$ | $\eta_{11}$ |
| 908A ~ NB-SSS Symbol |   |   |   | $B_1$    | $B_2$    | $B_3$    | $B_4$    | $B_5$    | $B_6$    | $B_7$    | $B_8$    | $B_9$    | $B_{10}$    | $B_{11}$    |

910A →

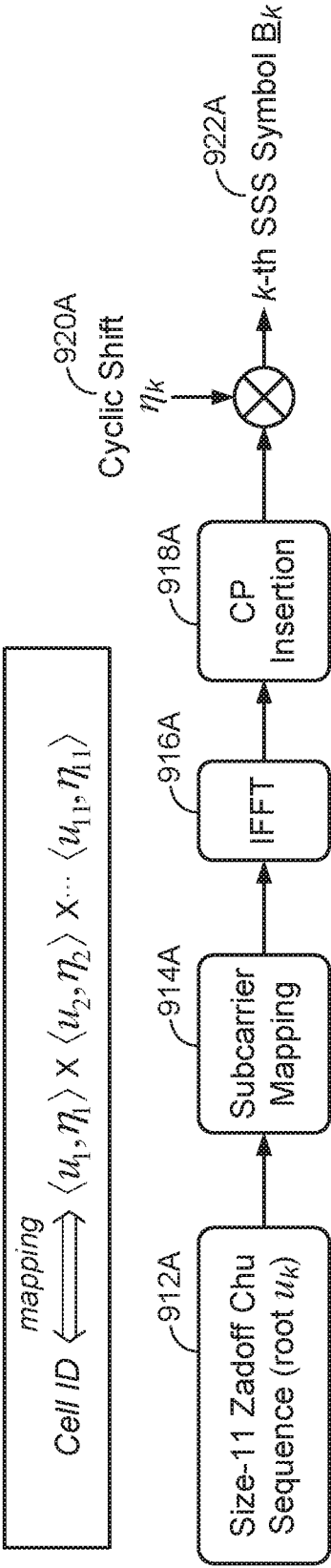


FIG. 9A

11/21

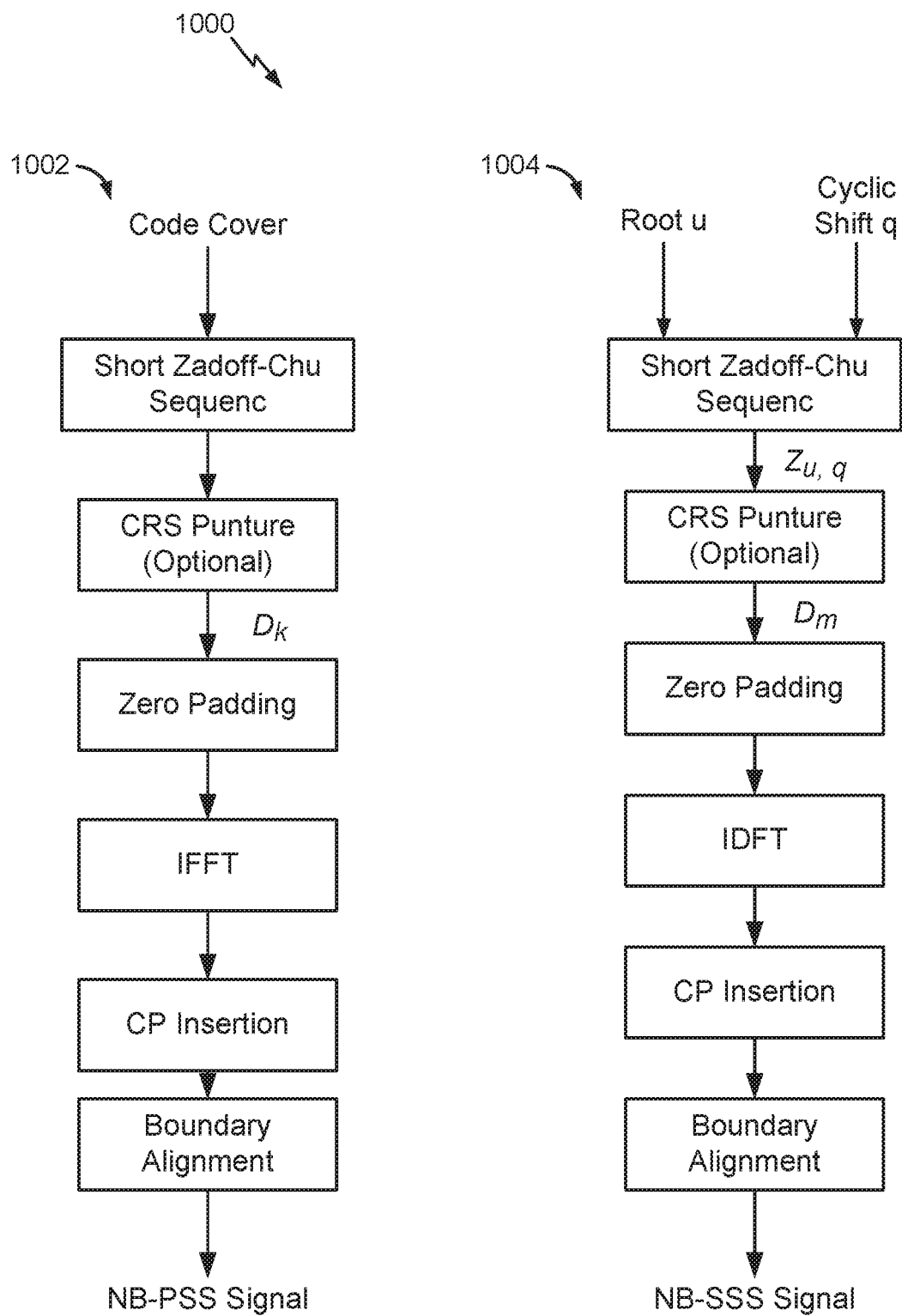


FIG. 10

12/21

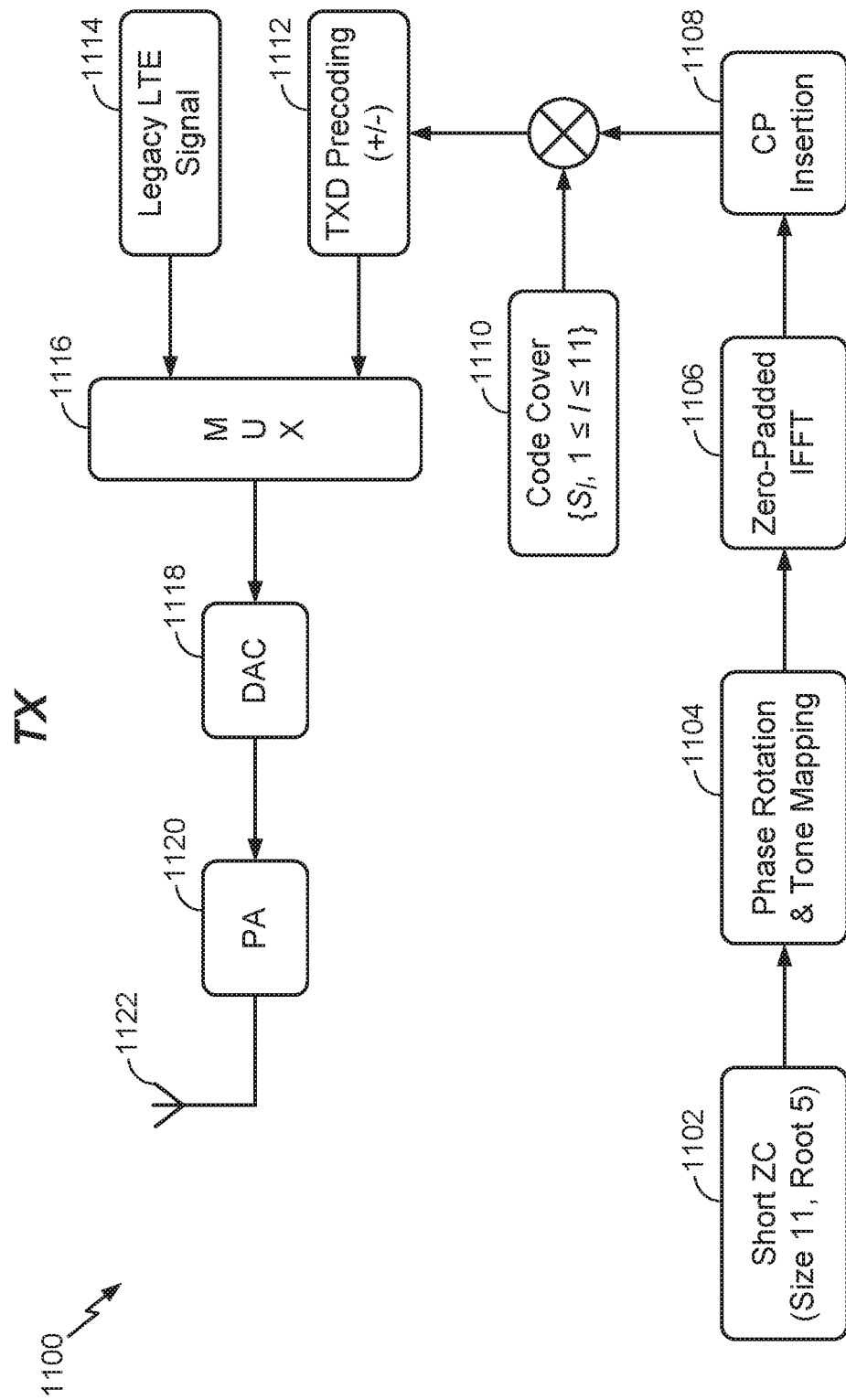


FIG. 11

13/21

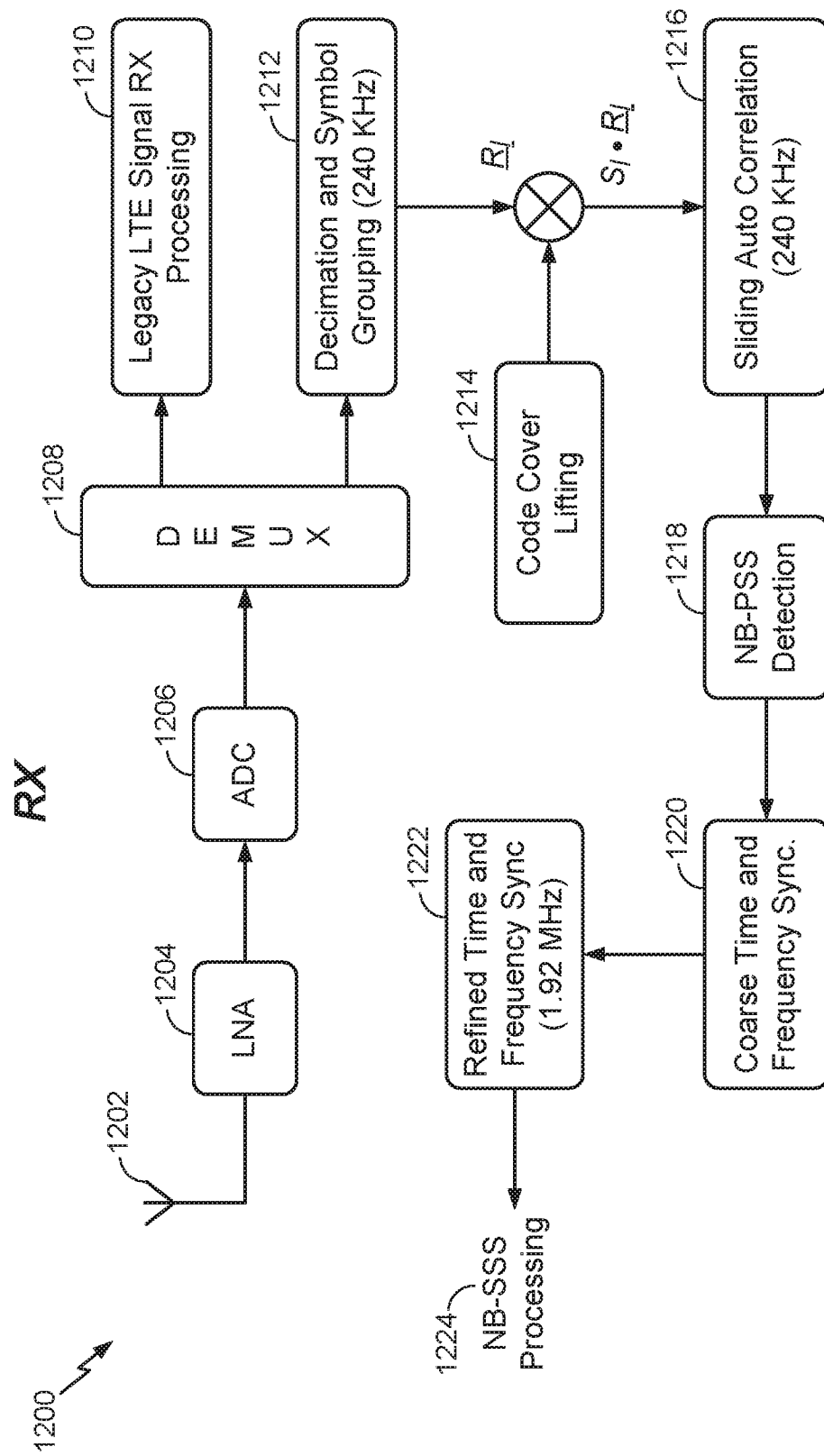
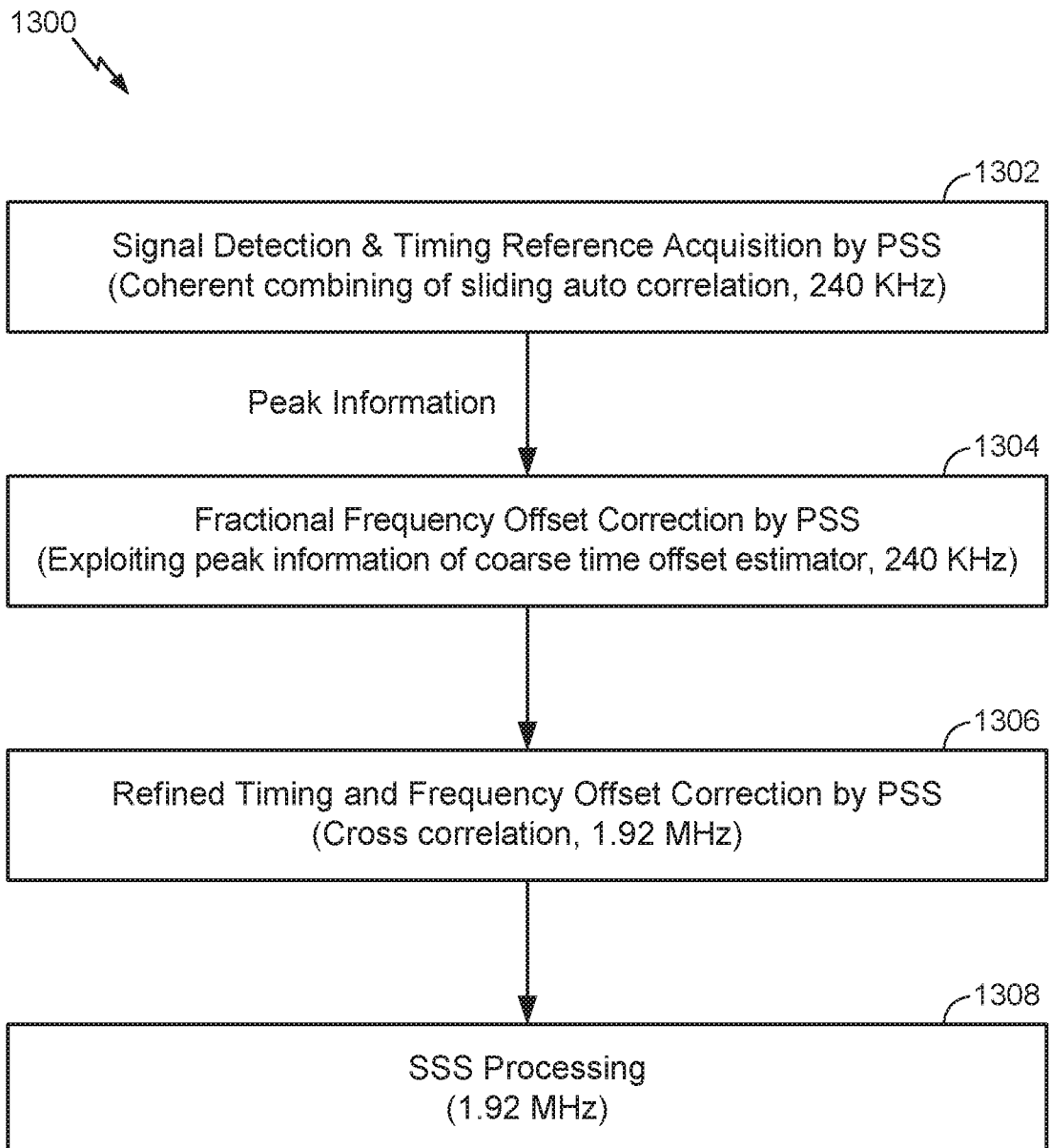


FIG. 12

14/21

**FIG. 13**

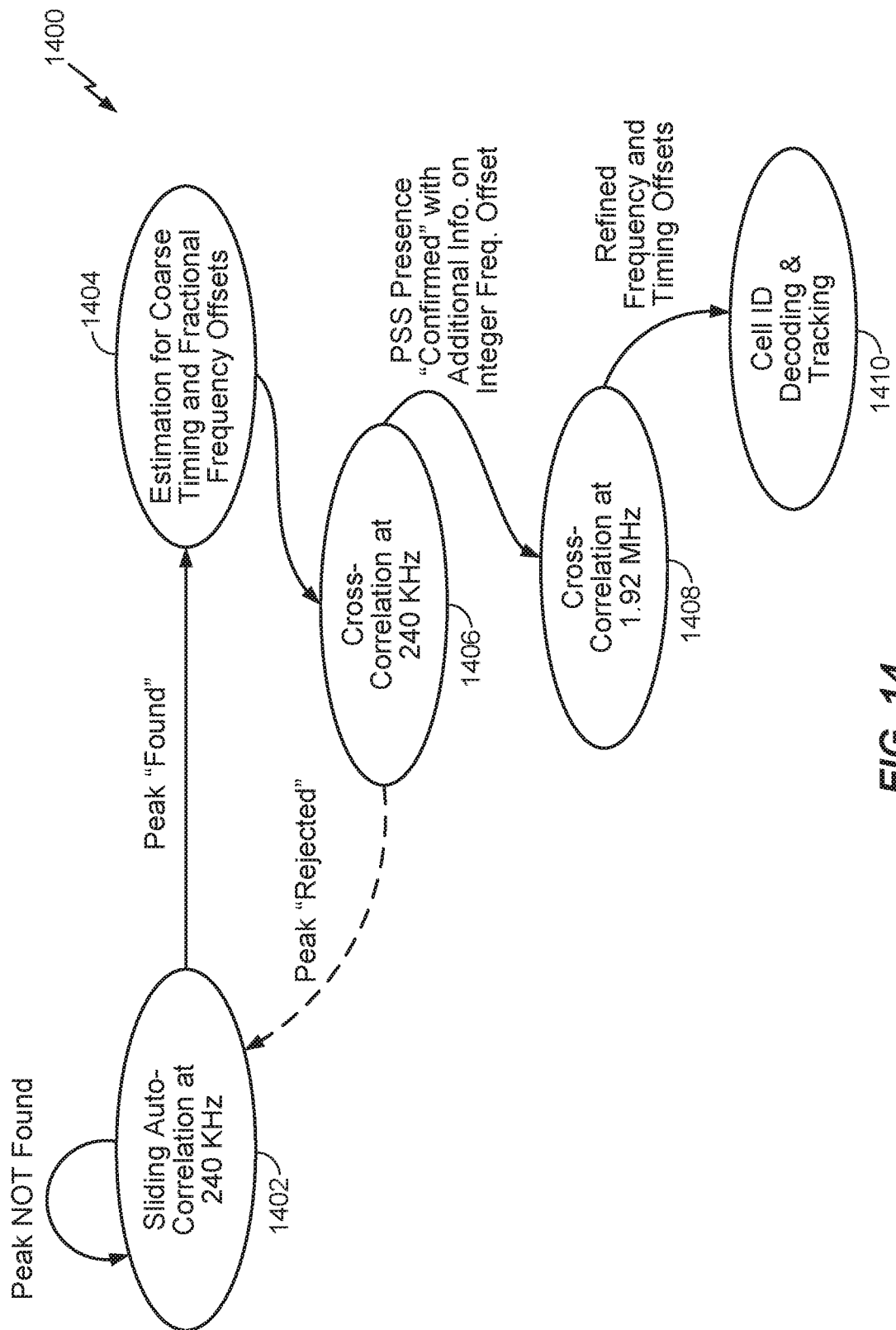
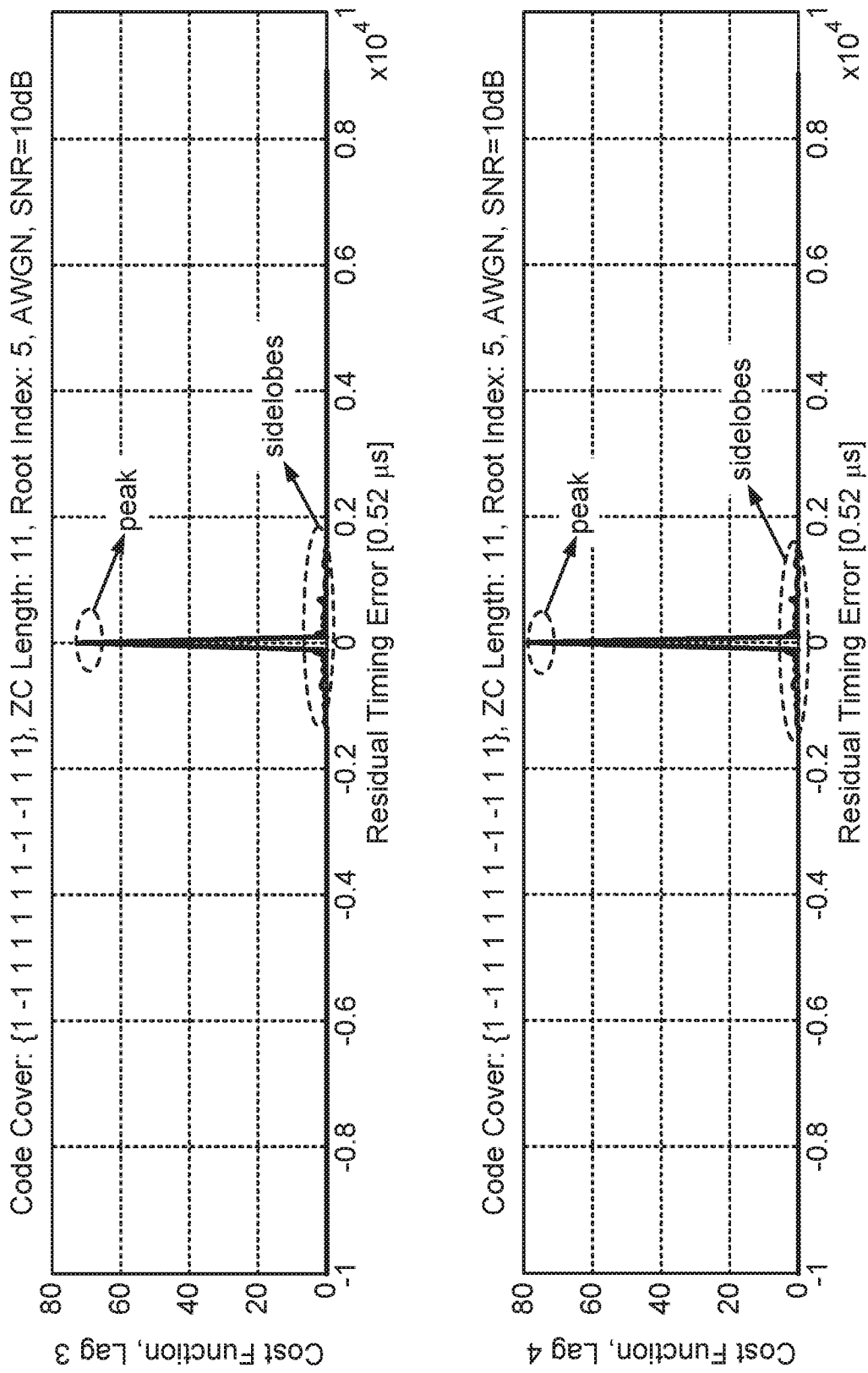


FIG. 14



**FIG. 15**

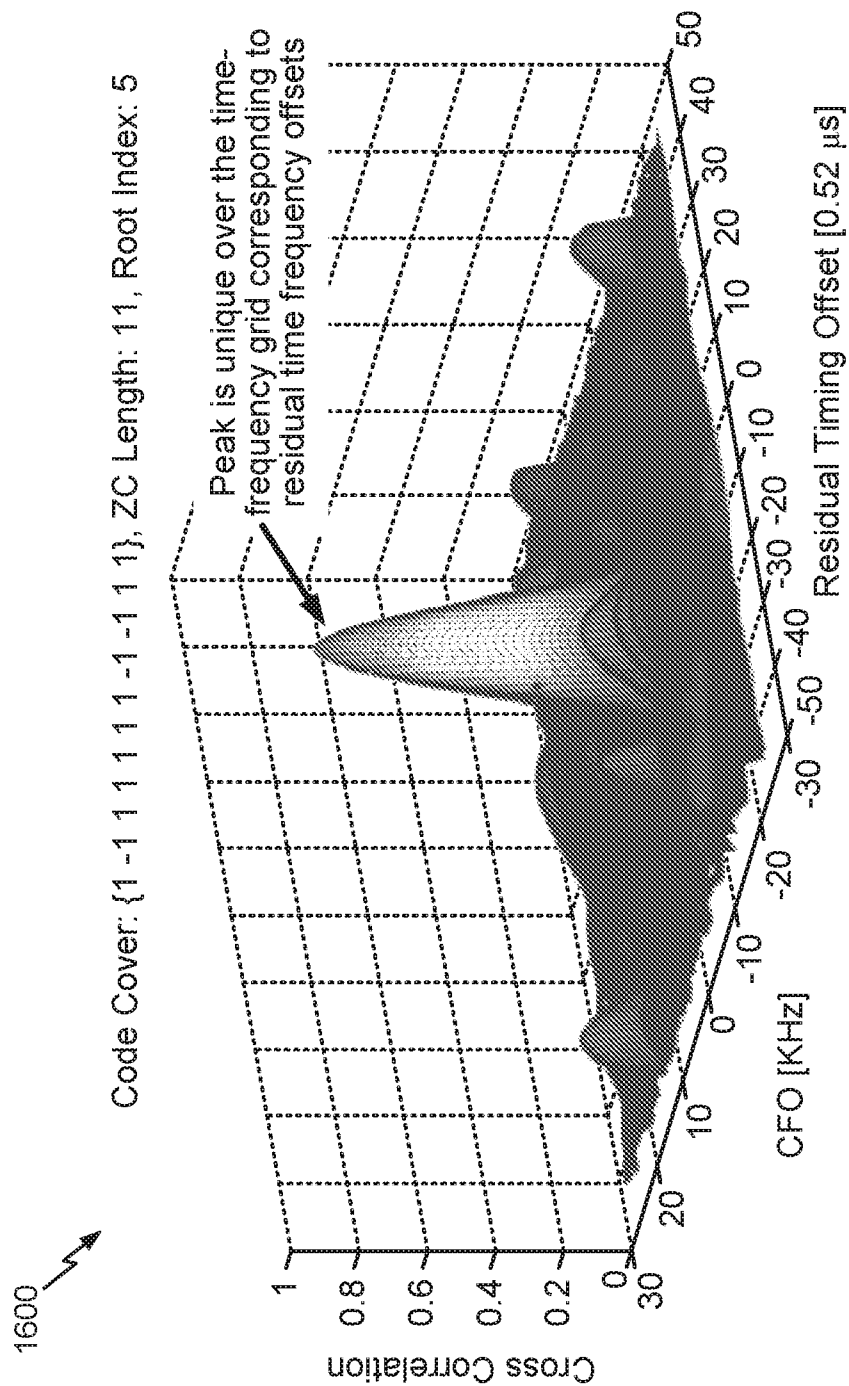


FIG. 16

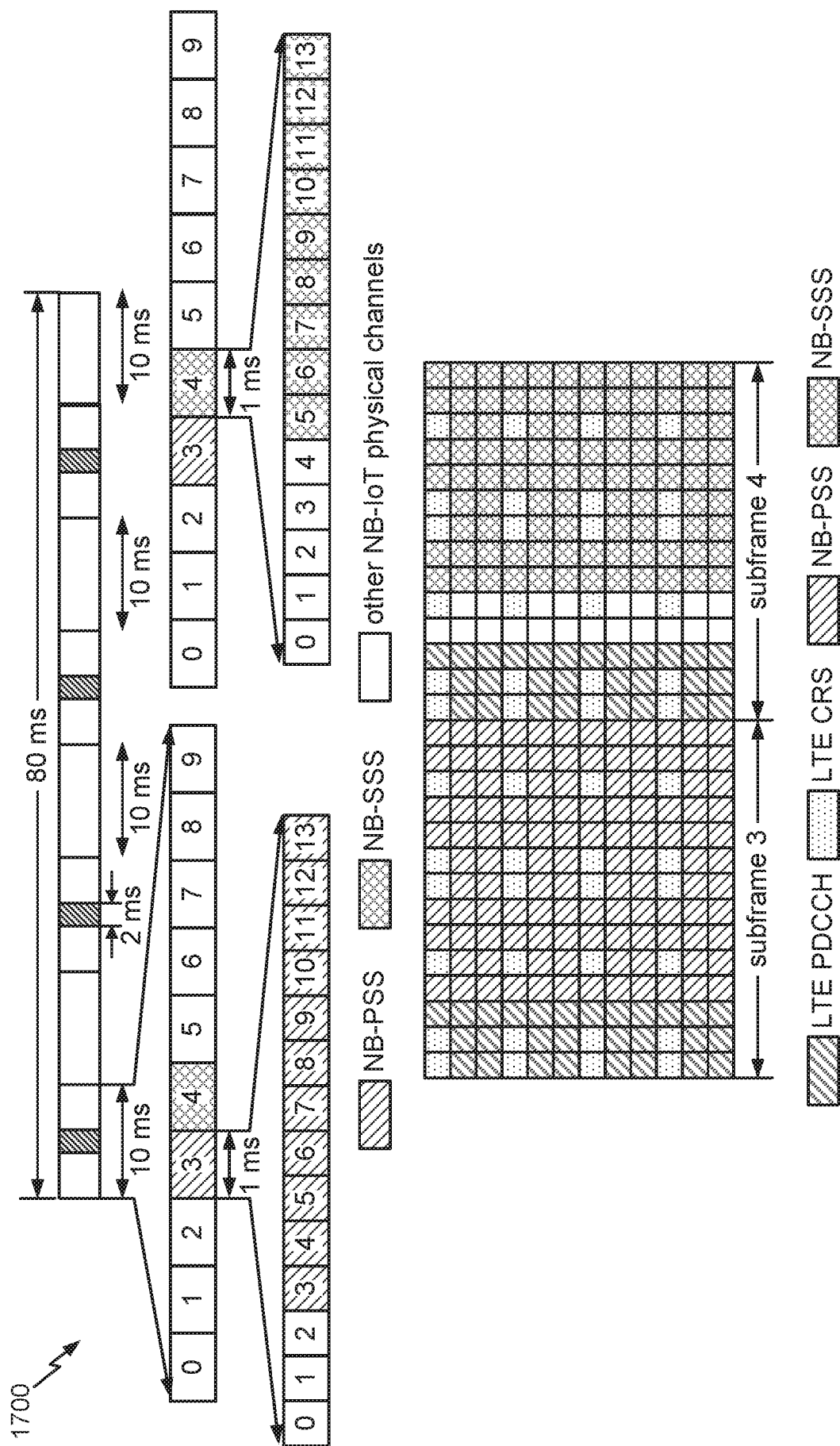
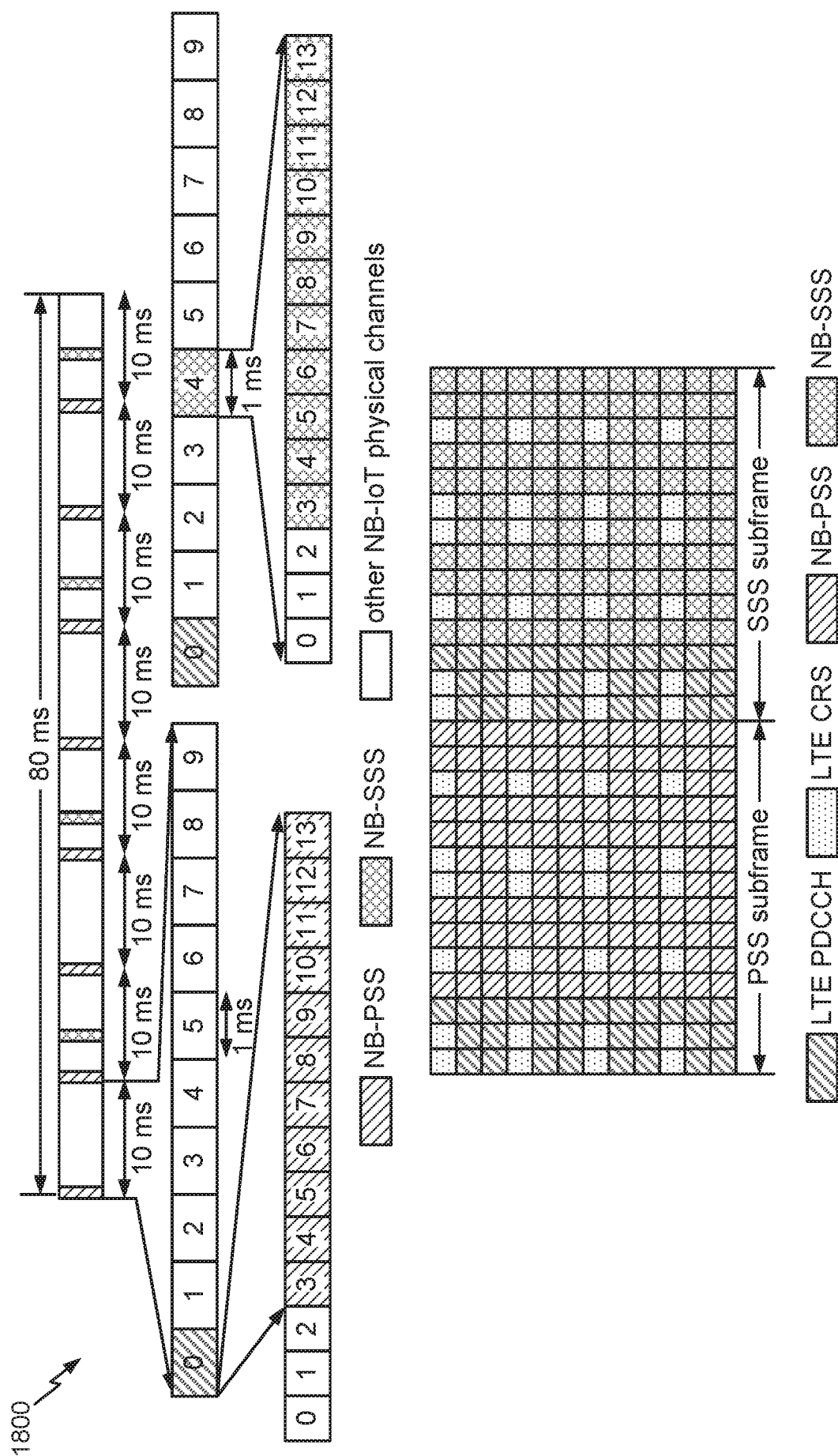


FIG. 17



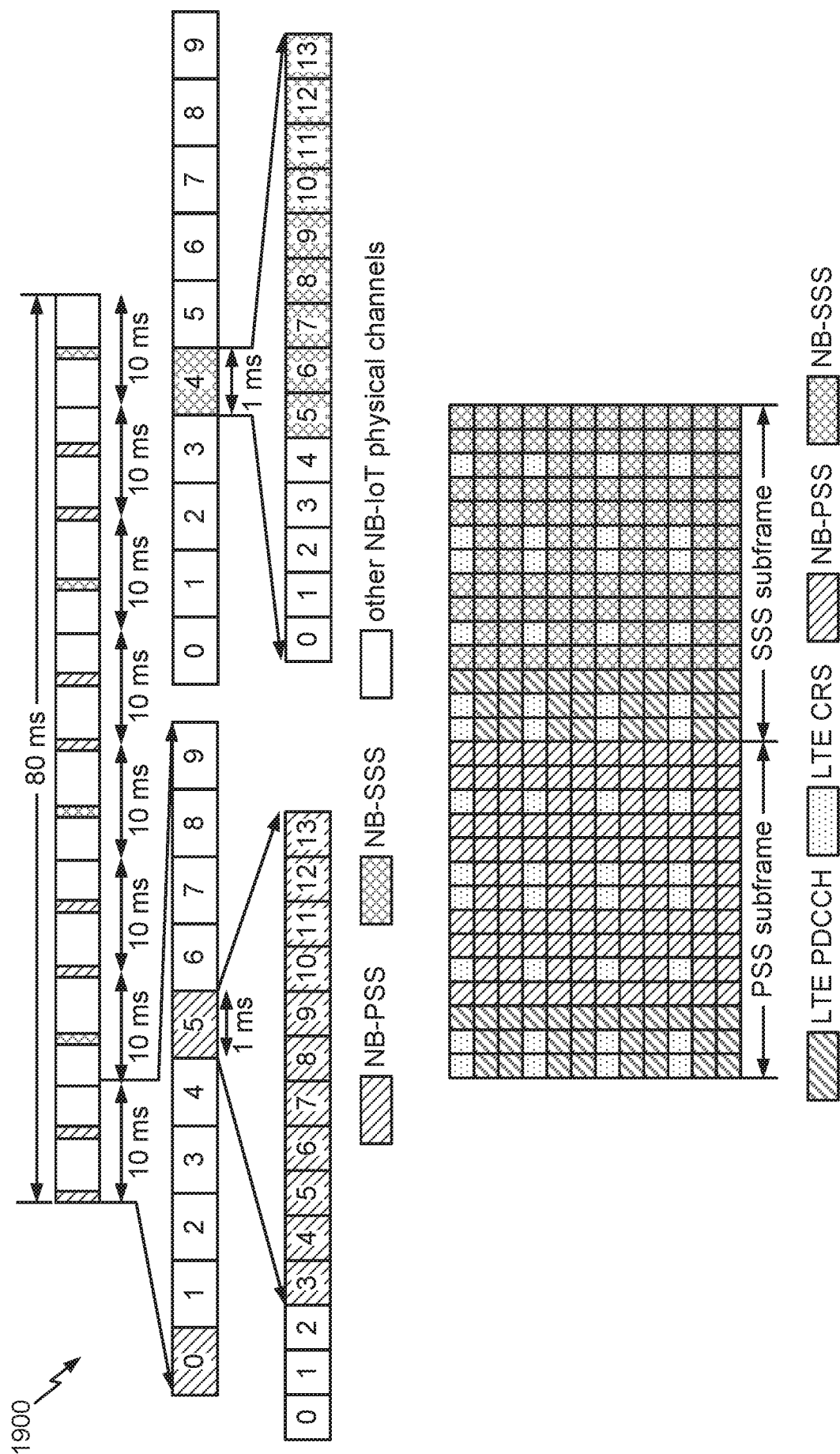


FIG. 19

2000 ↗

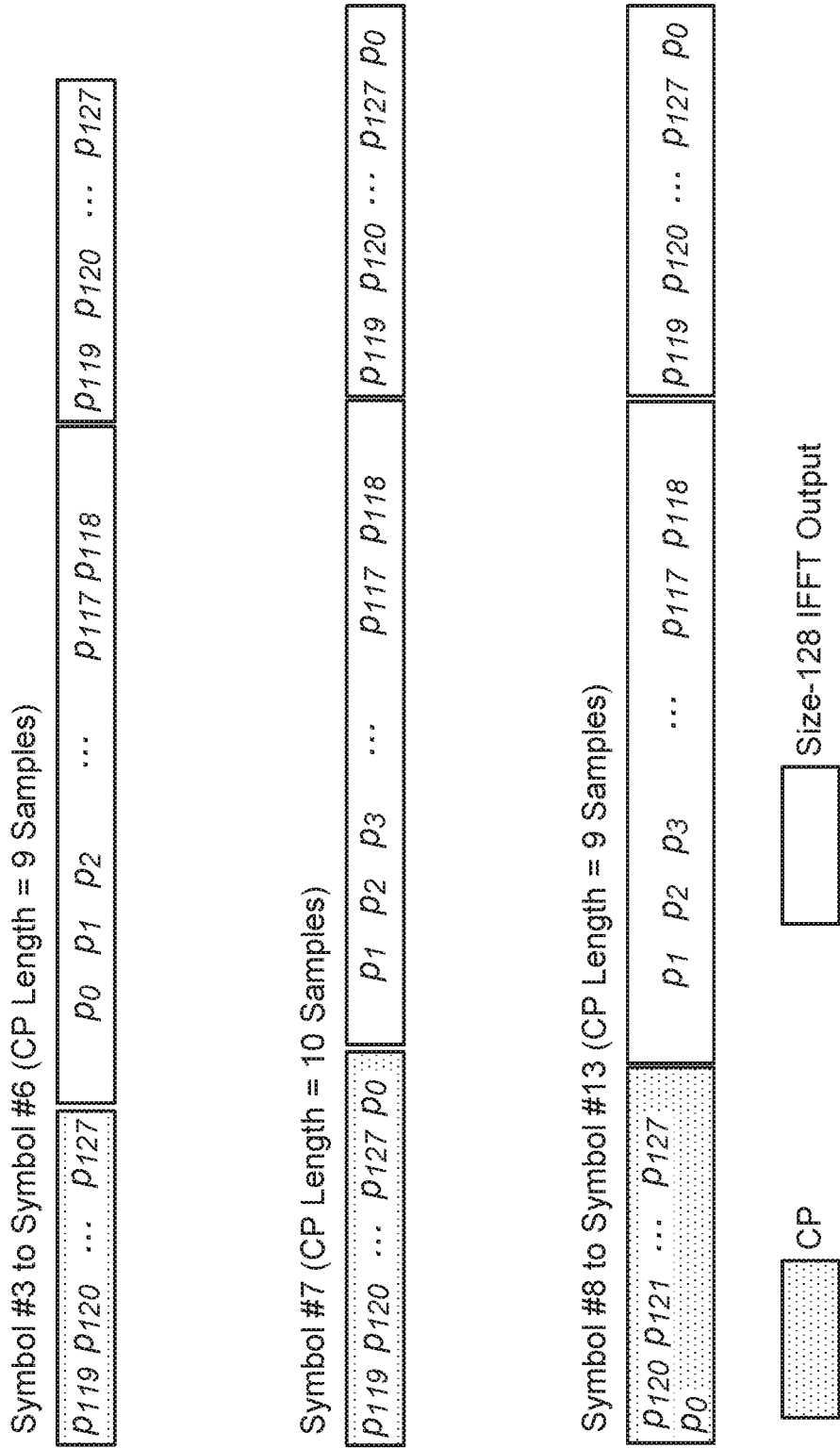


FIG. 20