

FIG. 1

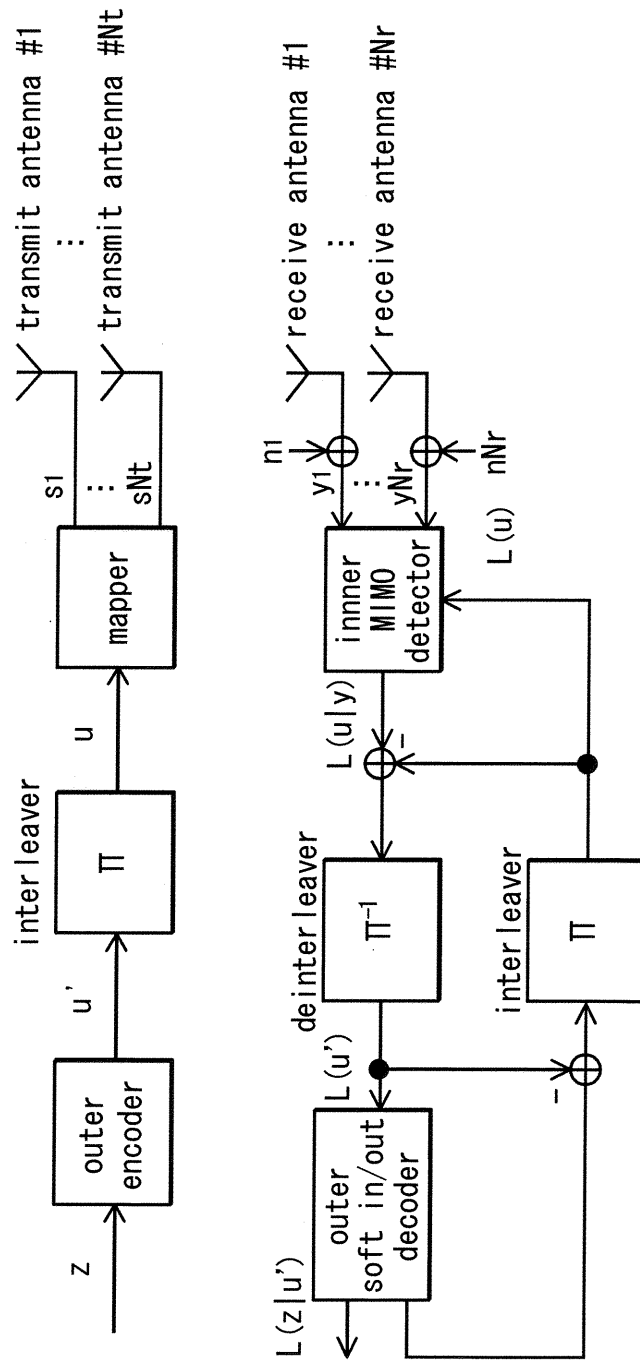


FIG. 2

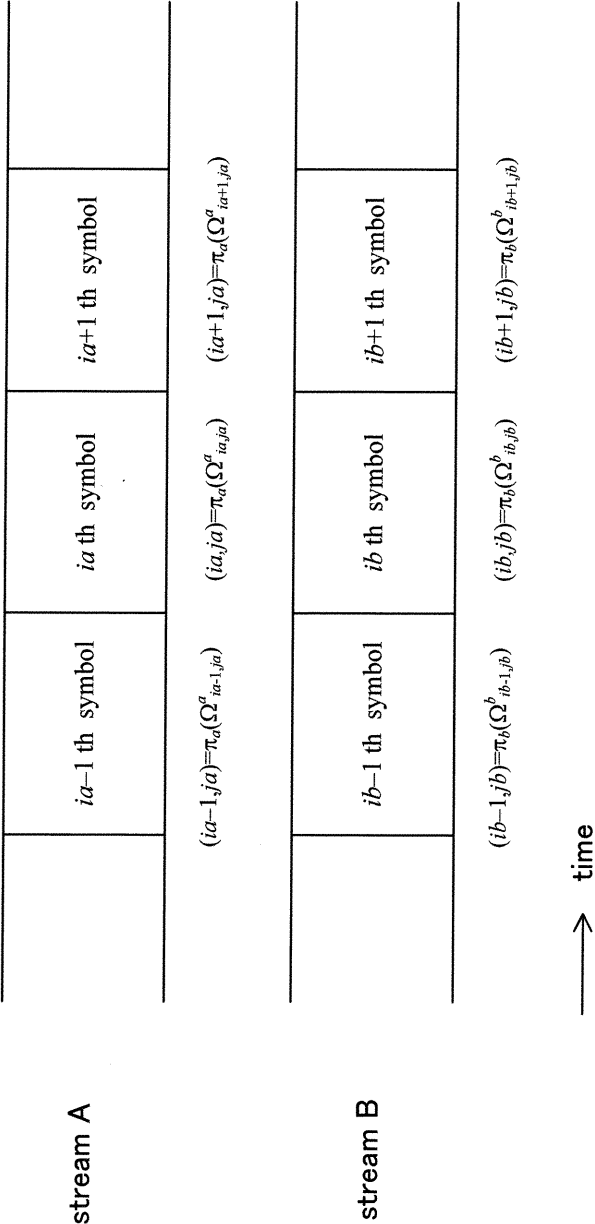


FIG. 3

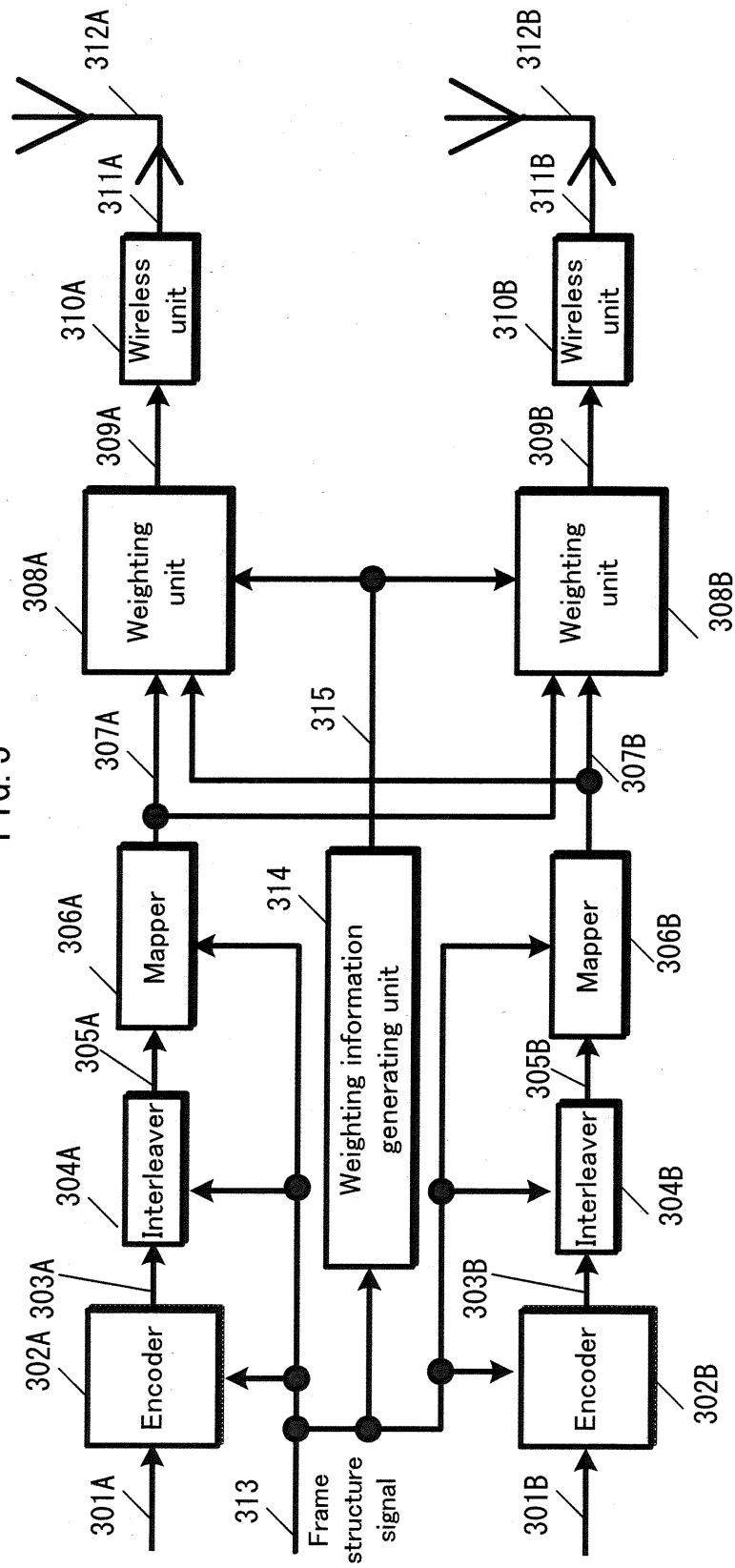


FIG. 4

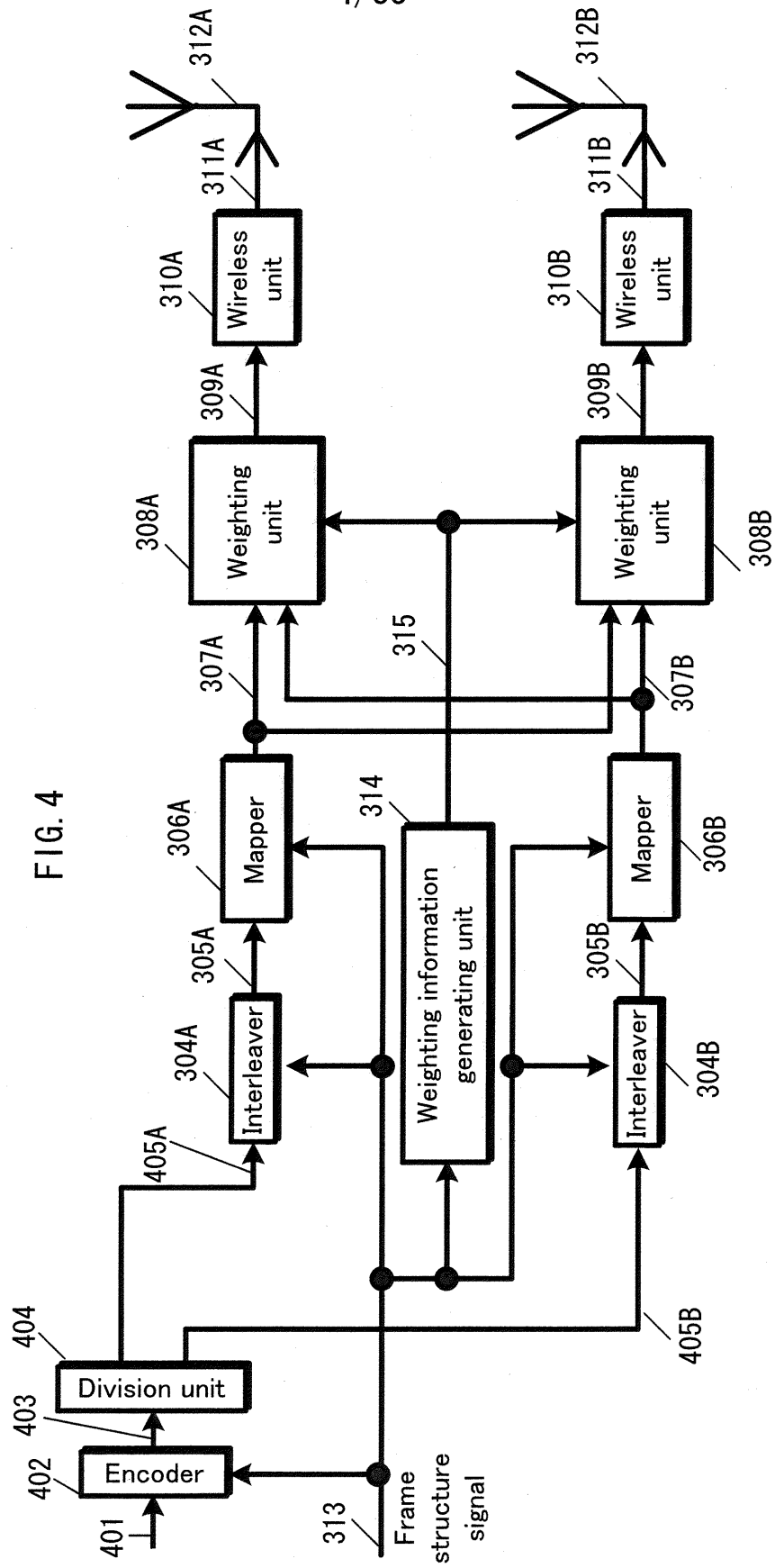


FIG. 5

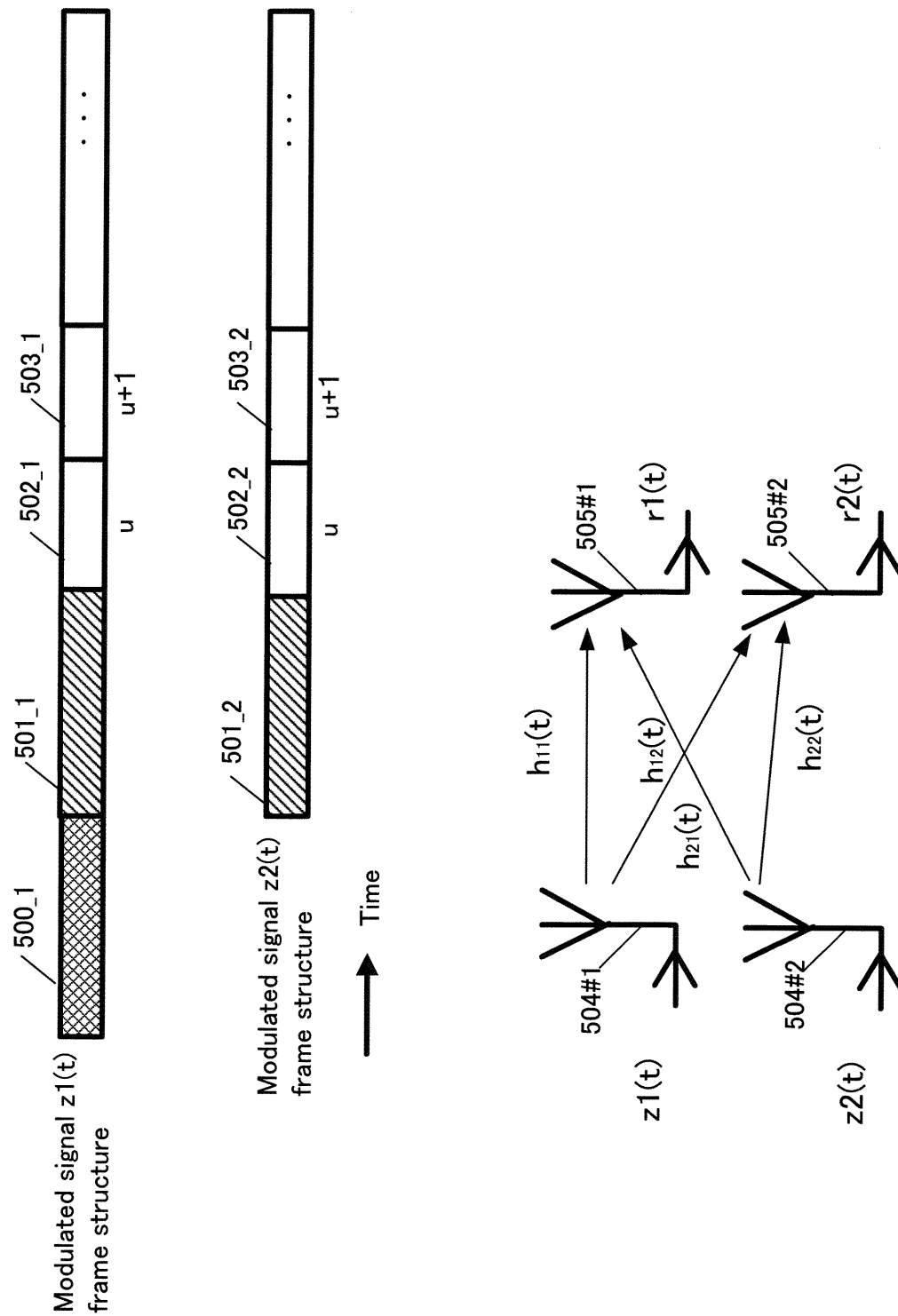
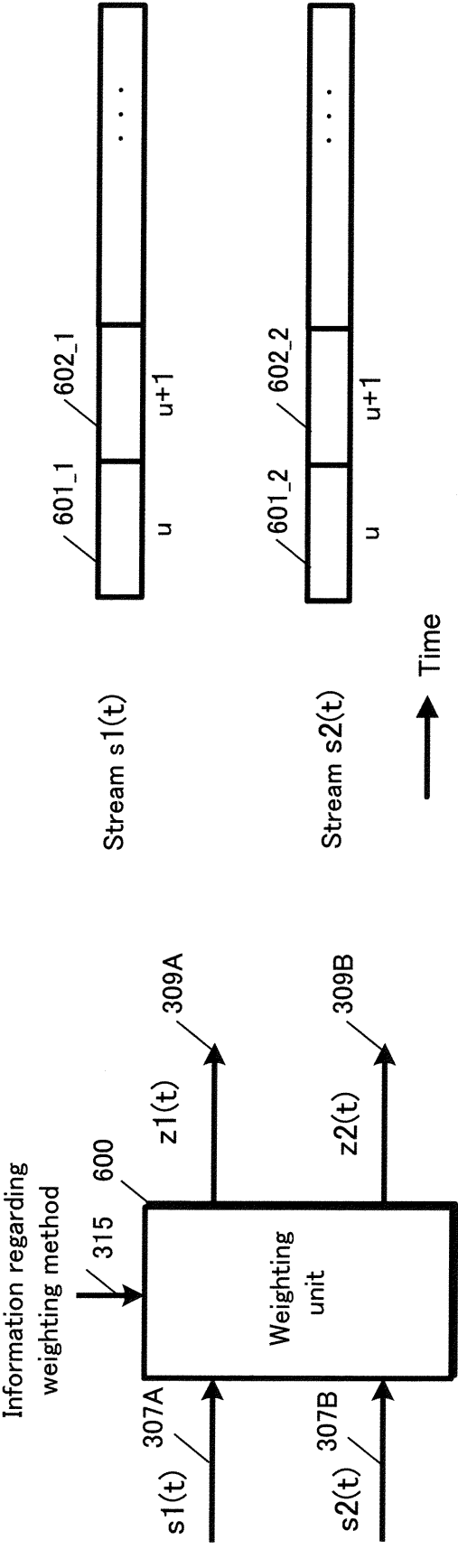


FIG. 6



time $4i$

time $4i+1$

time $4i+2$

time $4i+3$

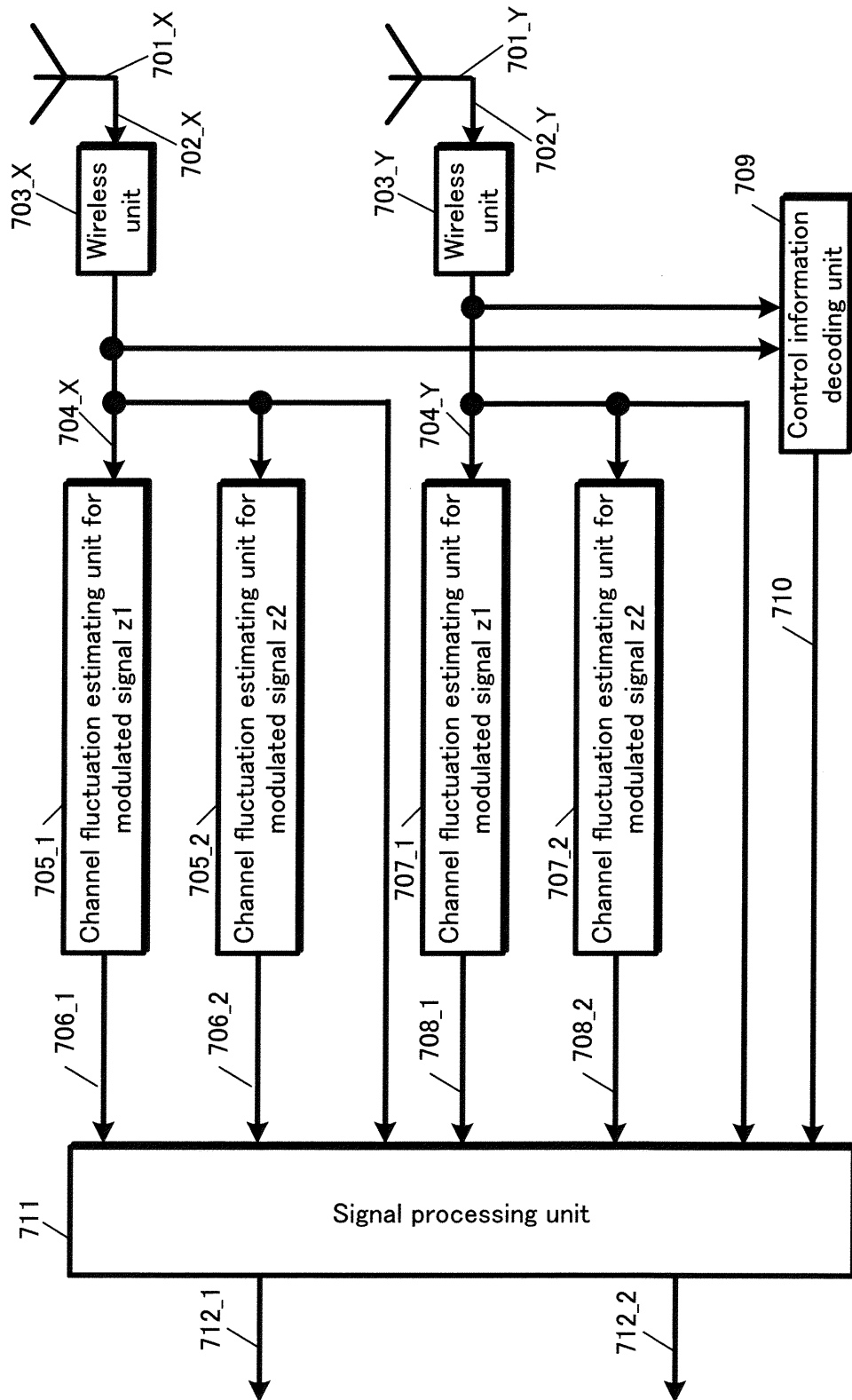
$$W(4i) = \frac{1}{\sqrt{2}} \begin{pmatrix} e^{j0} & e^{j0} \\ e^{j0} & e^{j\frac{3}{4}\pi} \end{pmatrix}$$

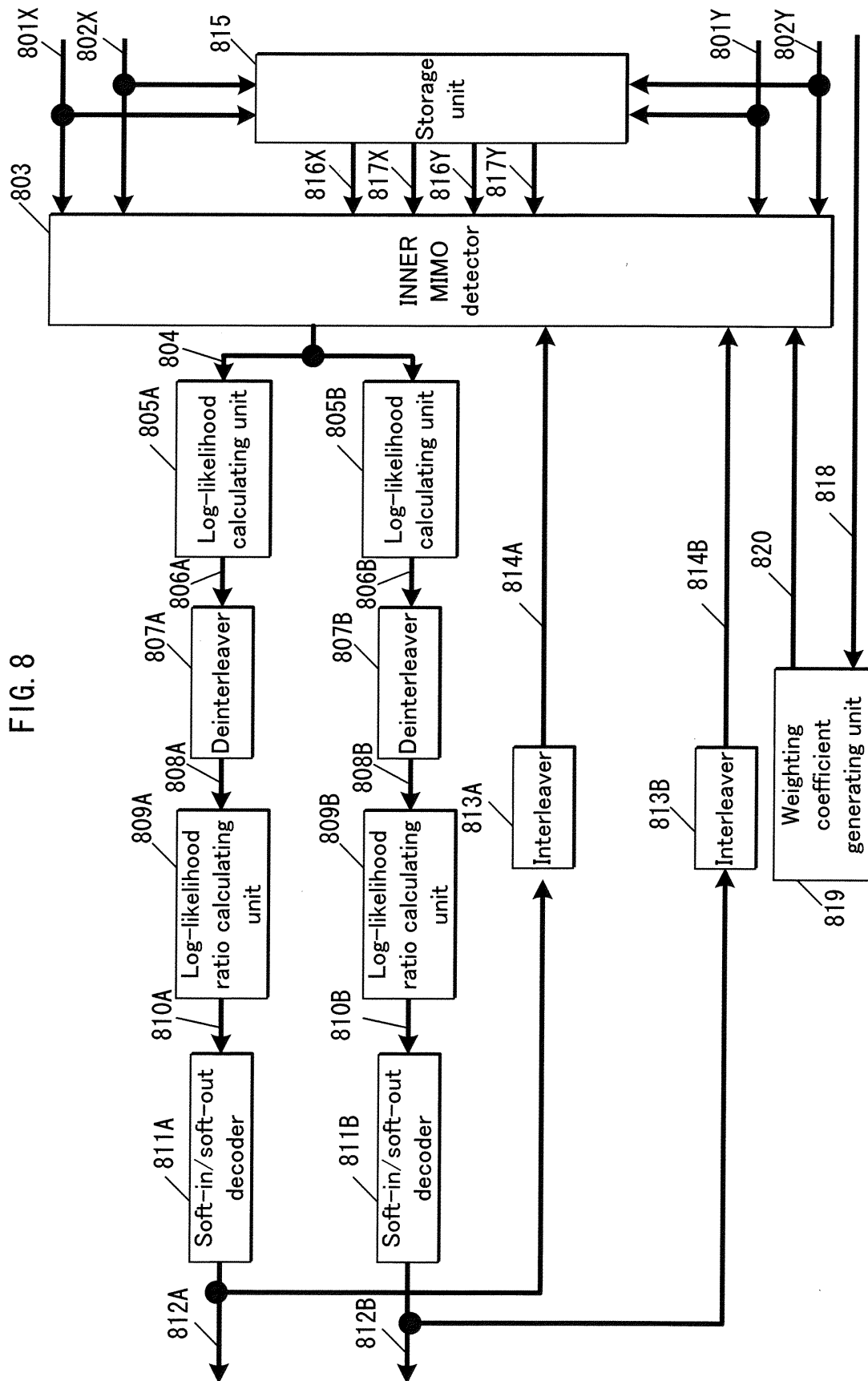
$$W(4i+1) = \frac{1}{\sqrt{2}} \begin{pmatrix} e^{j0} & e^{j0} \\ e^{j\frac{3}{4}\pi} & e^{j0} \end{pmatrix}$$

$$W(4i+2) = \frac{1}{\sqrt{2}} \begin{pmatrix} e^{j0} & e^{j\frac{3}{4}\pi} \\ e^{j0} & e^{j0} \end{pmatrix}$$

$$W(4i+3) = \frac{1}{\sqrt{2}} \begin{pmatrix} e^{j\frac{3}{4}\pi} & e^{j0} \\ e^{j0} & e^{j0} \end{pmatrix}$$

FIG. 7





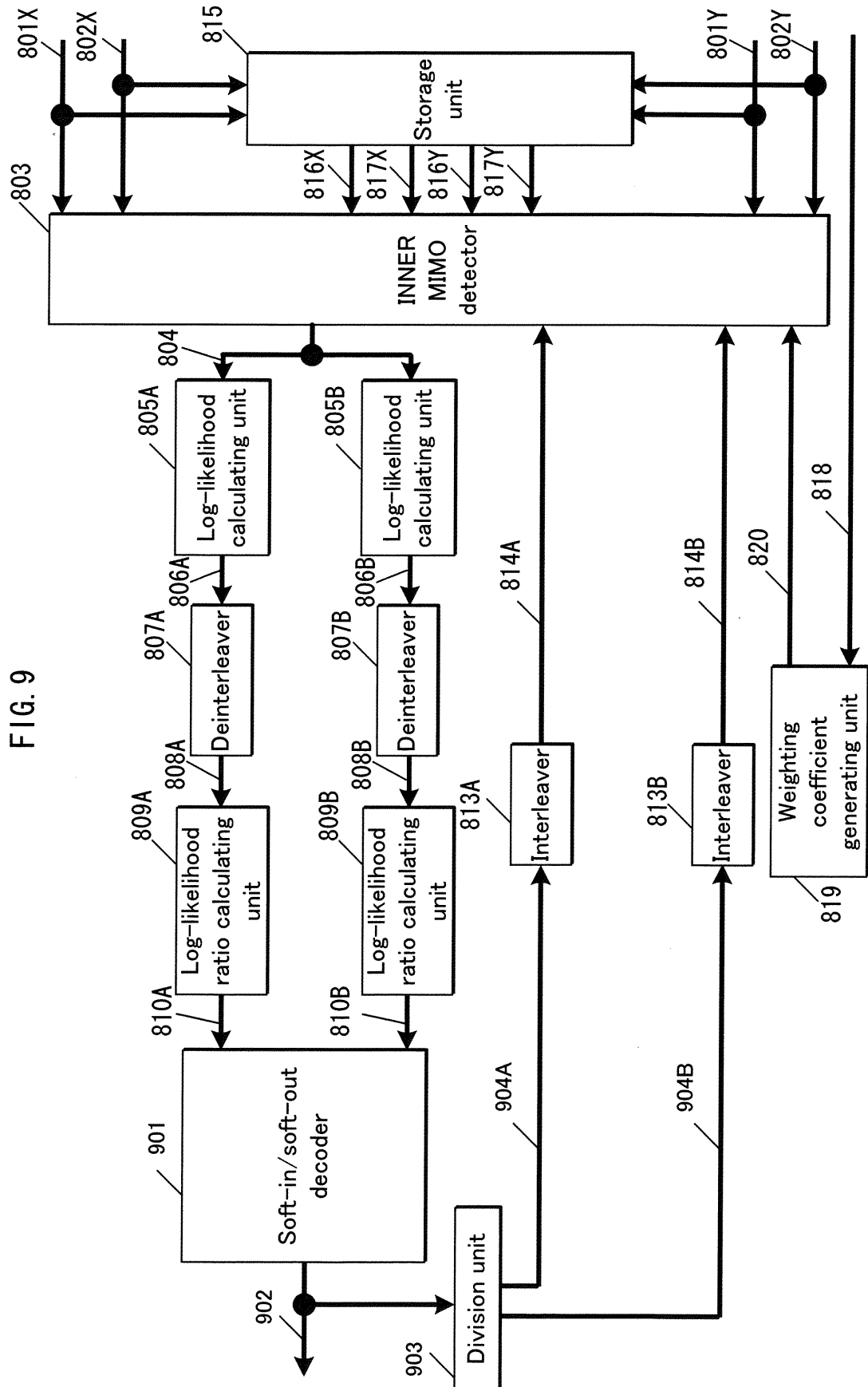


FIG. 10

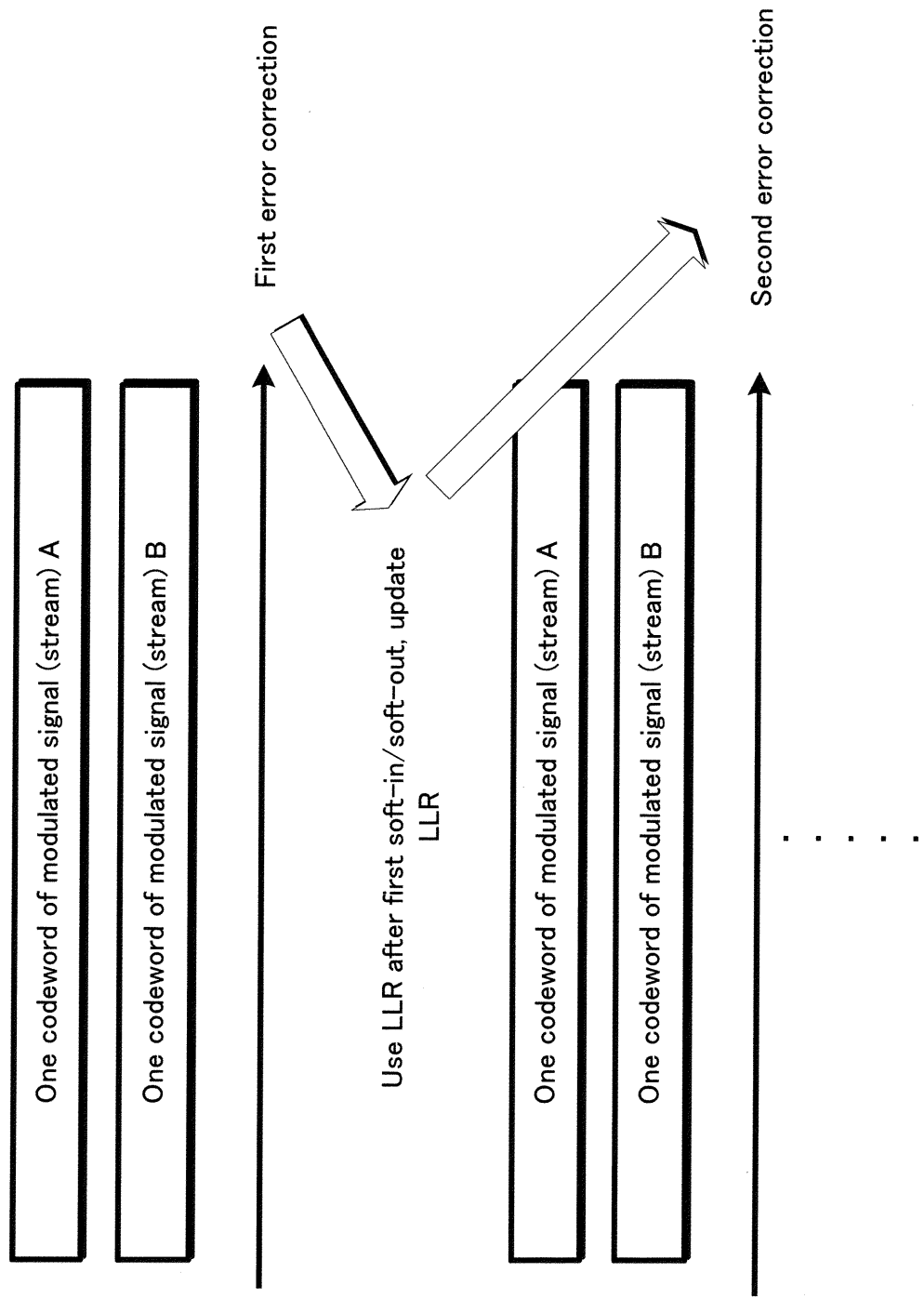


FIG. 11

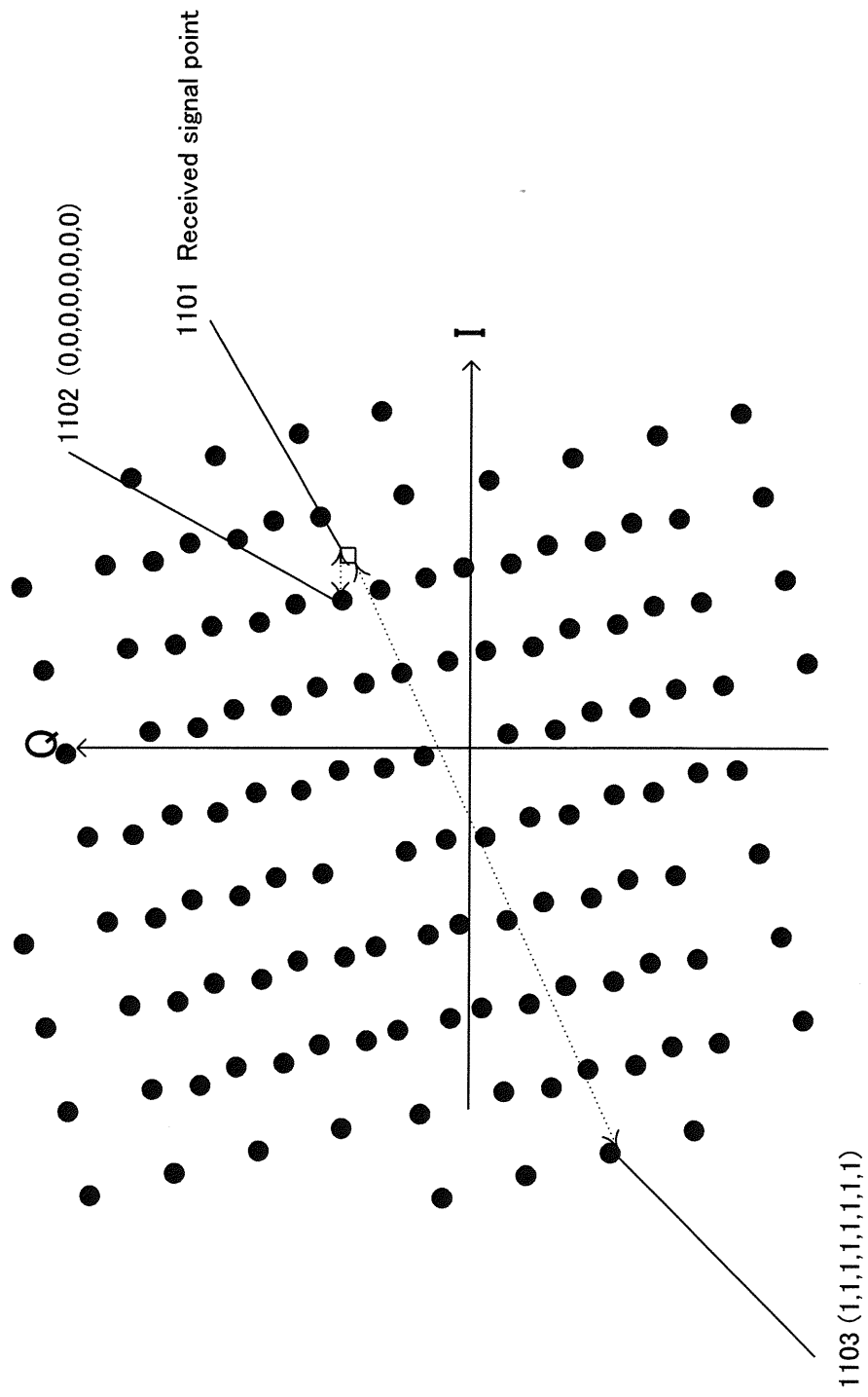


FIG. 12B

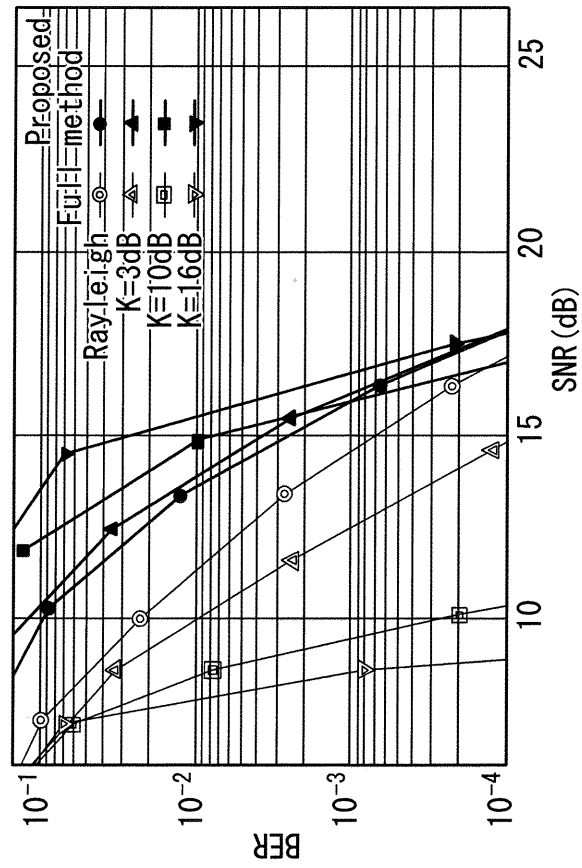


FIG. 12A

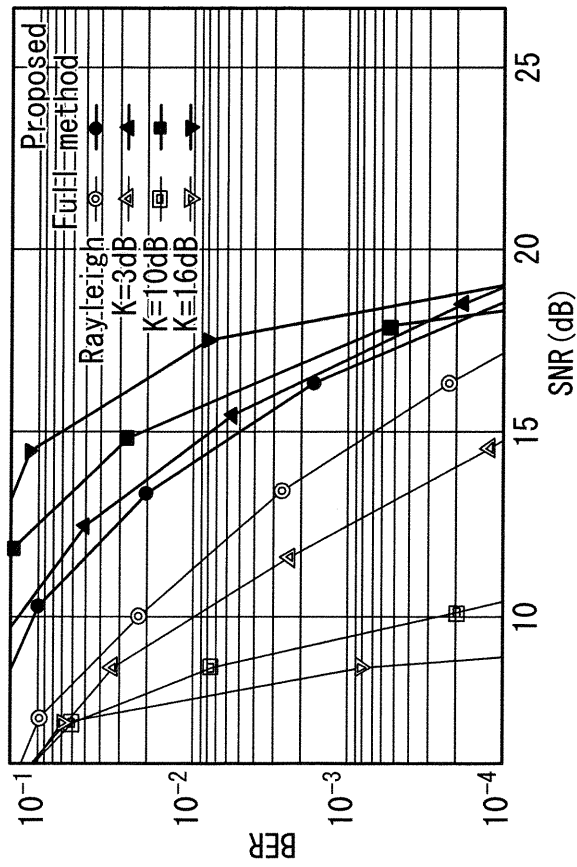


FIG. 13

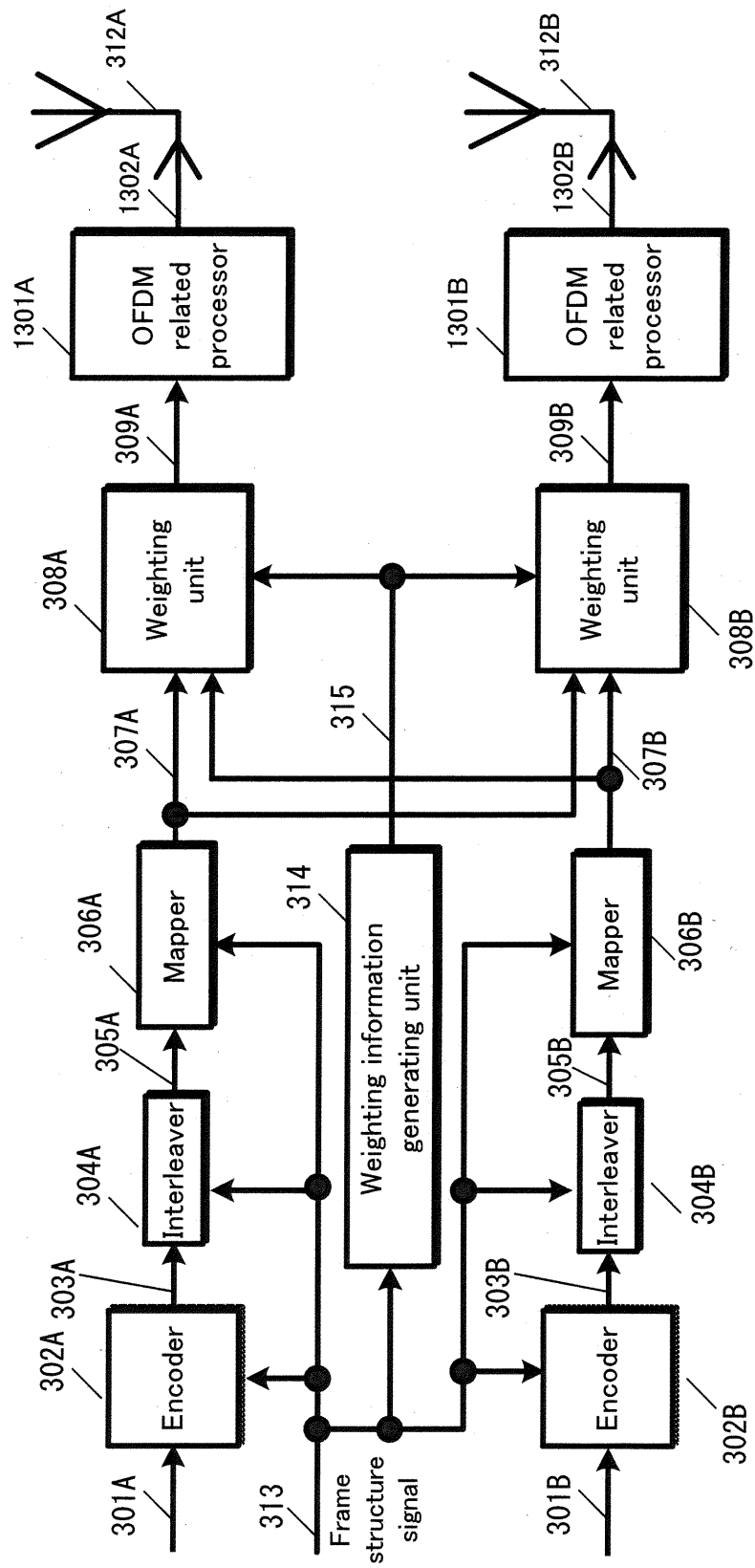


FIG. 14

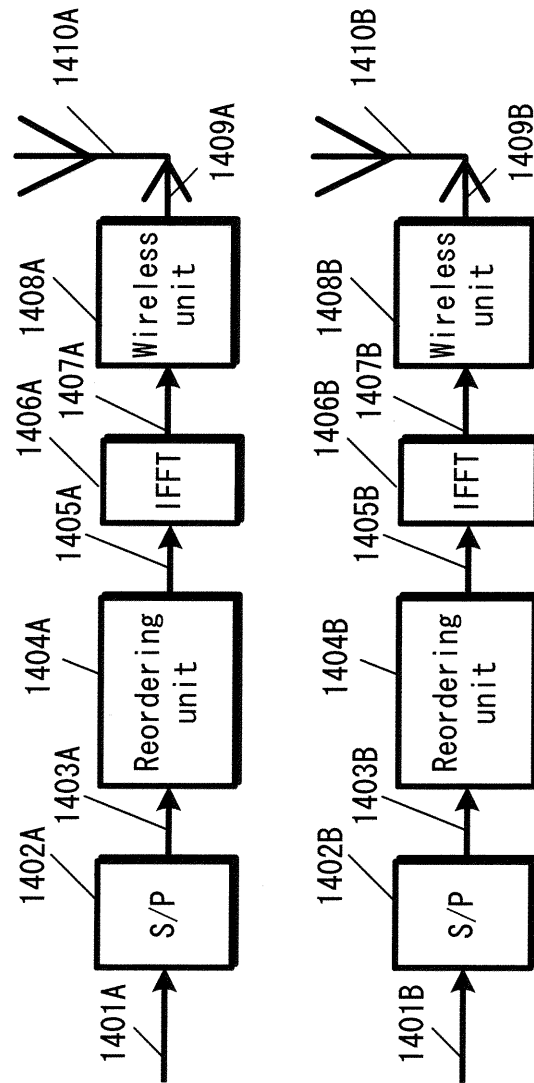


FIG. 15A

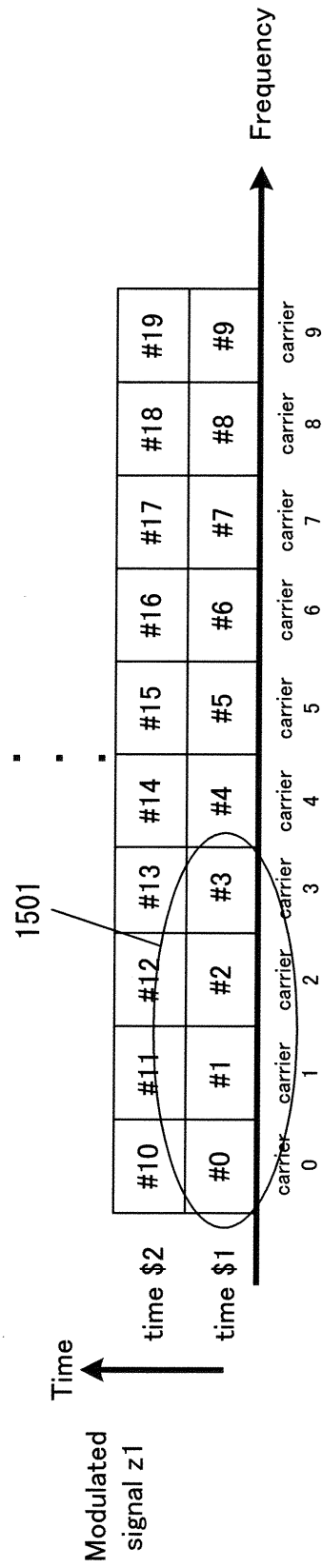


FIG. 15B

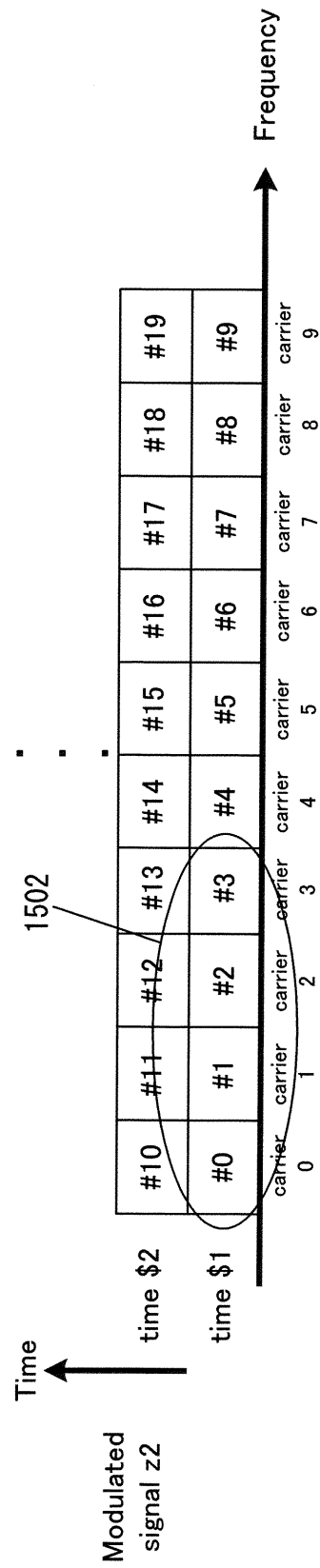


FIG. 16A

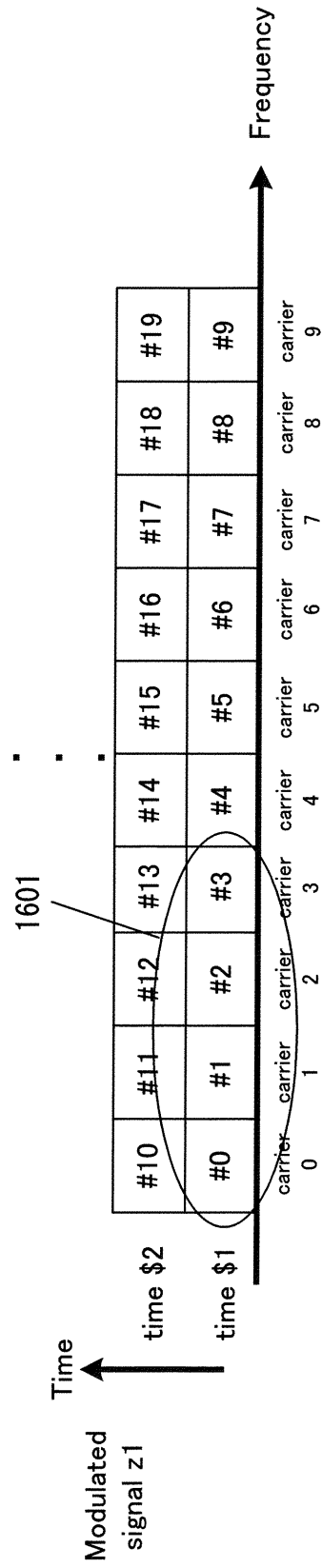


FIG. 16B

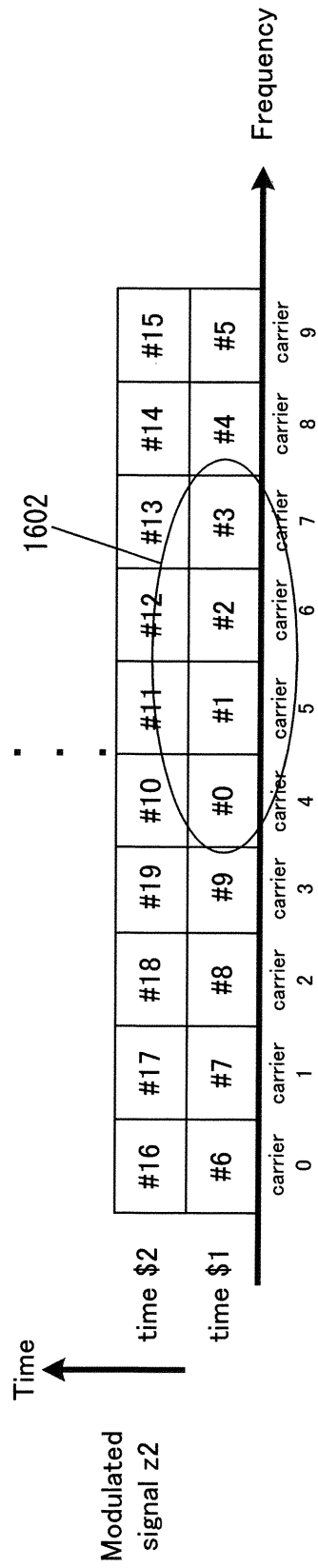


FIG. 17A

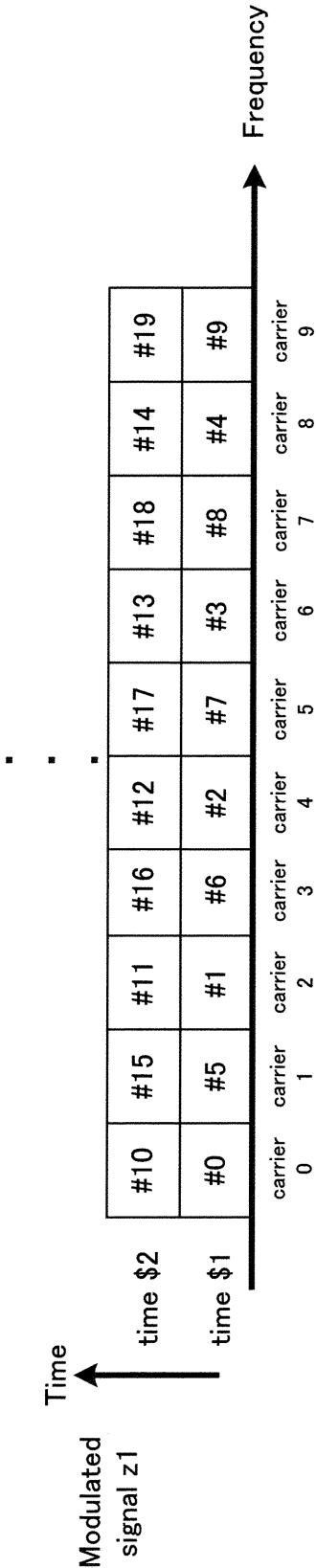


FIG. 17B

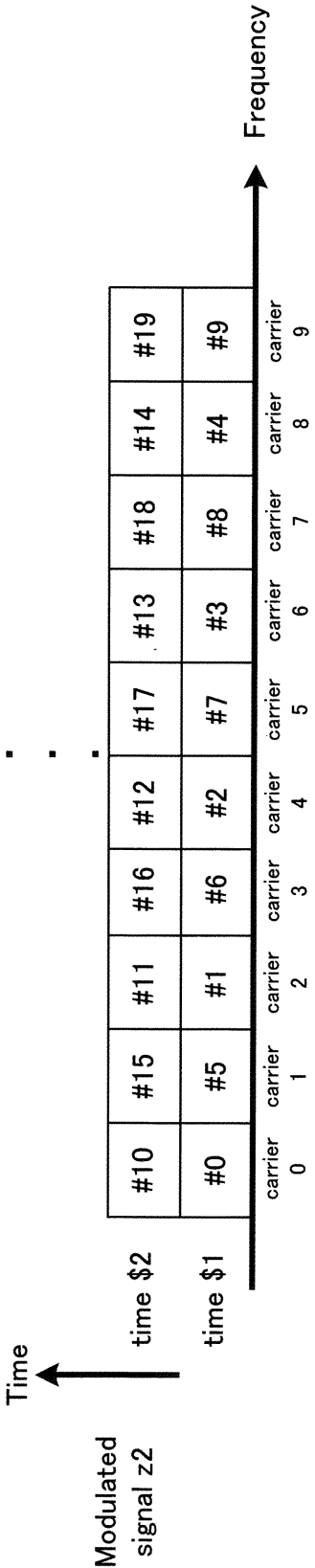


FIG. 18A

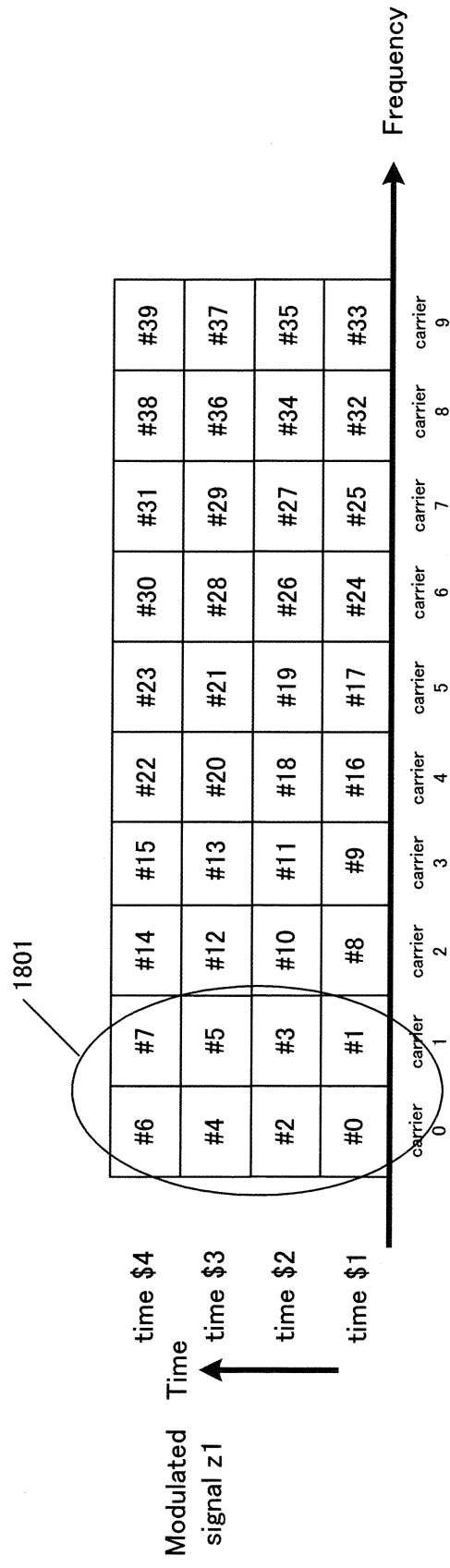


FIG. 18B

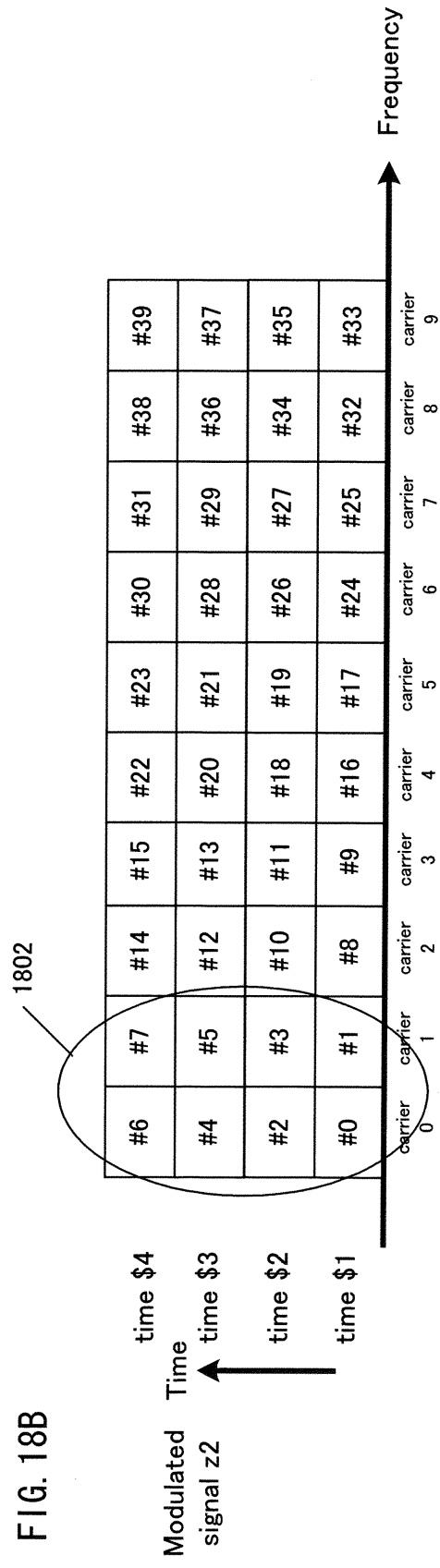


FIG. 19A

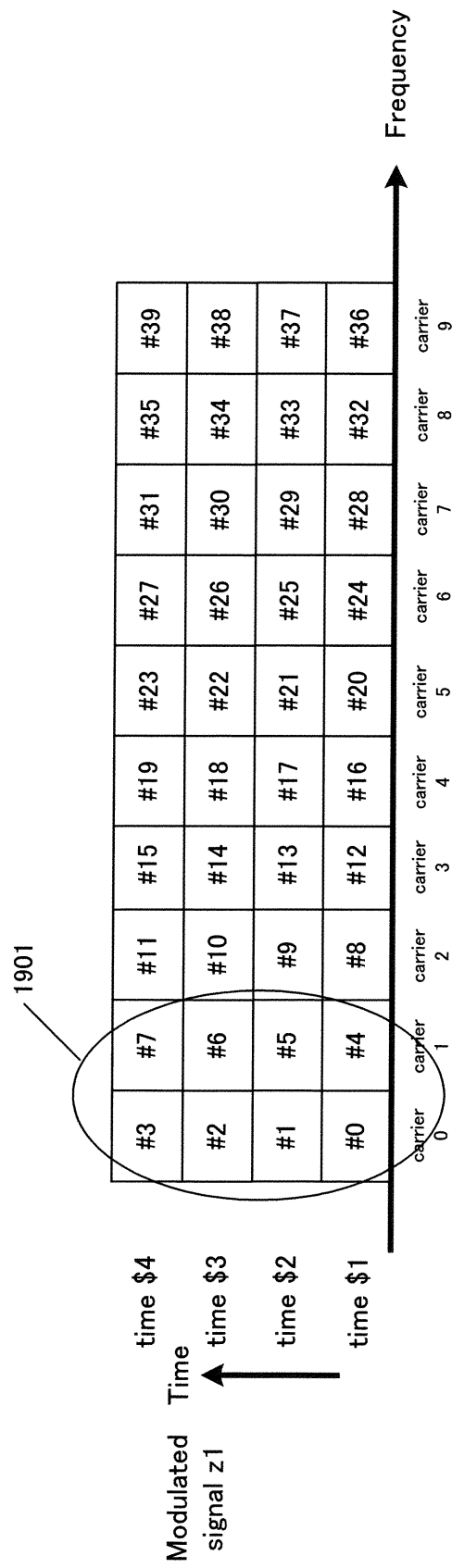


FIG. 19B

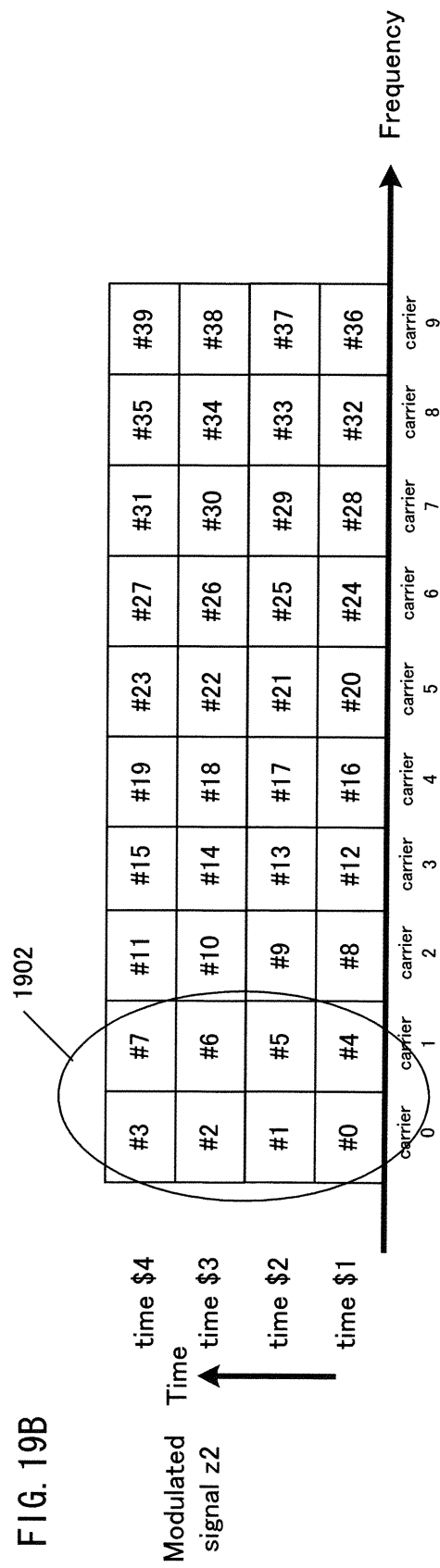


FIG. 20

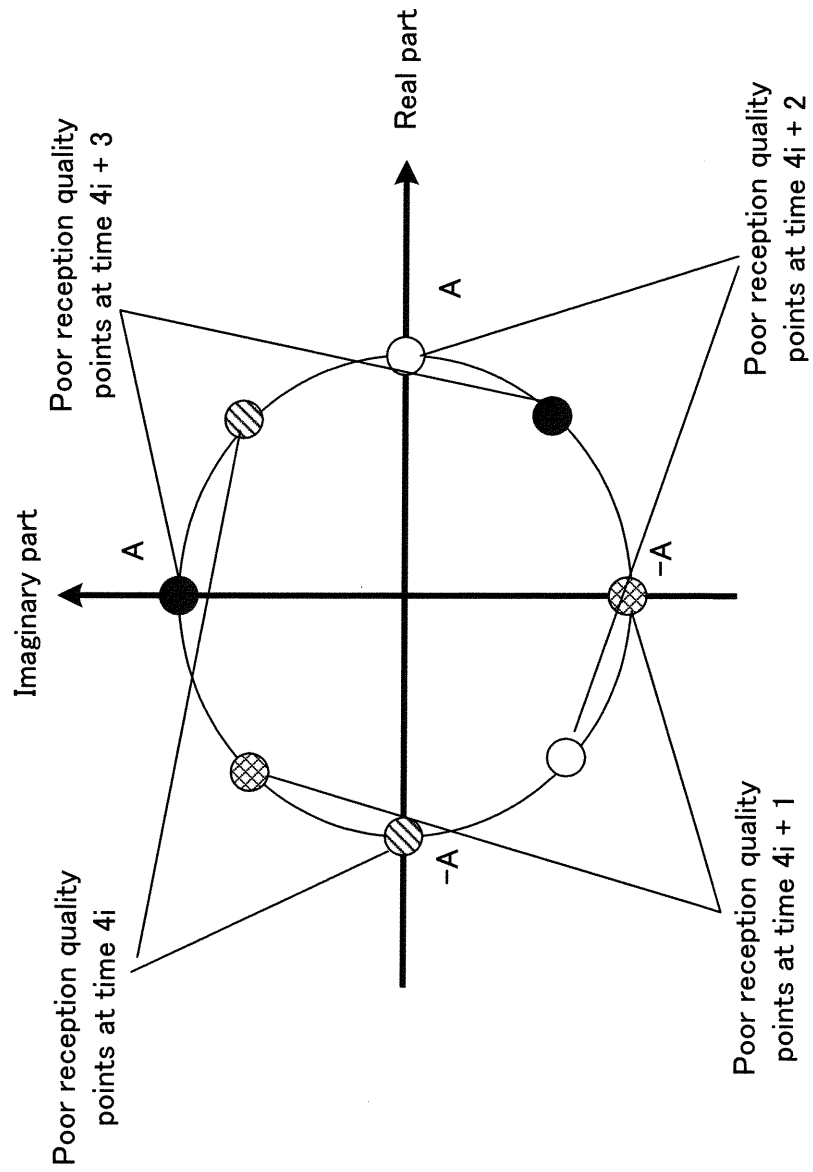


FIG. 21

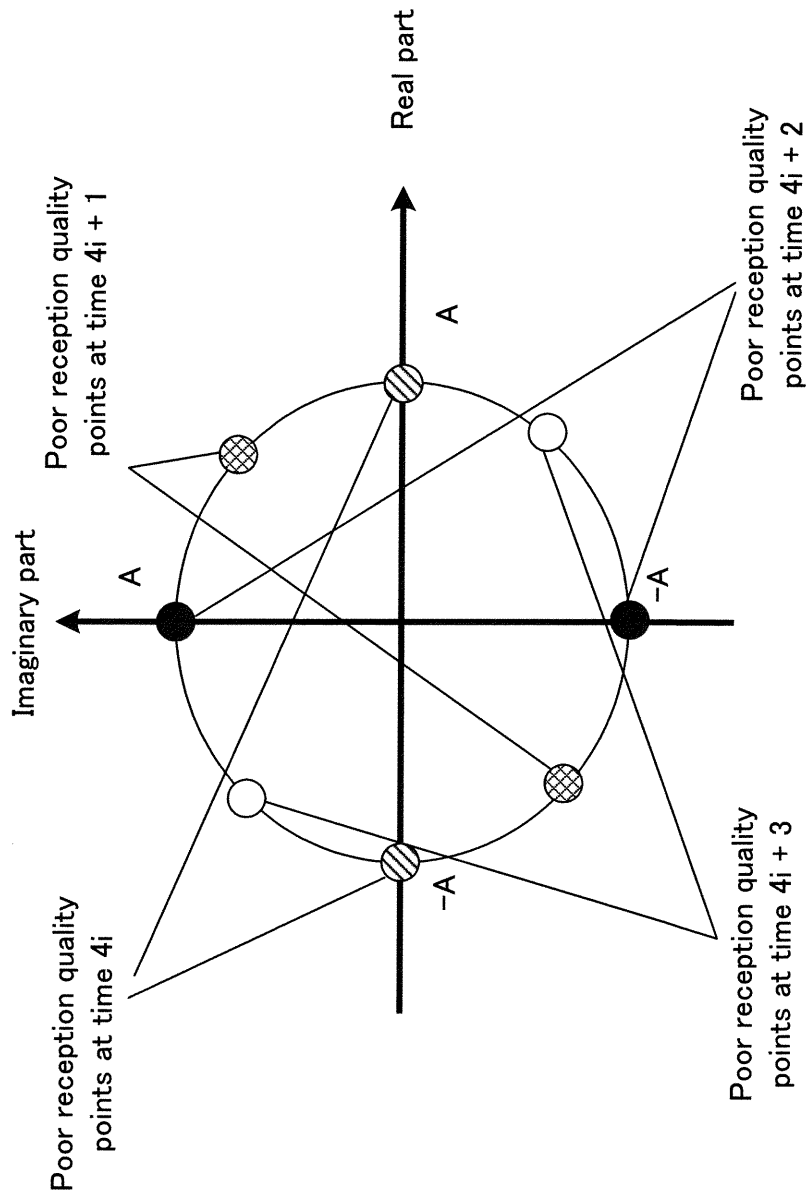


FIG. 22

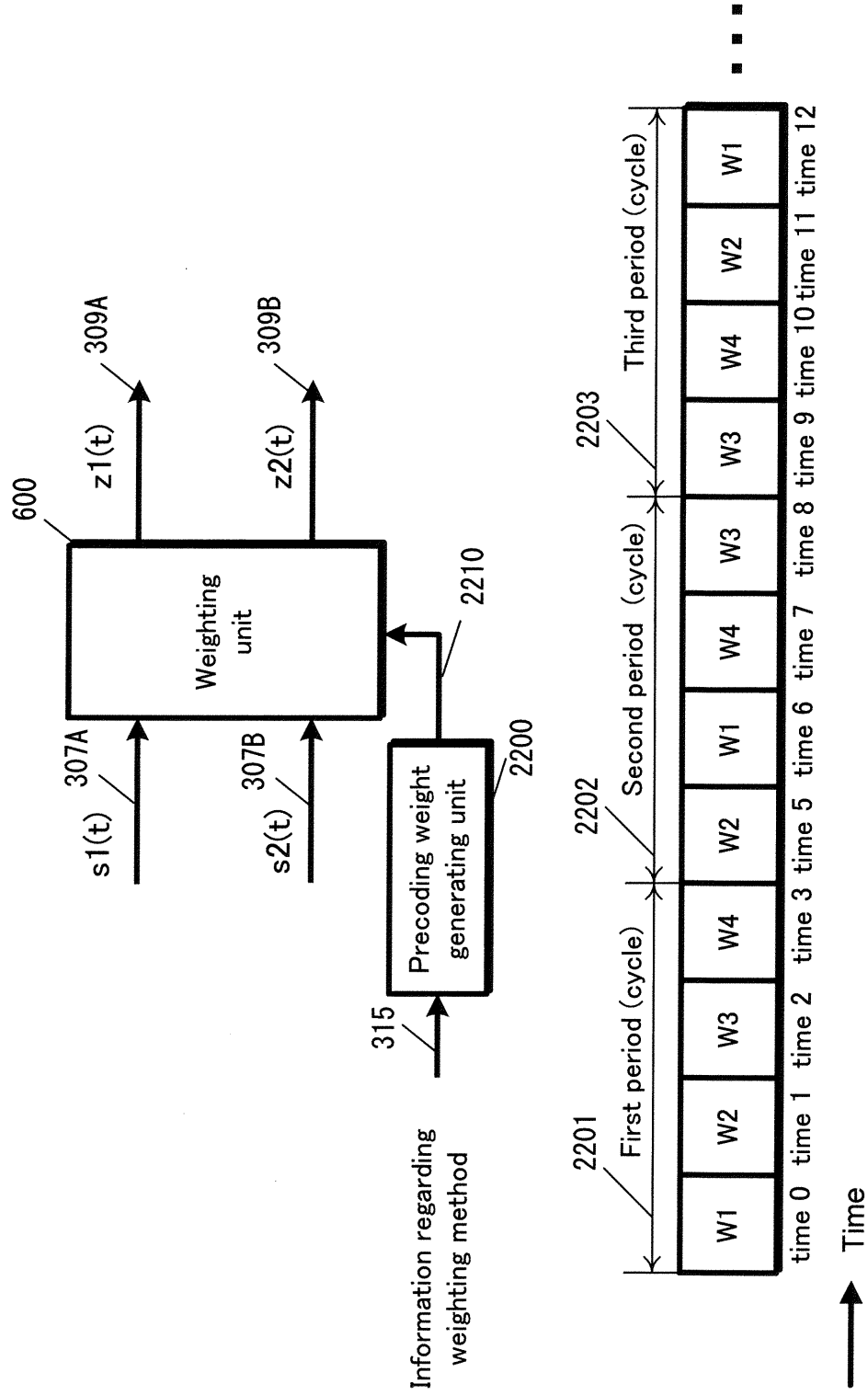


FIG. 23

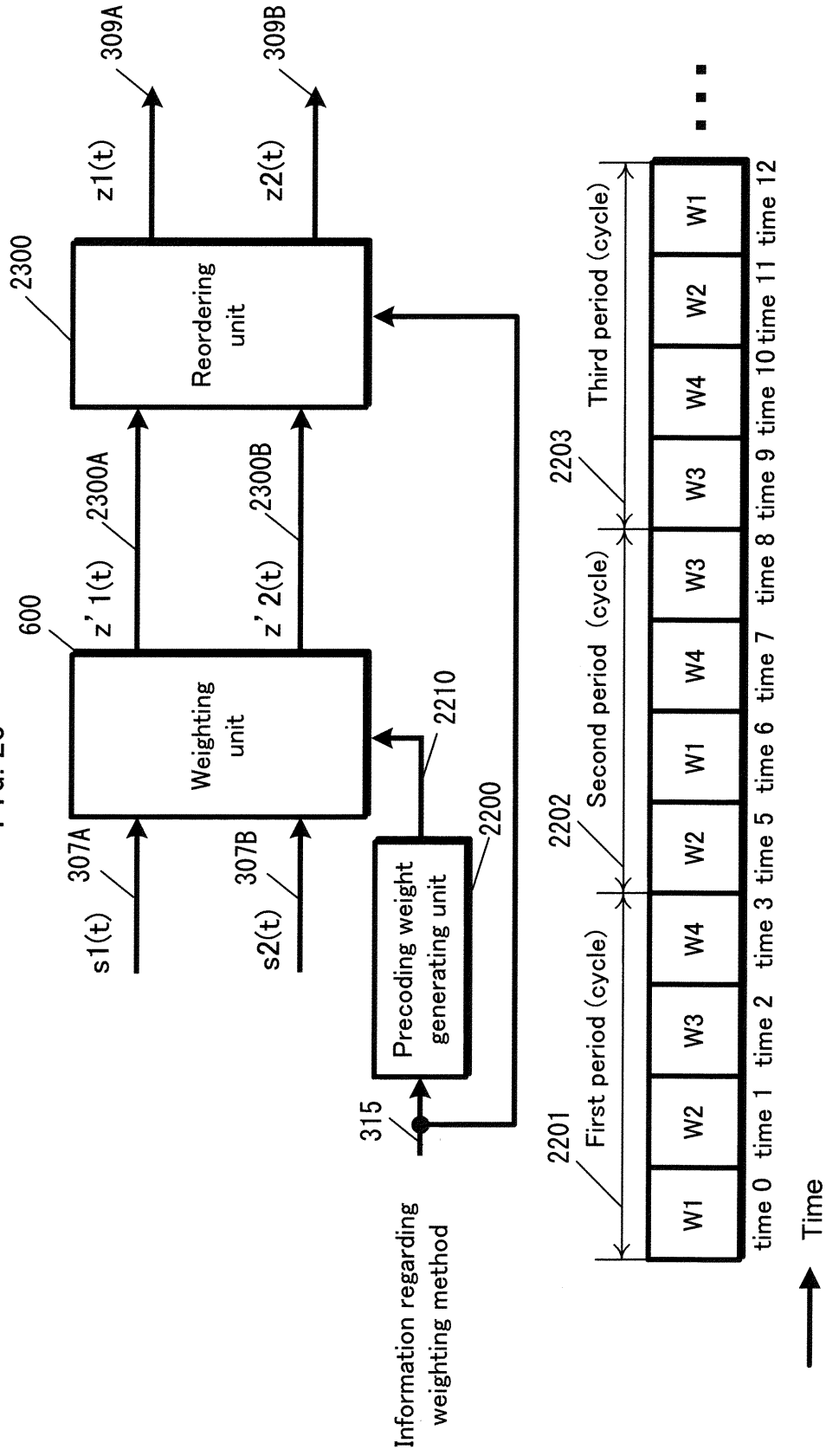


FIG. 24B

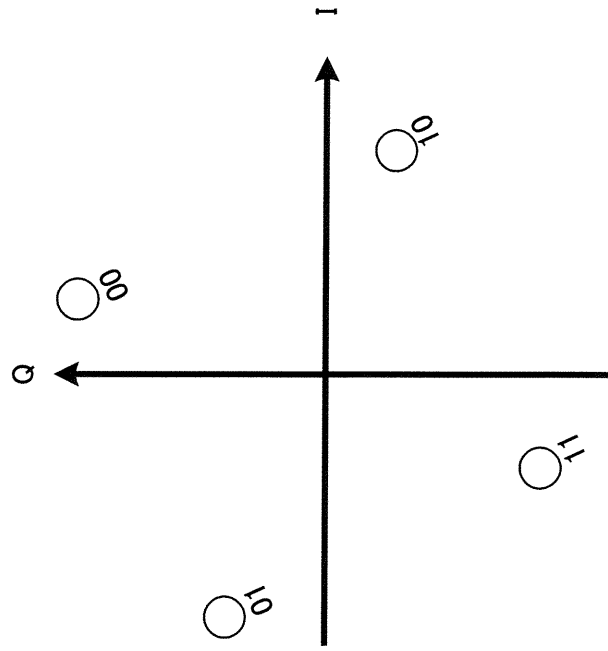


FIG. 24A

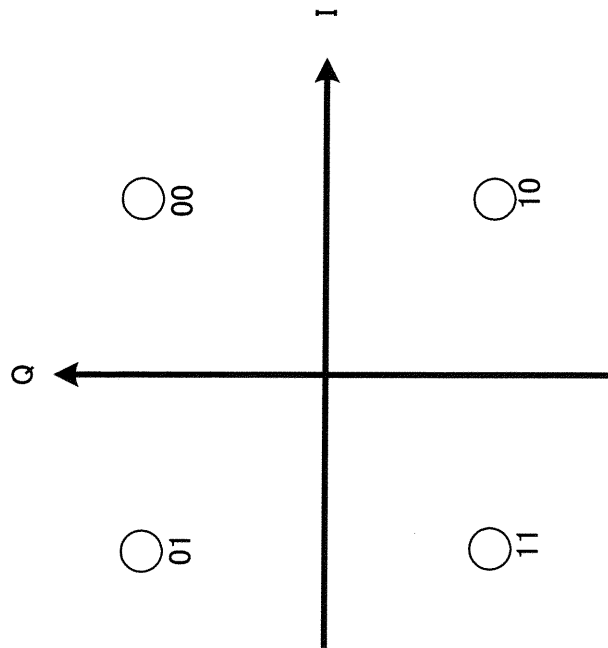


FIG. 25B

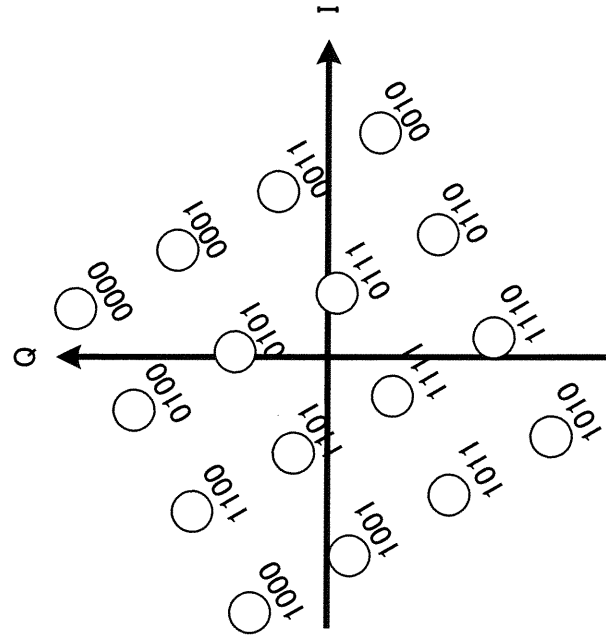


FIG. 25A

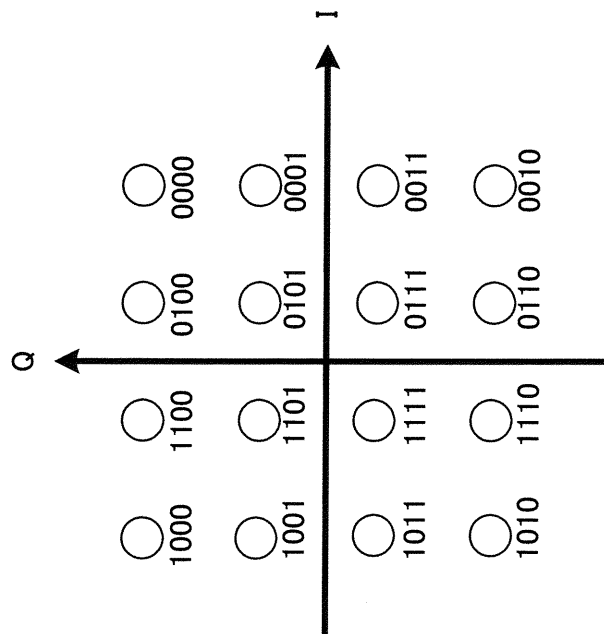


FIG. 26

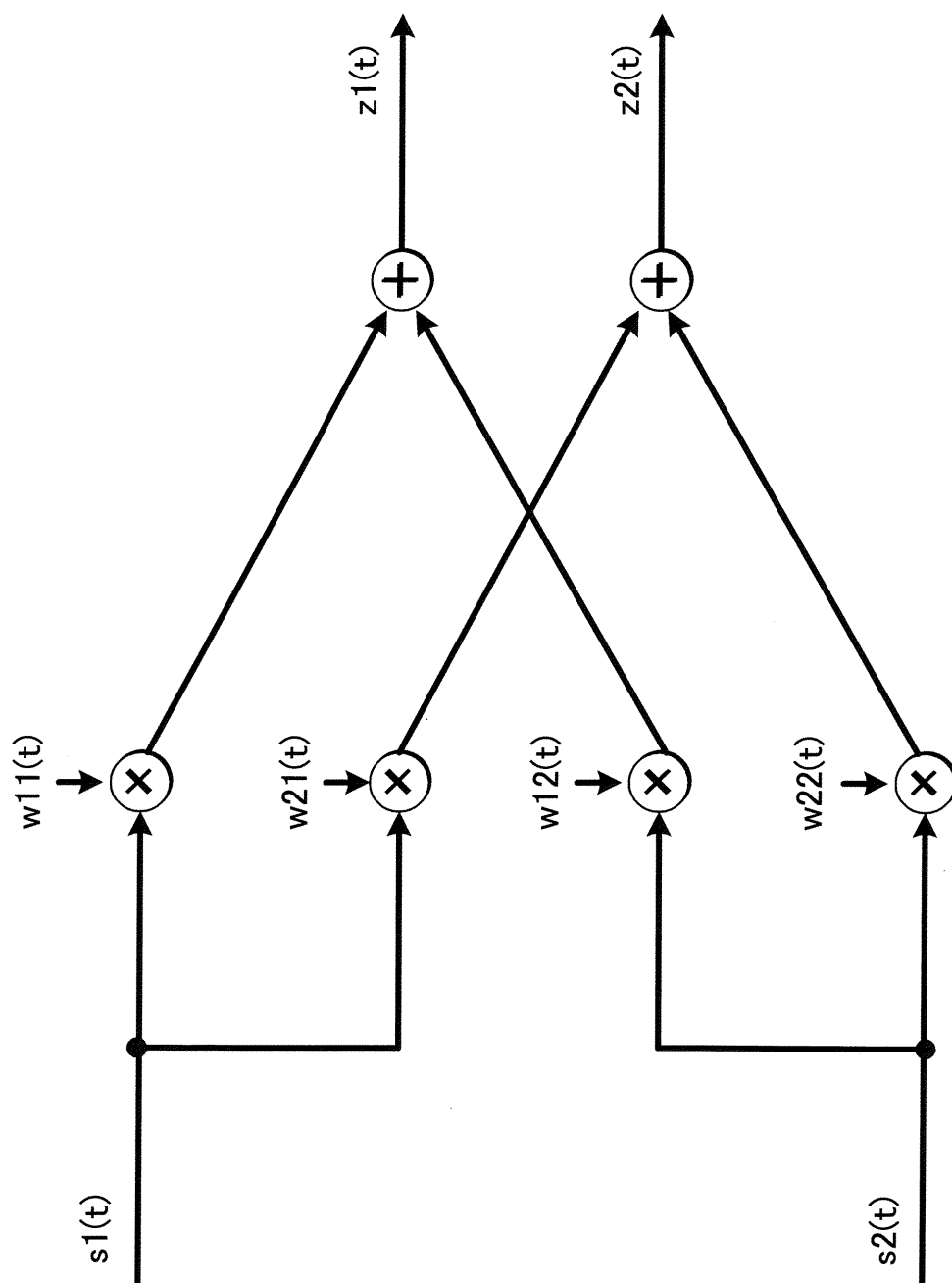


FIG. 27

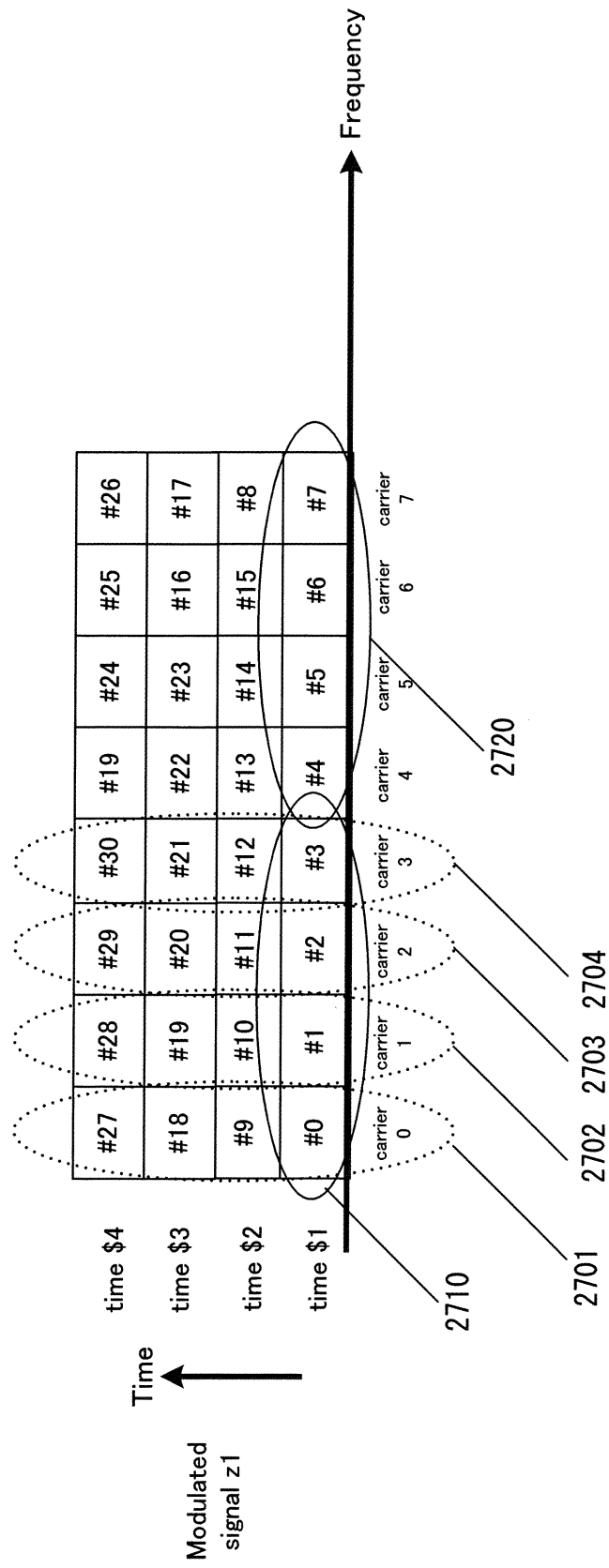


FIG. 28

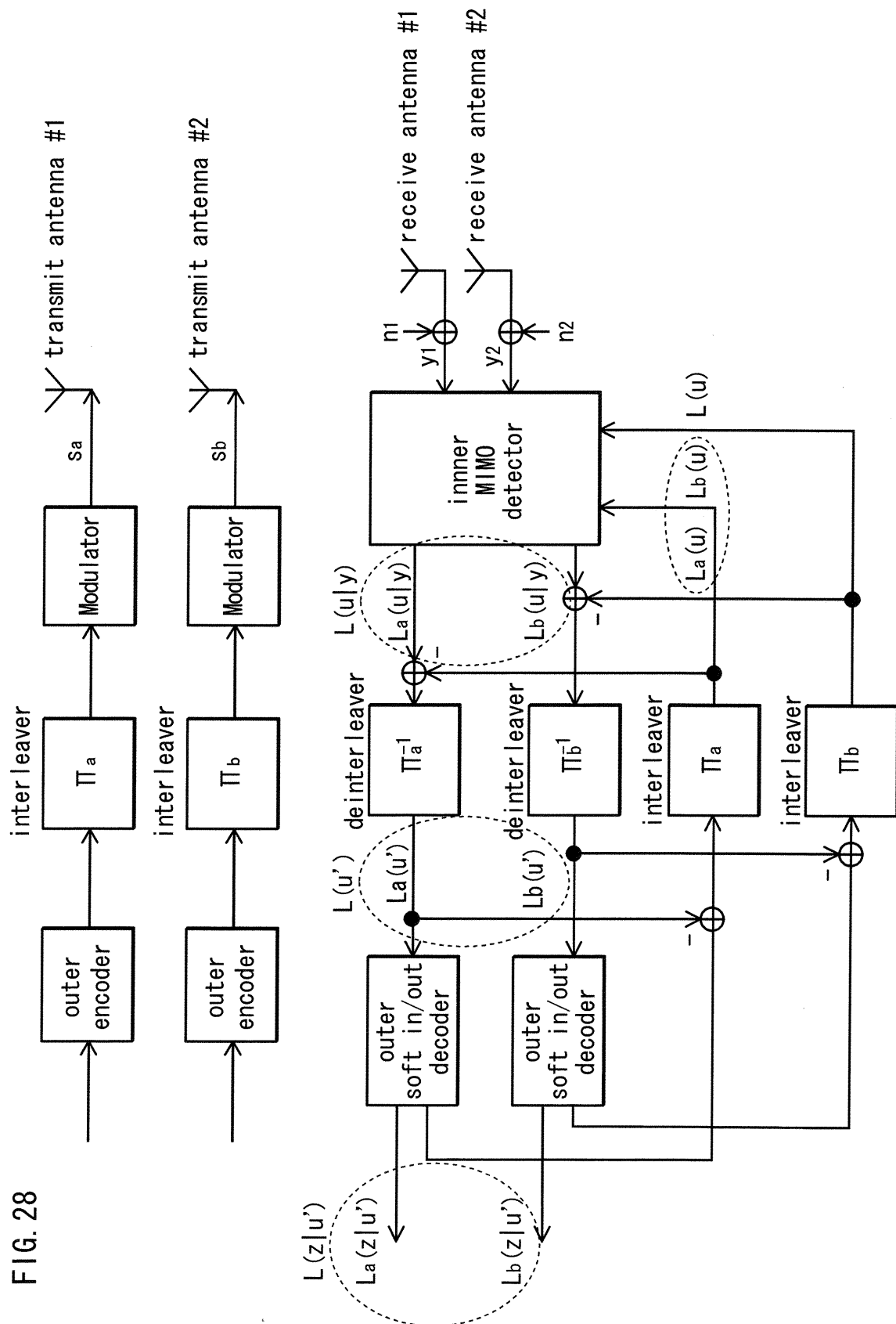


FIG. 29B

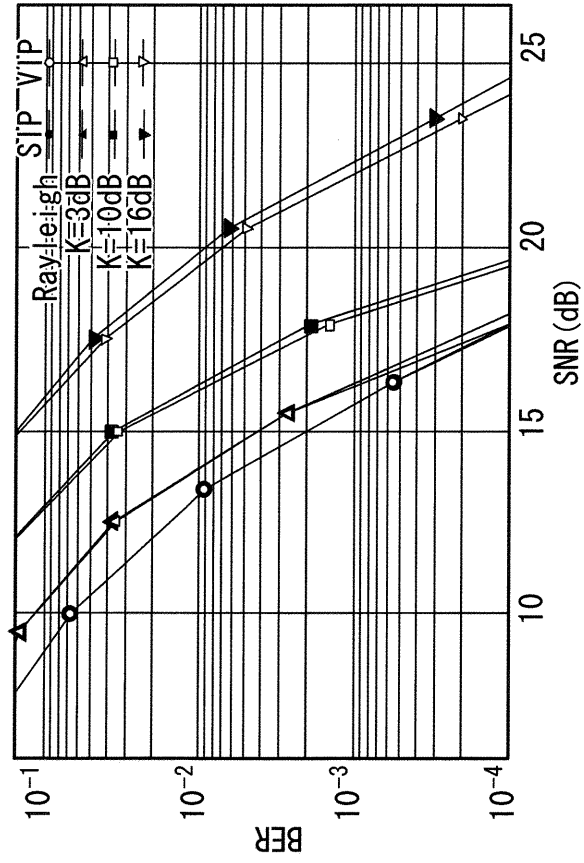


FIG. 29A

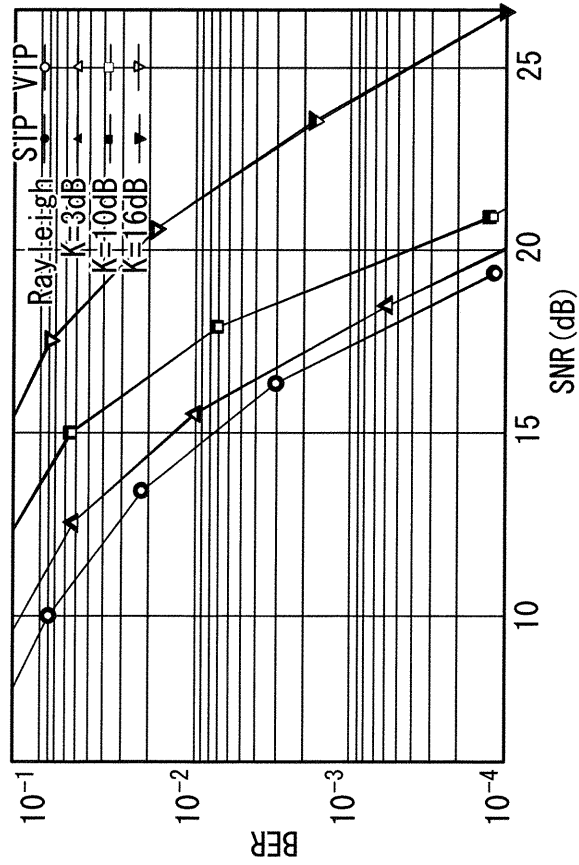


FIG. 30

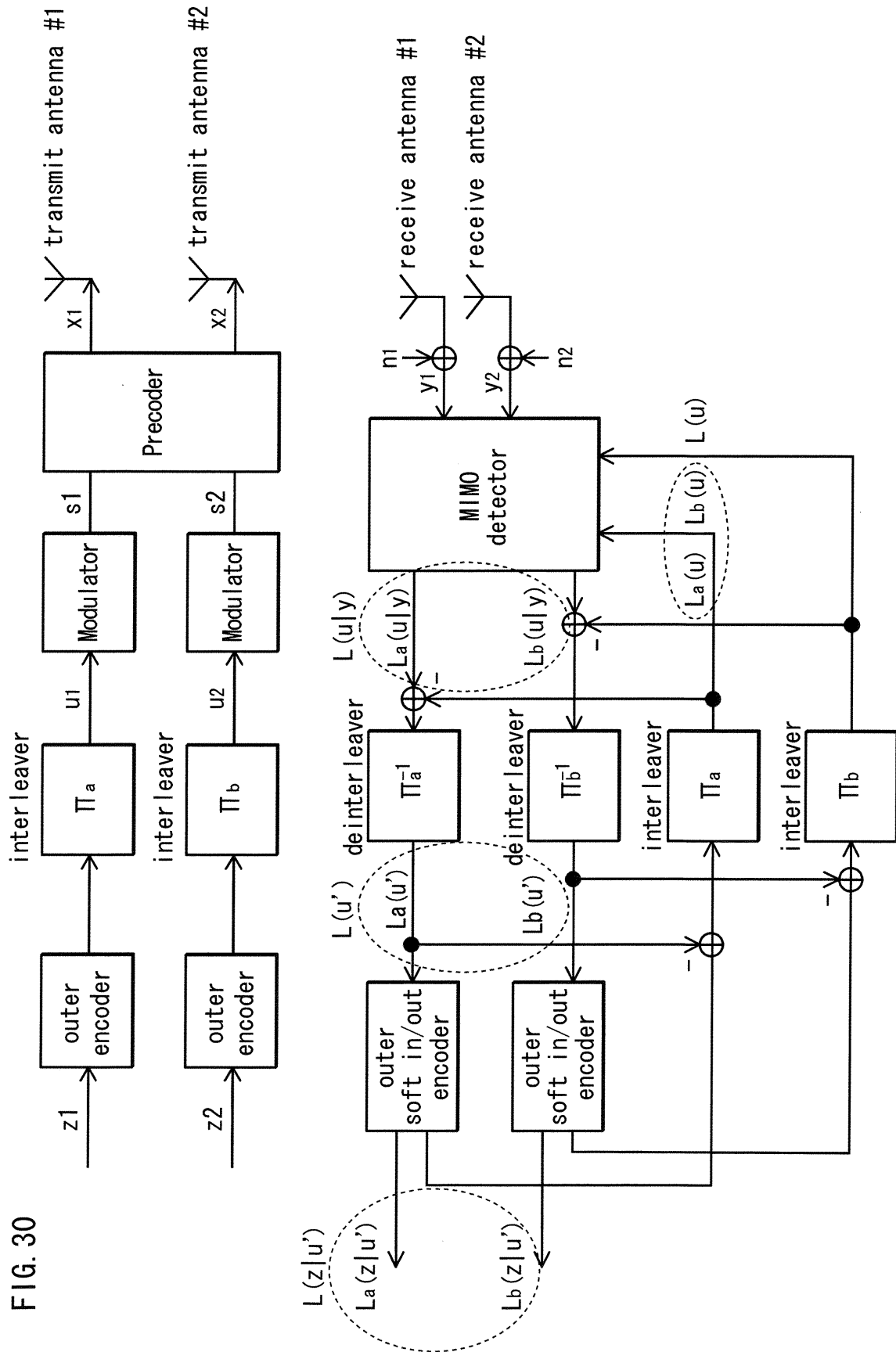


FIG. 31A

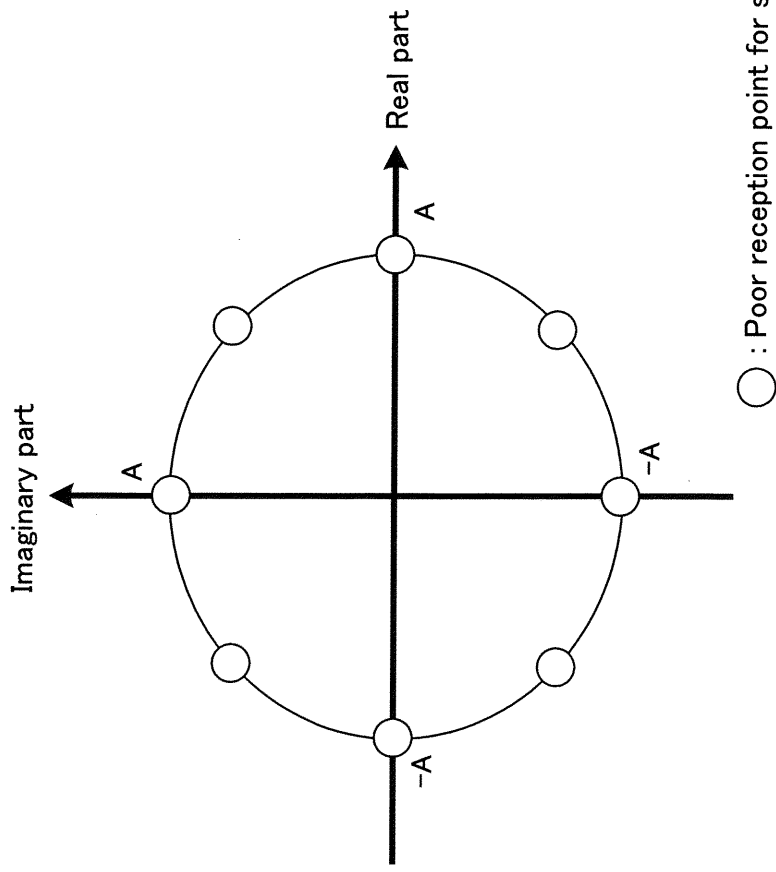
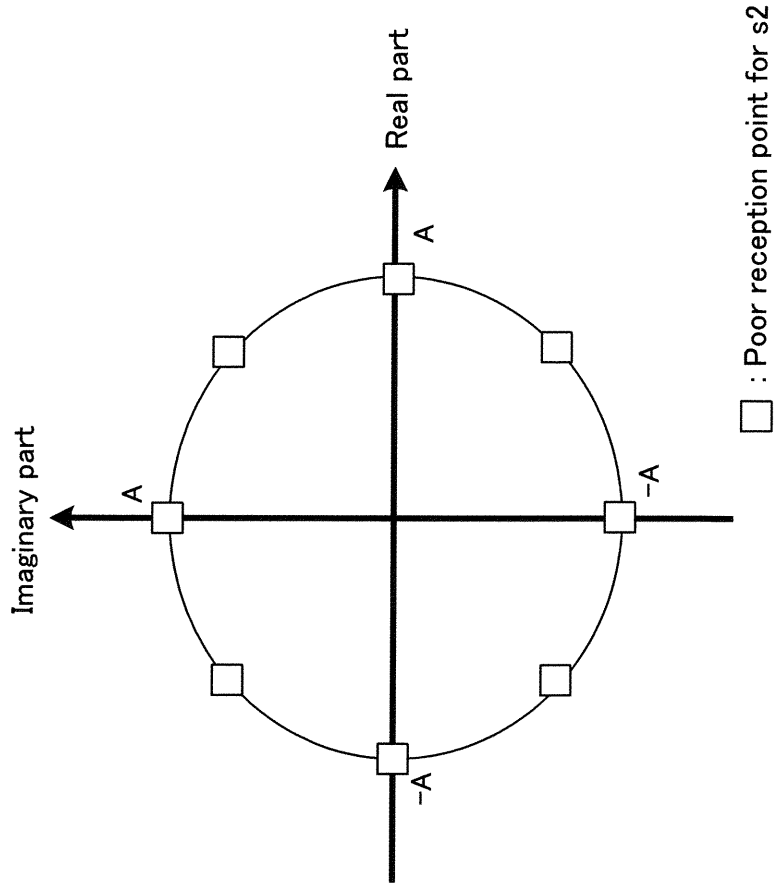


FIG. 31B



○ : Poor reception point for s1

□ : Poor reception point for s2

FIG. 32

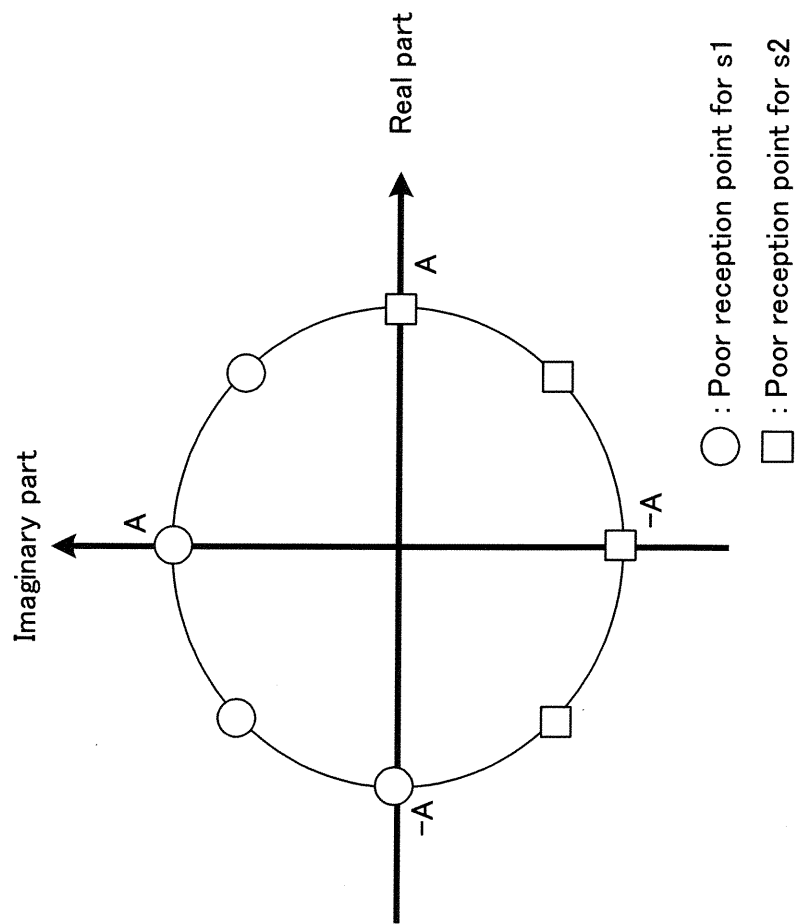
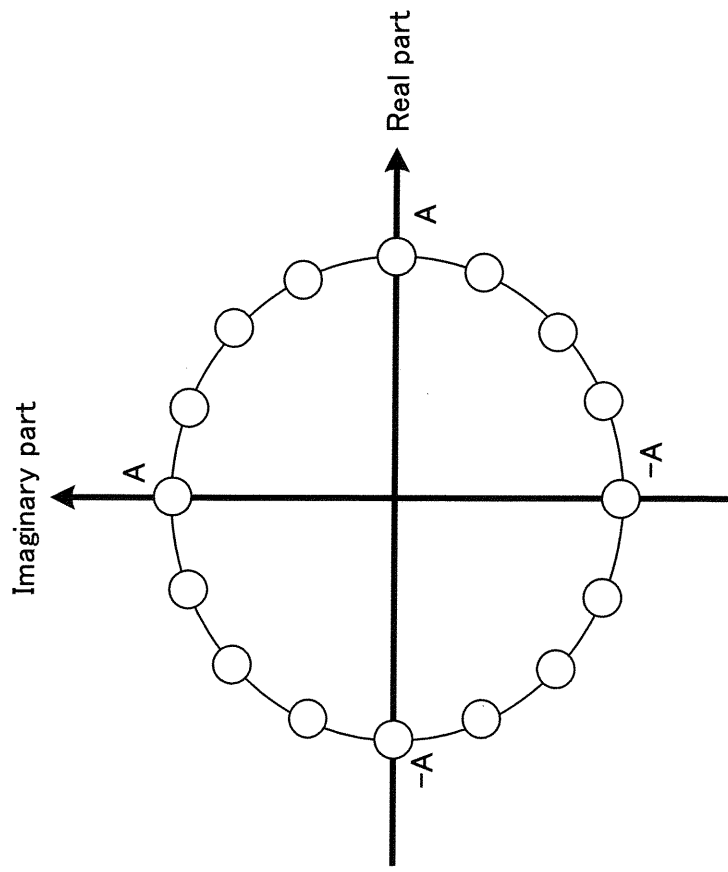
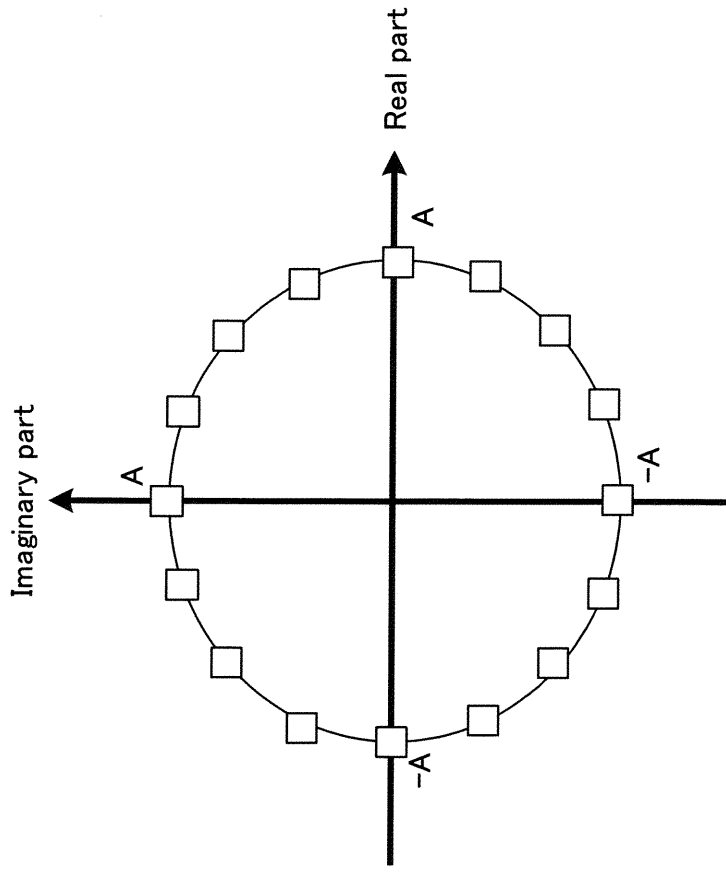


FIG. 33A



○ : Poor reception point for s1

FIG. 33B



□ : Poor reception point for s2

FIG. 34

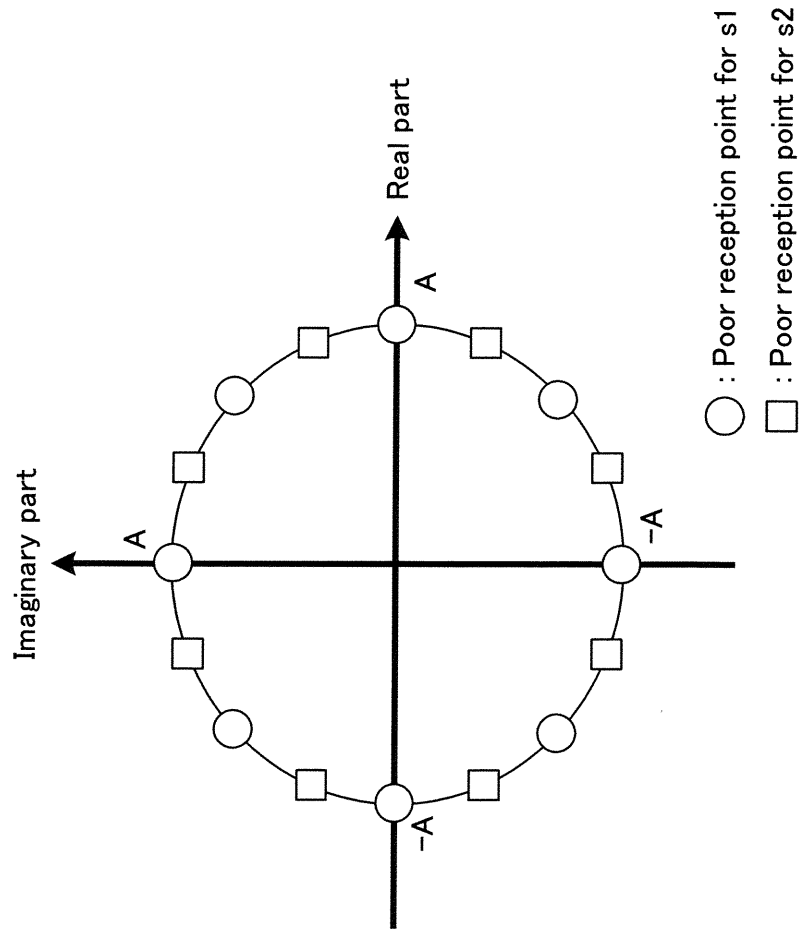


FIG. 35A

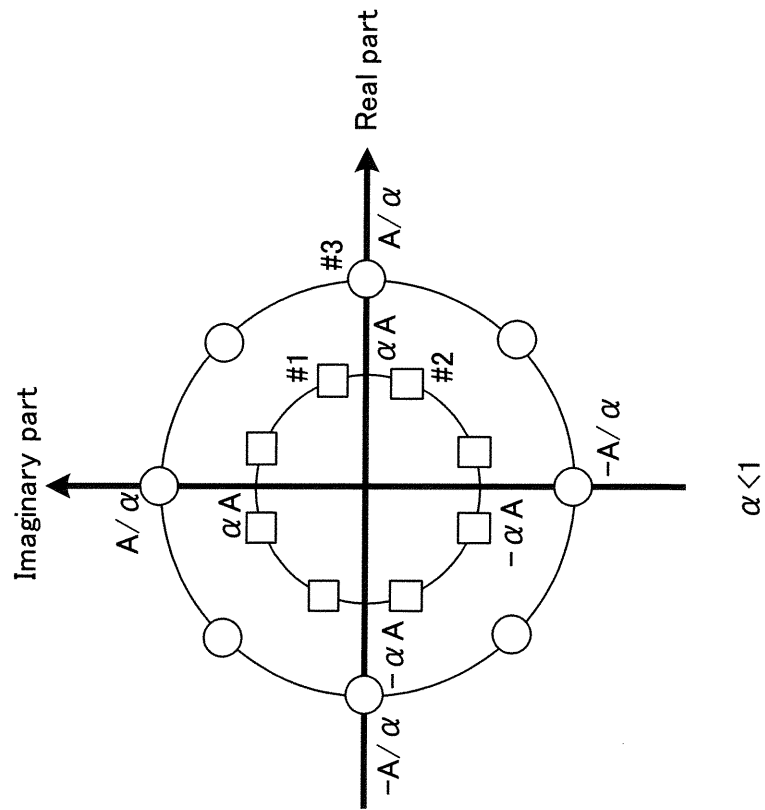


FIG. 35B

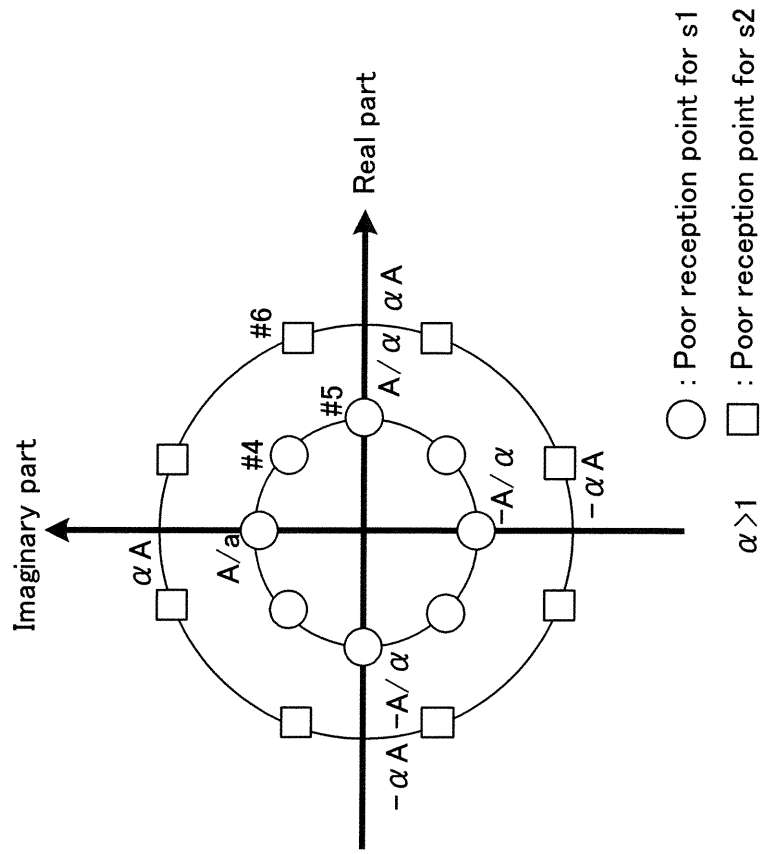


FIG. 36

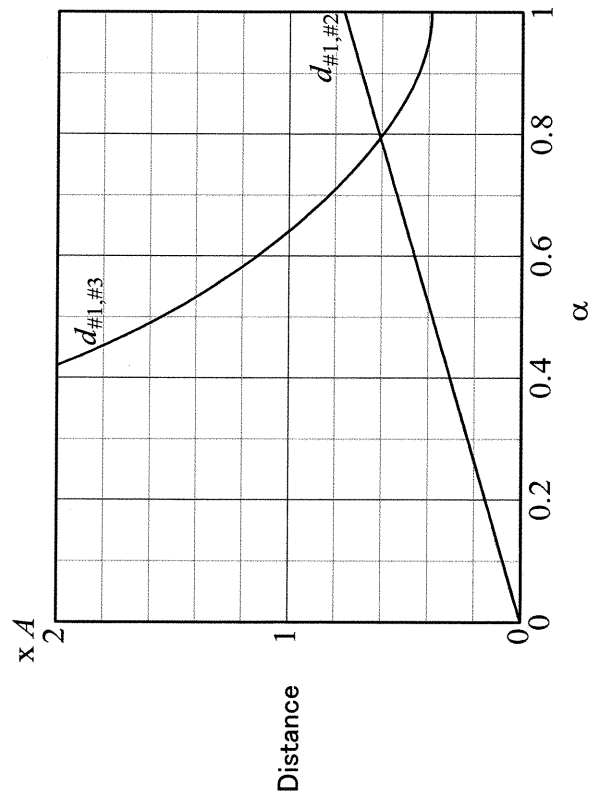


FIG. 37

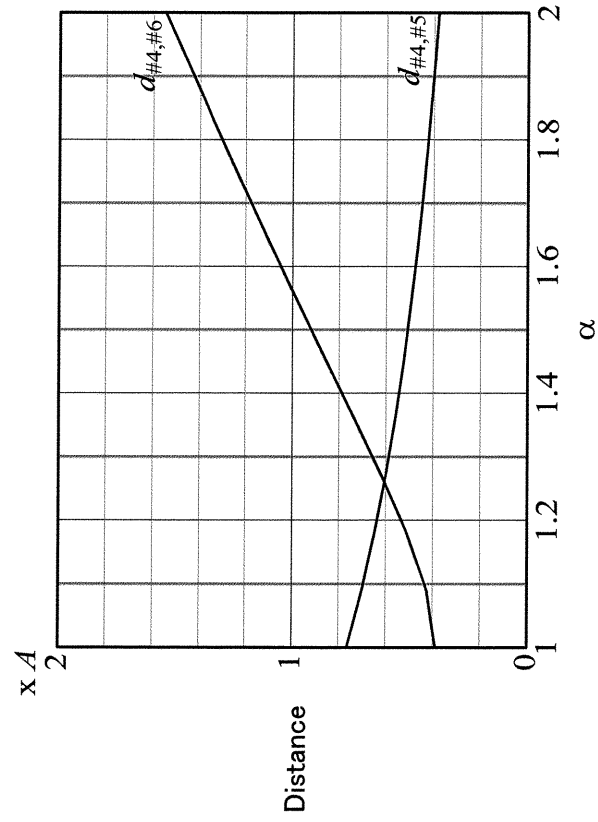


FIG. 38B

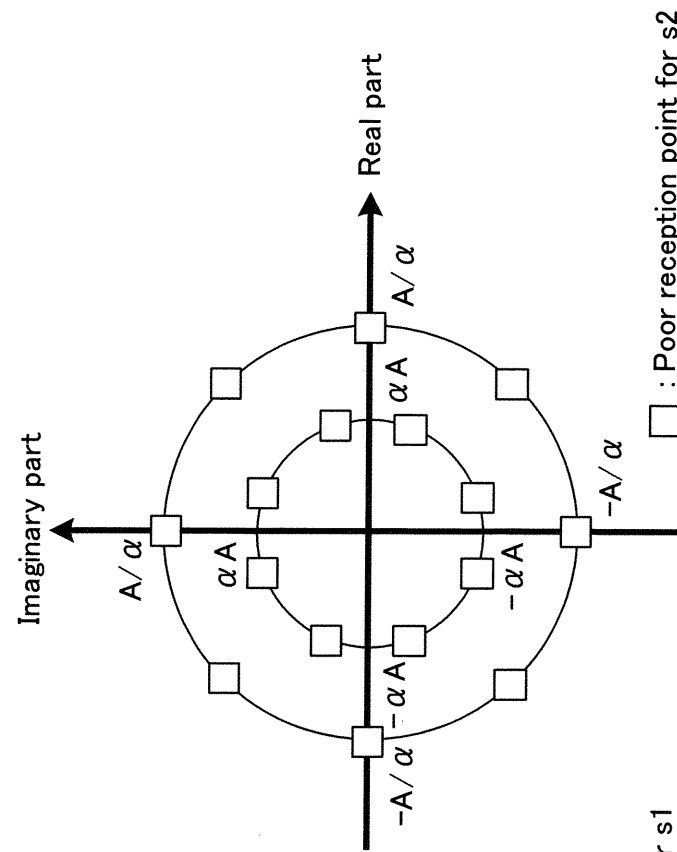


FIG. 38A

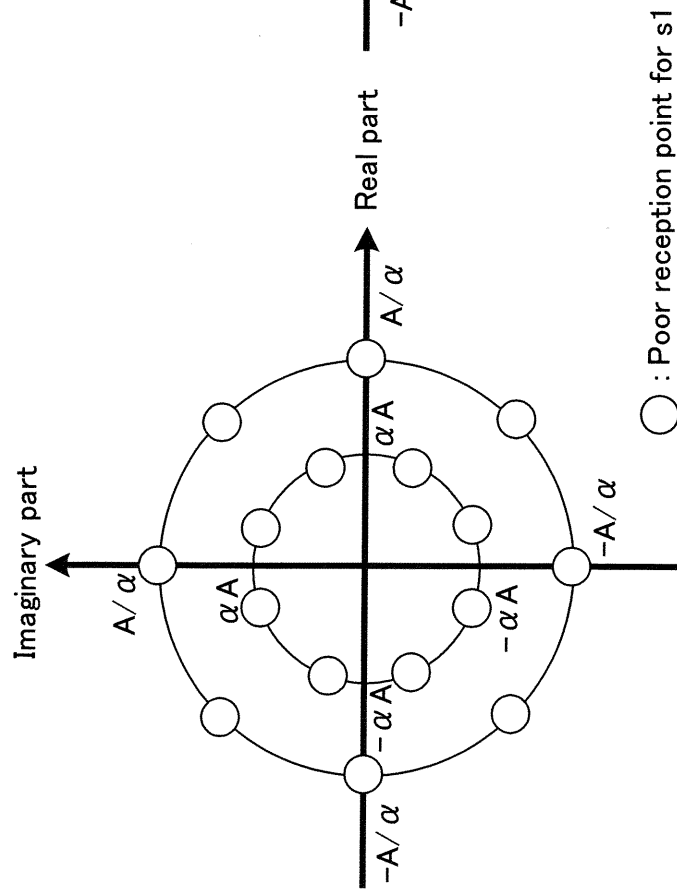


FIG. 39A

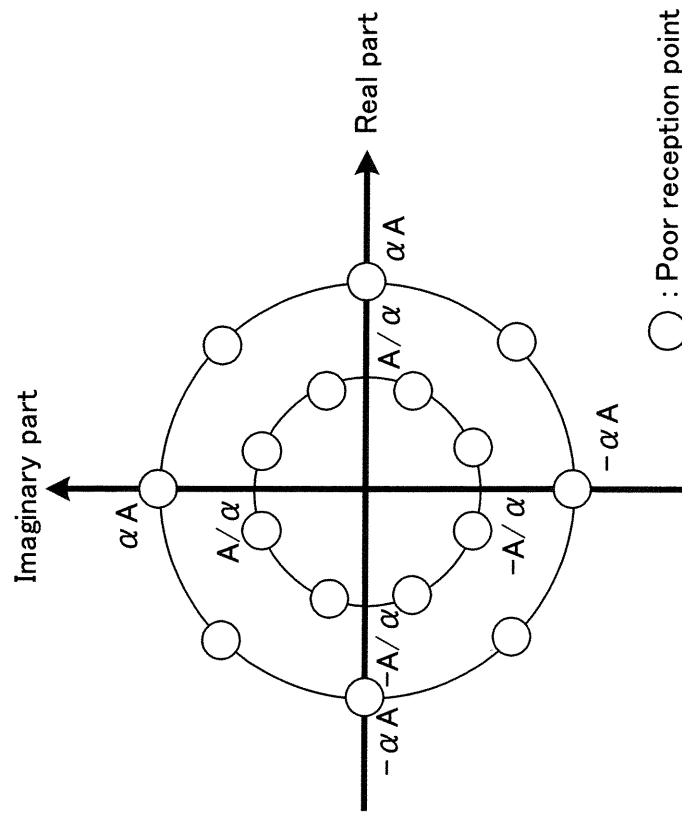


FIG. 39B

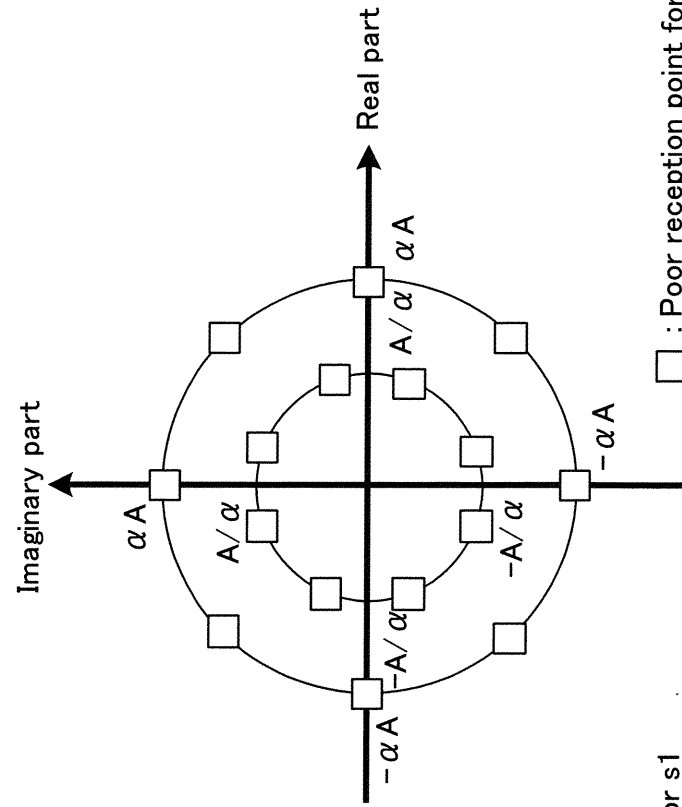


FIG. 40

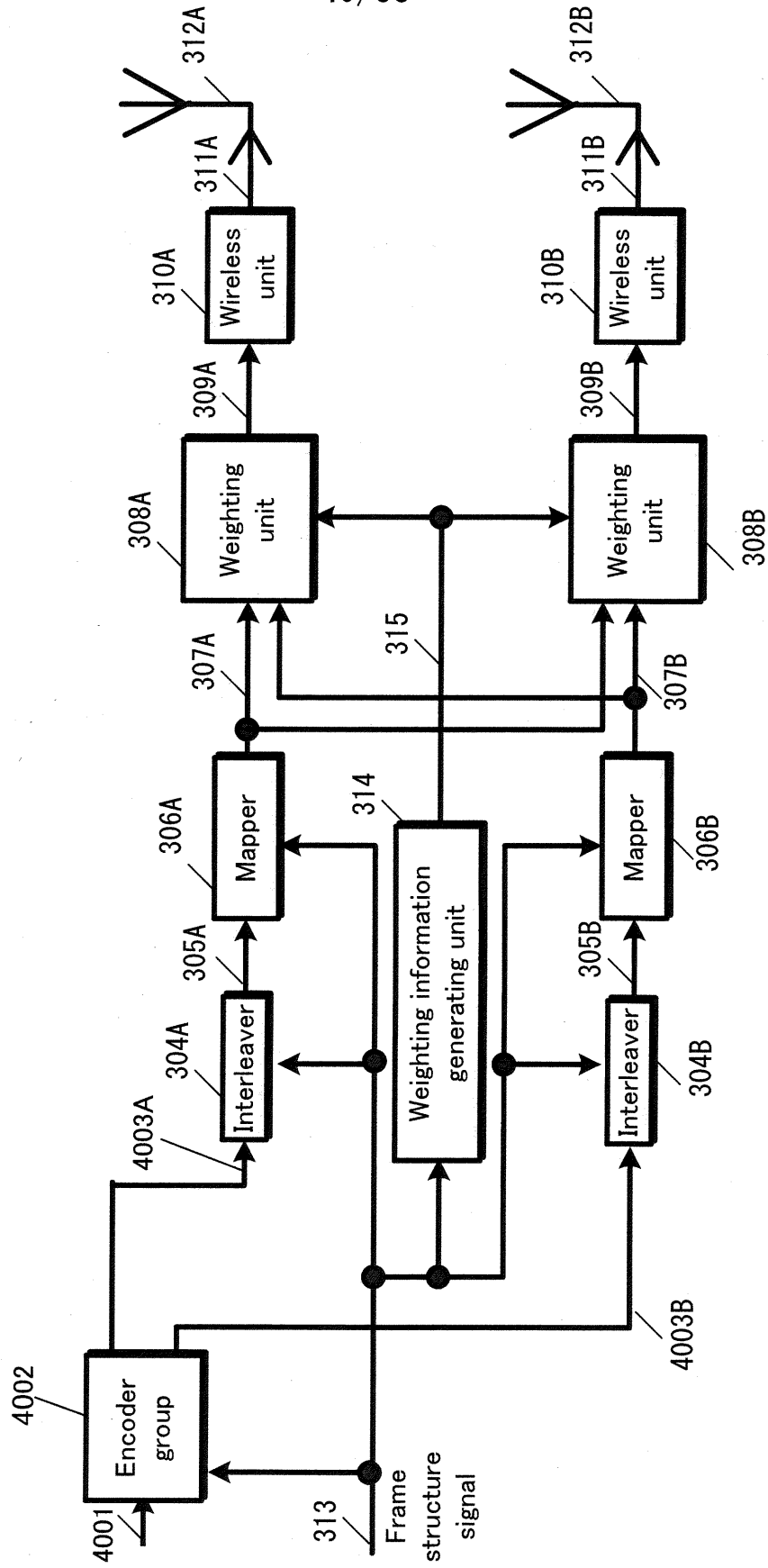


FIG. 41

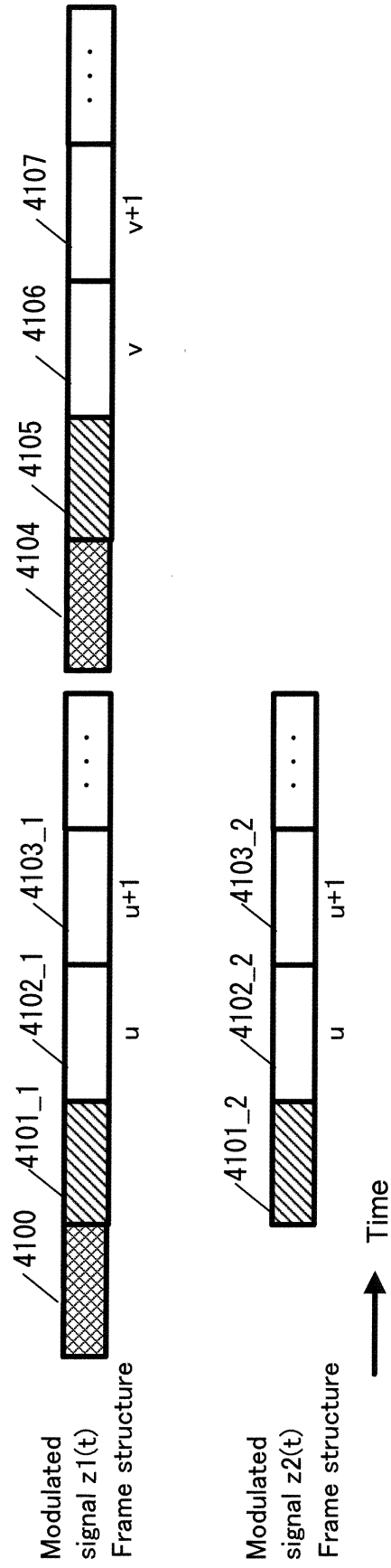


FIG. 42A

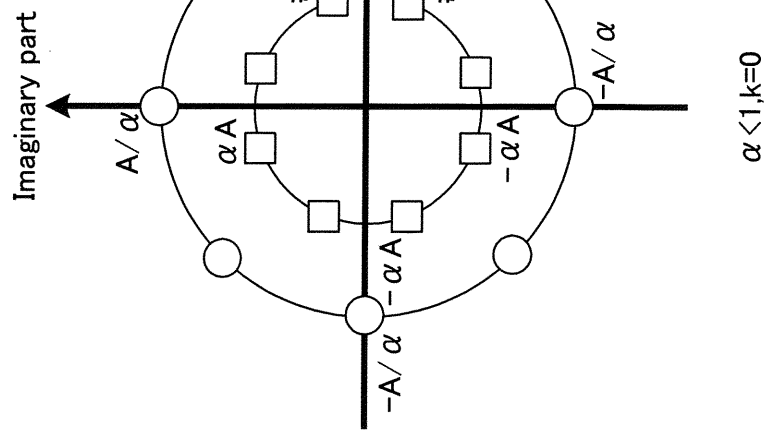


FIG. 42B

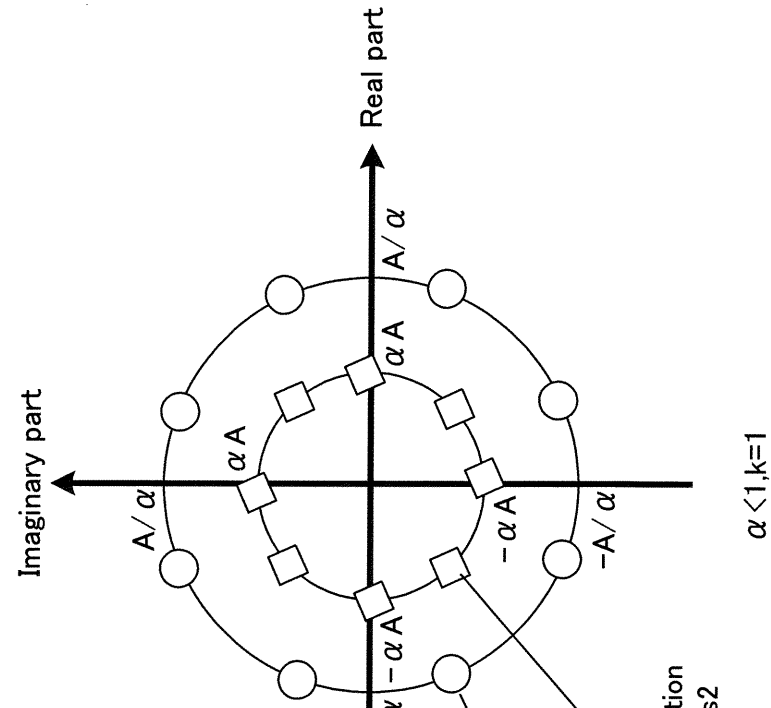


FIG. 43A

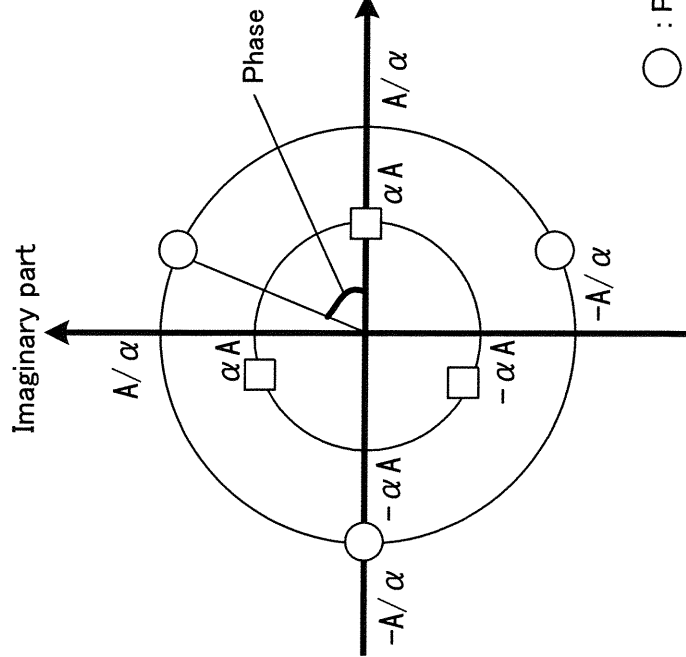


FIG. 43B

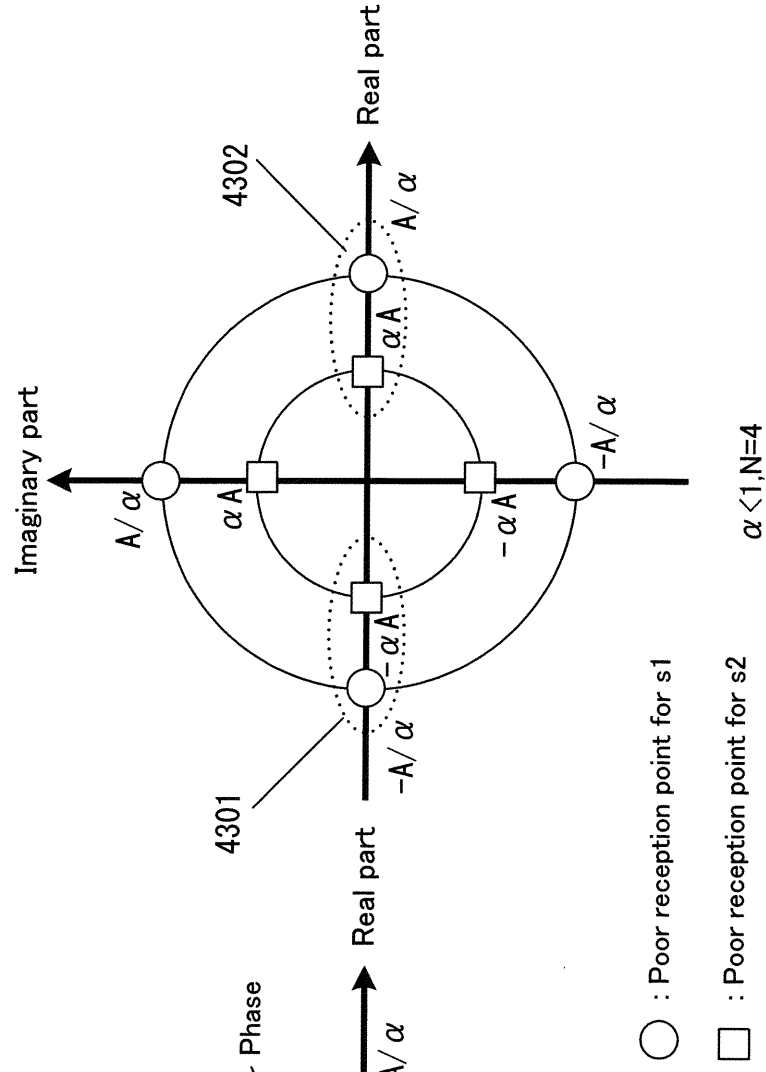
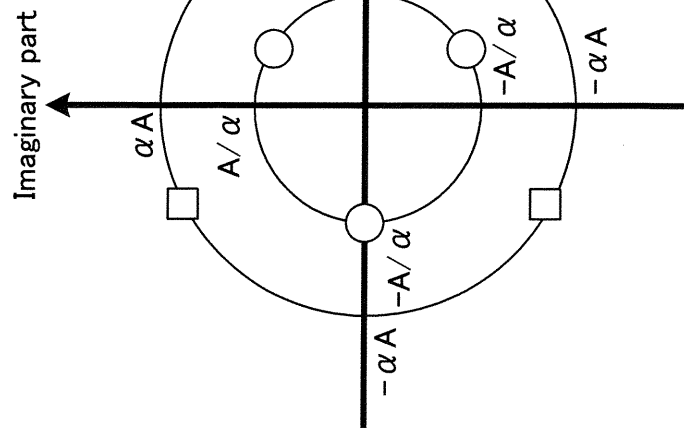


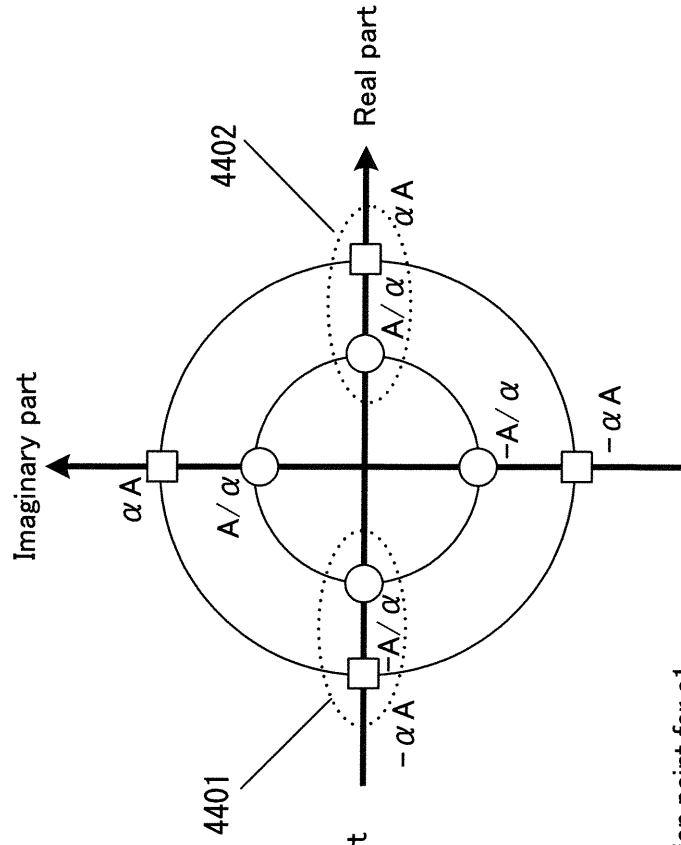
FIG. 44A



$\alpha > 1, N=3$

- : Poor reception point for s_1
- : Poor reception point for s_2

FIG. 44B



$\alpha > 1, N=4$

FIG. 45A

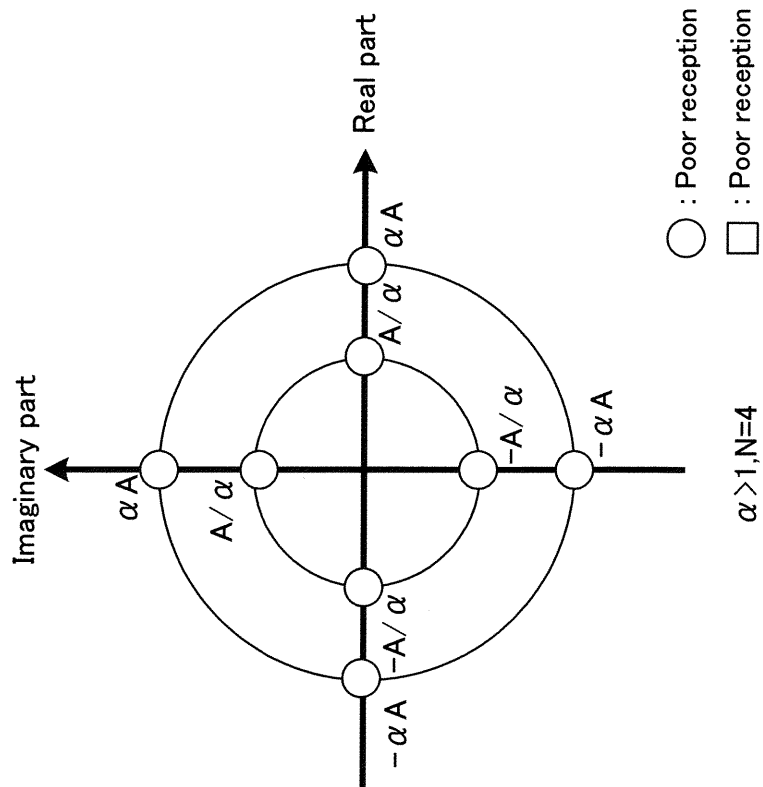


FIG. 45B

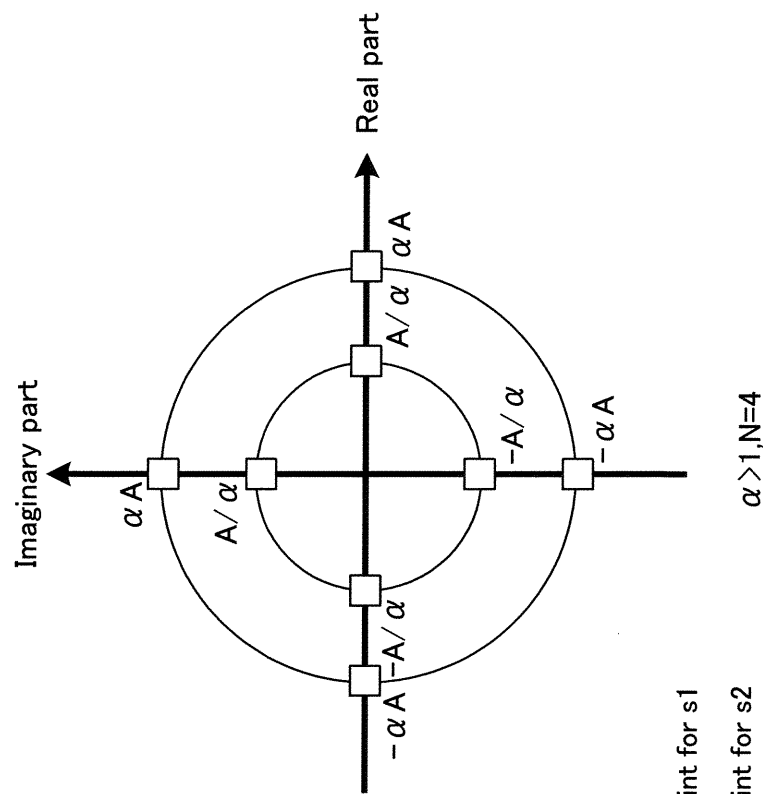


FIG. 46A

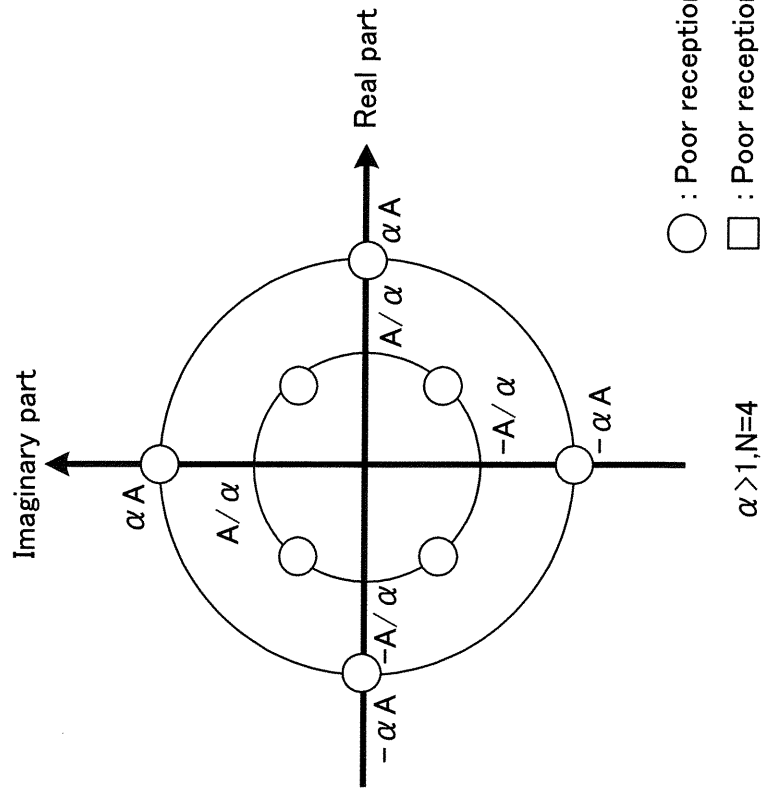


FIG. 46B

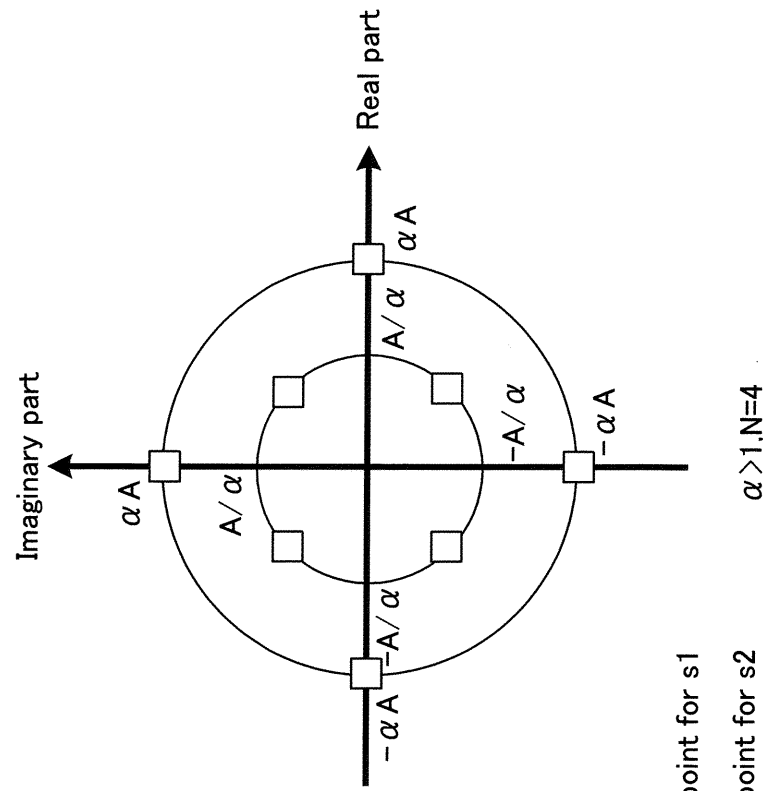


FIG. 47A

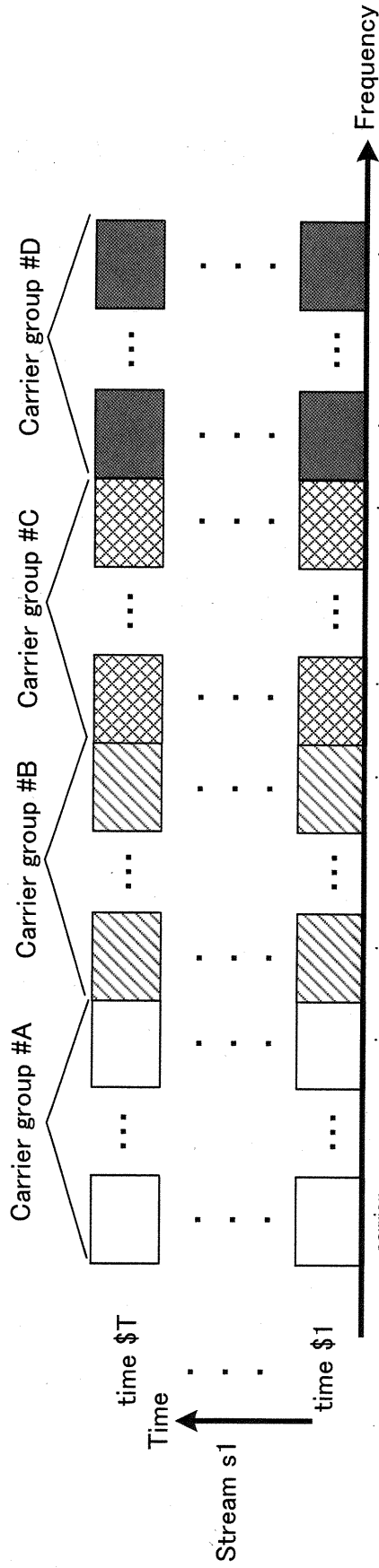


FIG. 47B

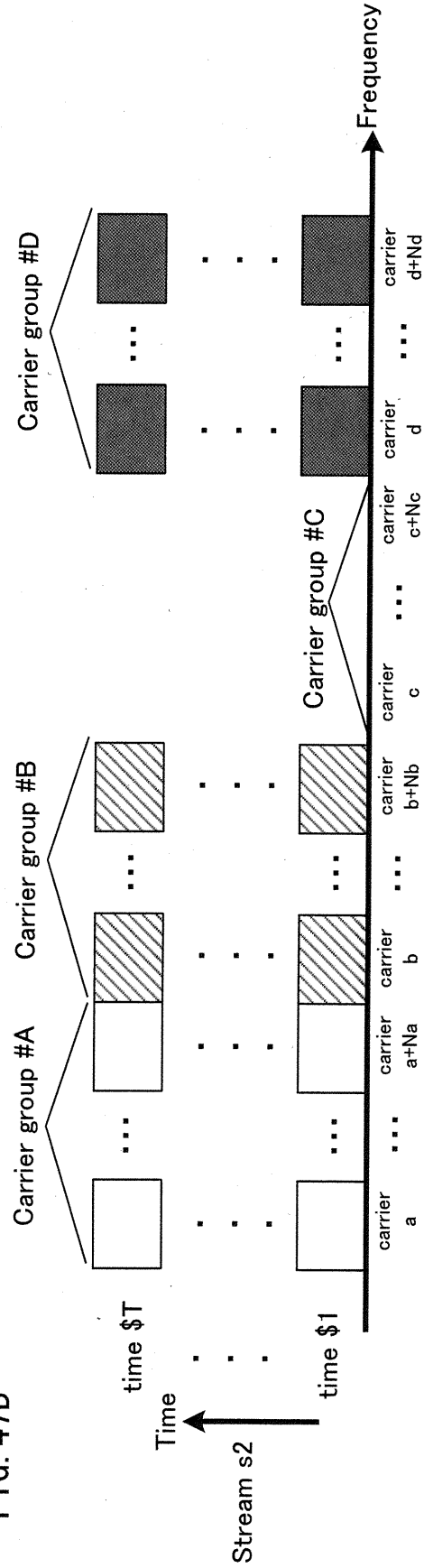


FIG. 48A

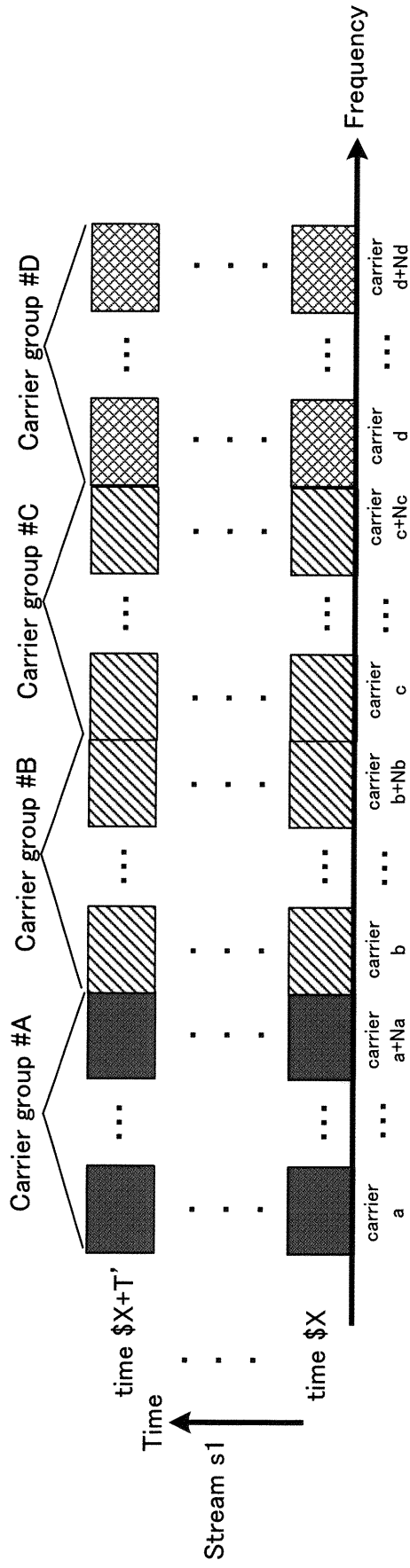


FIG. 48B

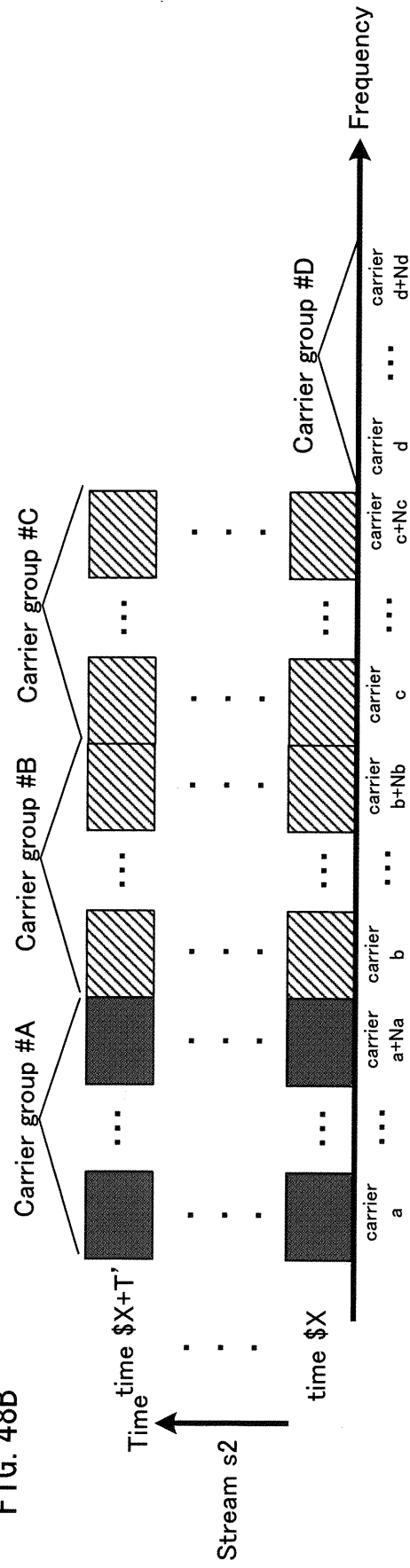
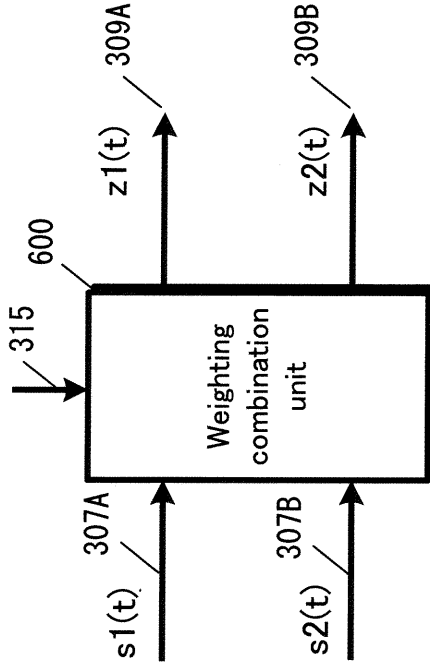


FIG. 49

Information regarding weighting method



Method #1:

$$\begin{pmatrix} z1(t) \\ z2(t) \end{pmatrix} = \begin{pmatrix} e^{j0} & 0 \\ 0 & e^{j0} \end{pmatrix} \begin{pmatrix} s1(t) \\ s2(t) \end{pmatrix} \\ = \begin{pmatrix} 1 & 0 \\ 0 & 1 \end{pmatrix} \begin{pmatrix} s1(t) \\ s2(t) \end{pmatrix}$$

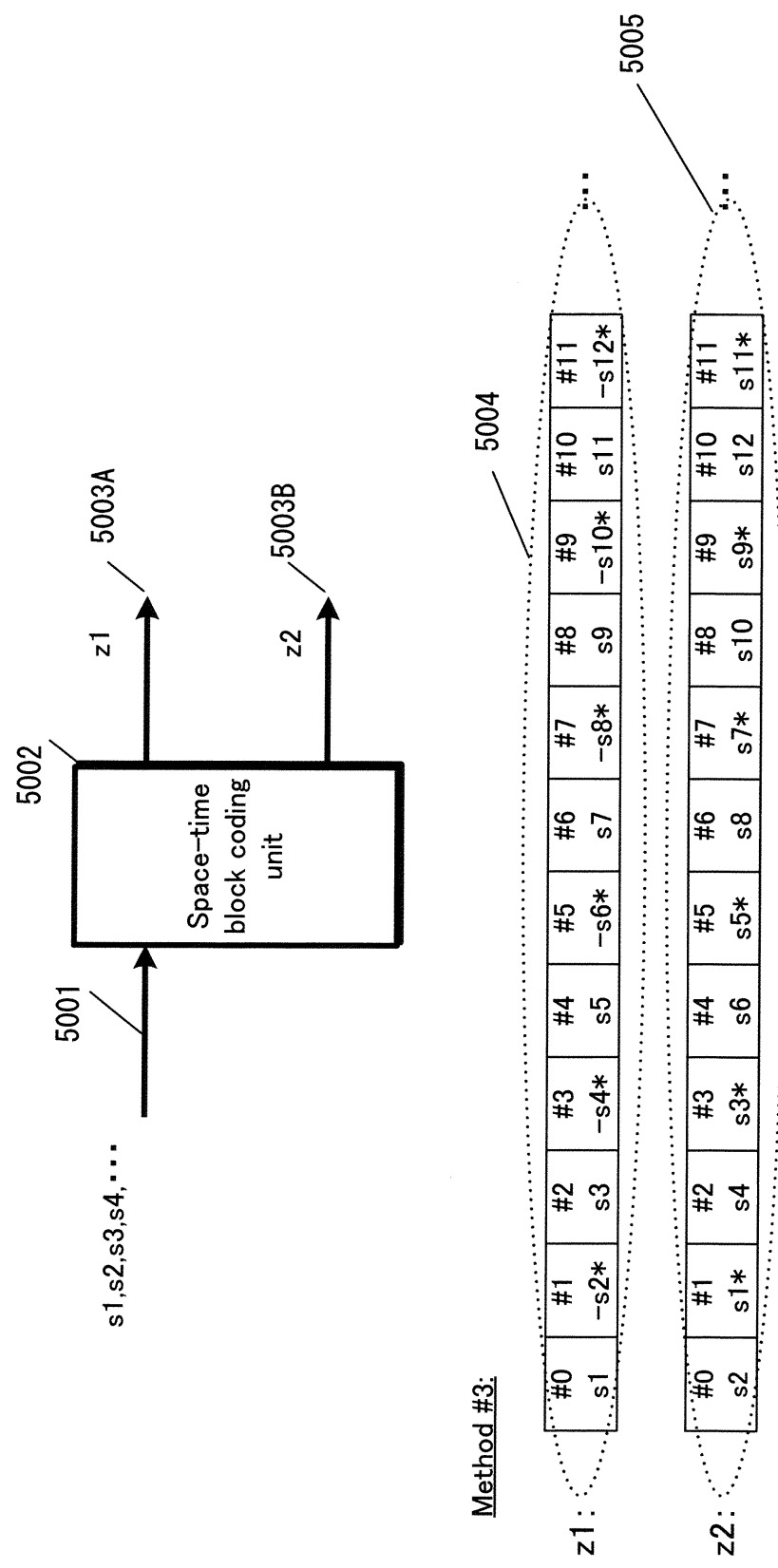
Different expression

$$\begin{pmatrix} z1(t) \\ z2(t) \end{pmatrix} = \frac{1}{\sqrt{2}} \begin{pmatrix} e^{j0} & 0 \\ 0 & e^{j0} \end{pmatrix} \begin{pmatrix} s1(t) \\ s2(t) \end{pmatrix} \\ = \frac{1}{\sqrt{2}} \begin{pmatrix} 1 & 0 \\ 0 & 1 \end{pmatrix} \begin{pmatrix} s1(t) \\ s2(t) \end{pmatrix}$$

Method #2:

$$\begin{pmatrix} z1(t) \\ z2(t) \end{pmatrix} = \frac{1}{\sqrt{\alpha^2 + 1}} \begin{pmatrix} e^{j\theta_{11}(t)} & \\ & e^{j\theta_{21}(t)} \end{pmatrix} \begin{pmatrix} \alpha \times e^{j\theta_{11}(t)+\lambda} \\ e^{j\theta_{21}(t)+\lambda+\delta} \end{pmatrix} \begin{pmatrix} s1(t) \\ s2(t) \end{pmatrix}$$

FIG. 50



* denotes a complex conjugate

FIG. 51

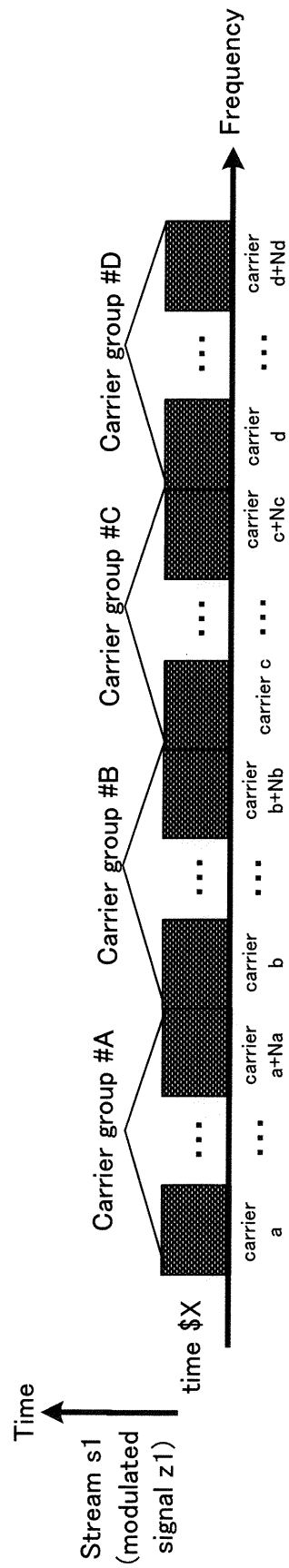


FIG. 52

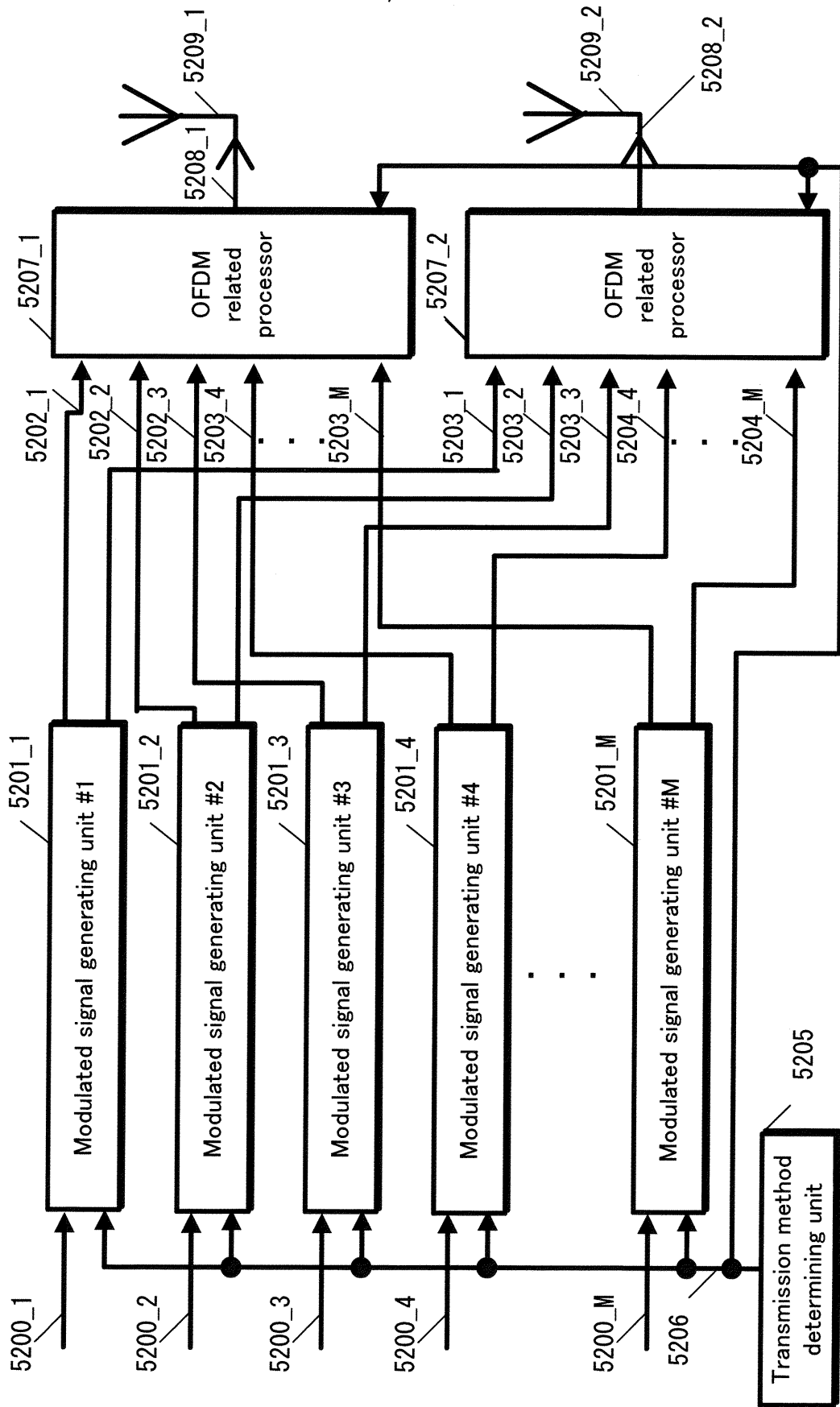
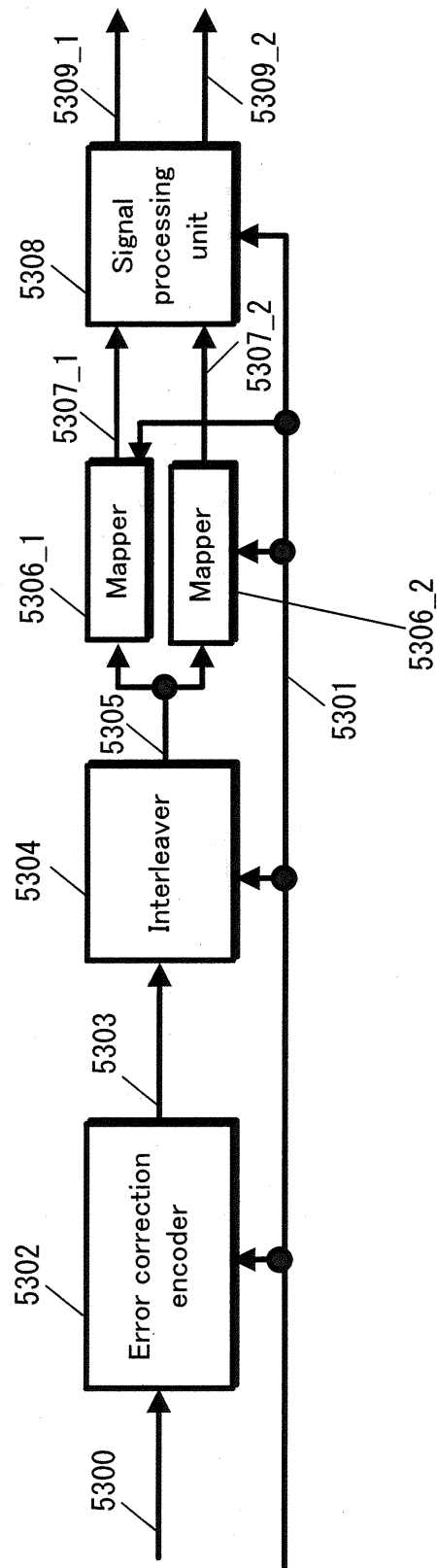


FIG. 53



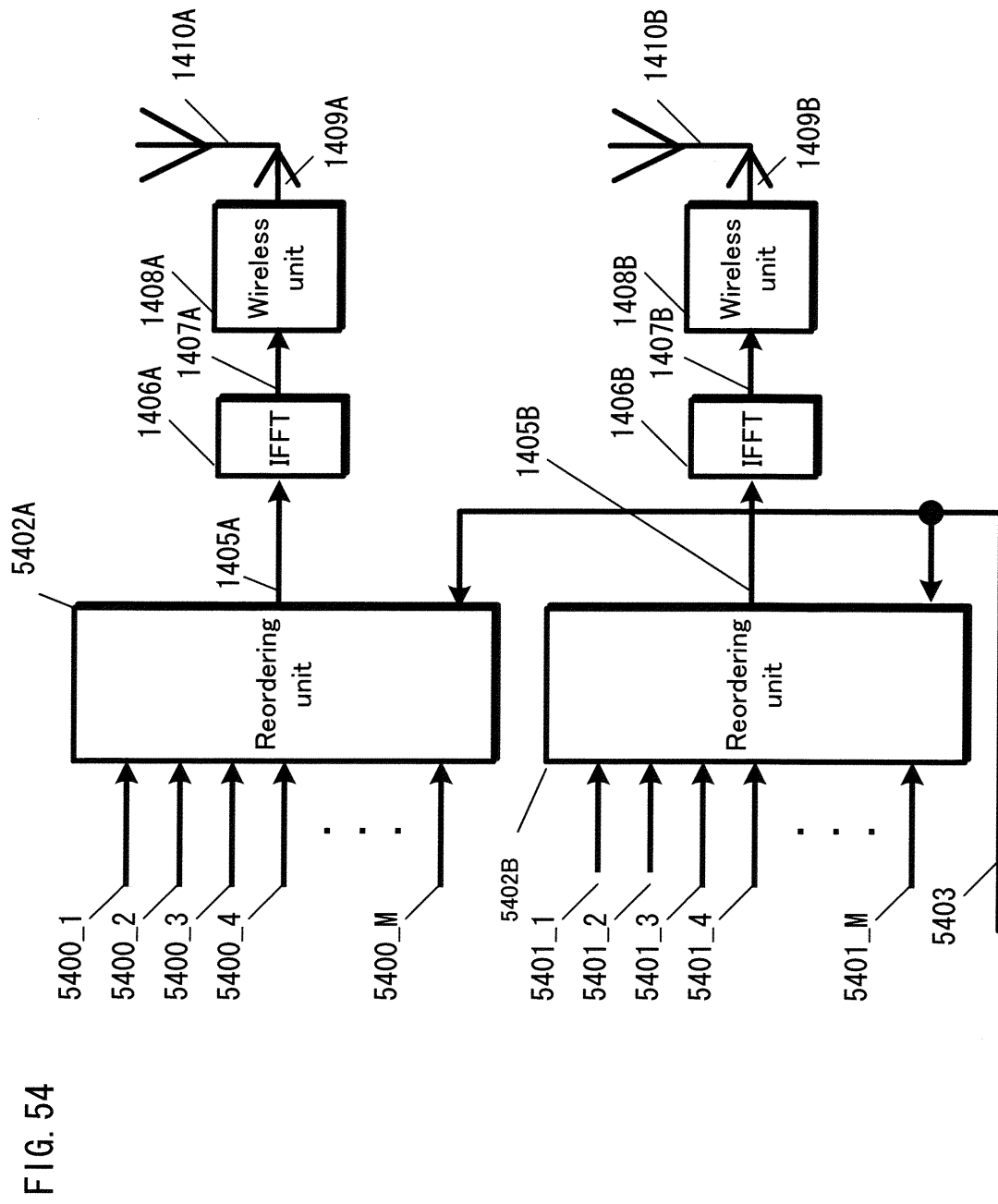


FIG. 55A

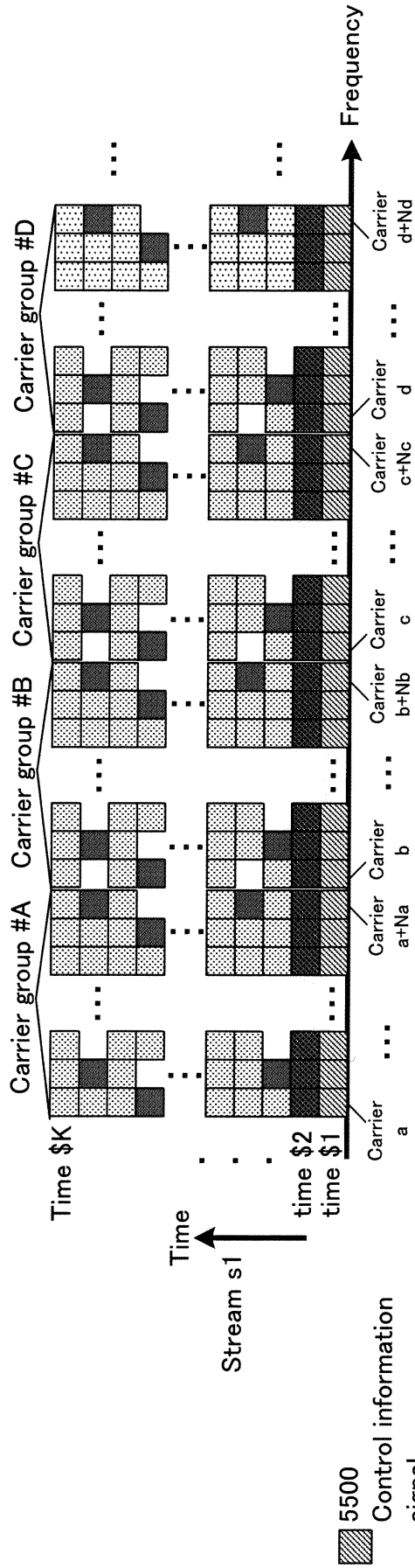
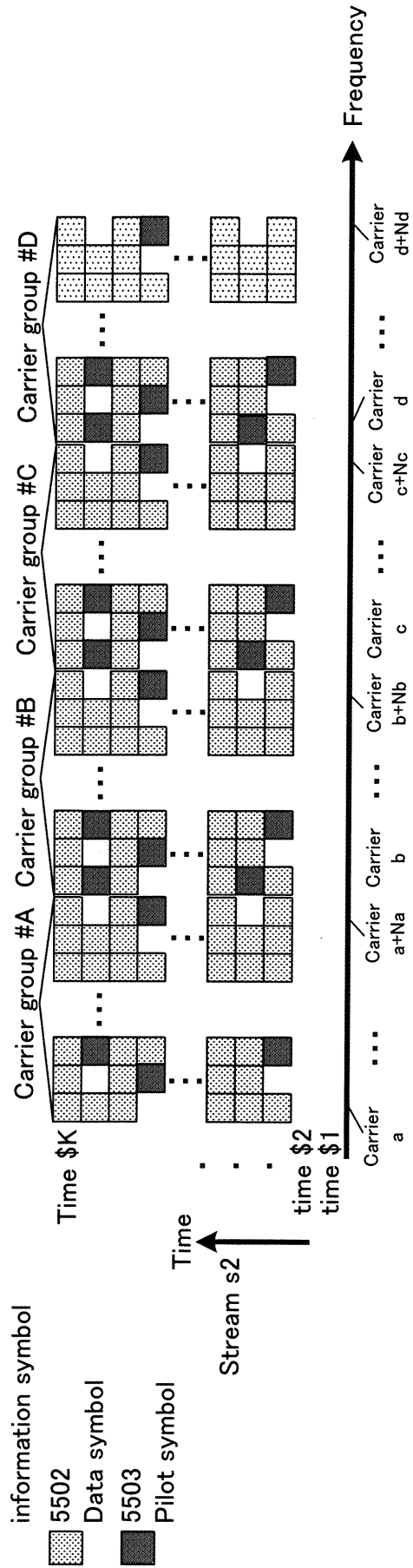


FIG. 55B



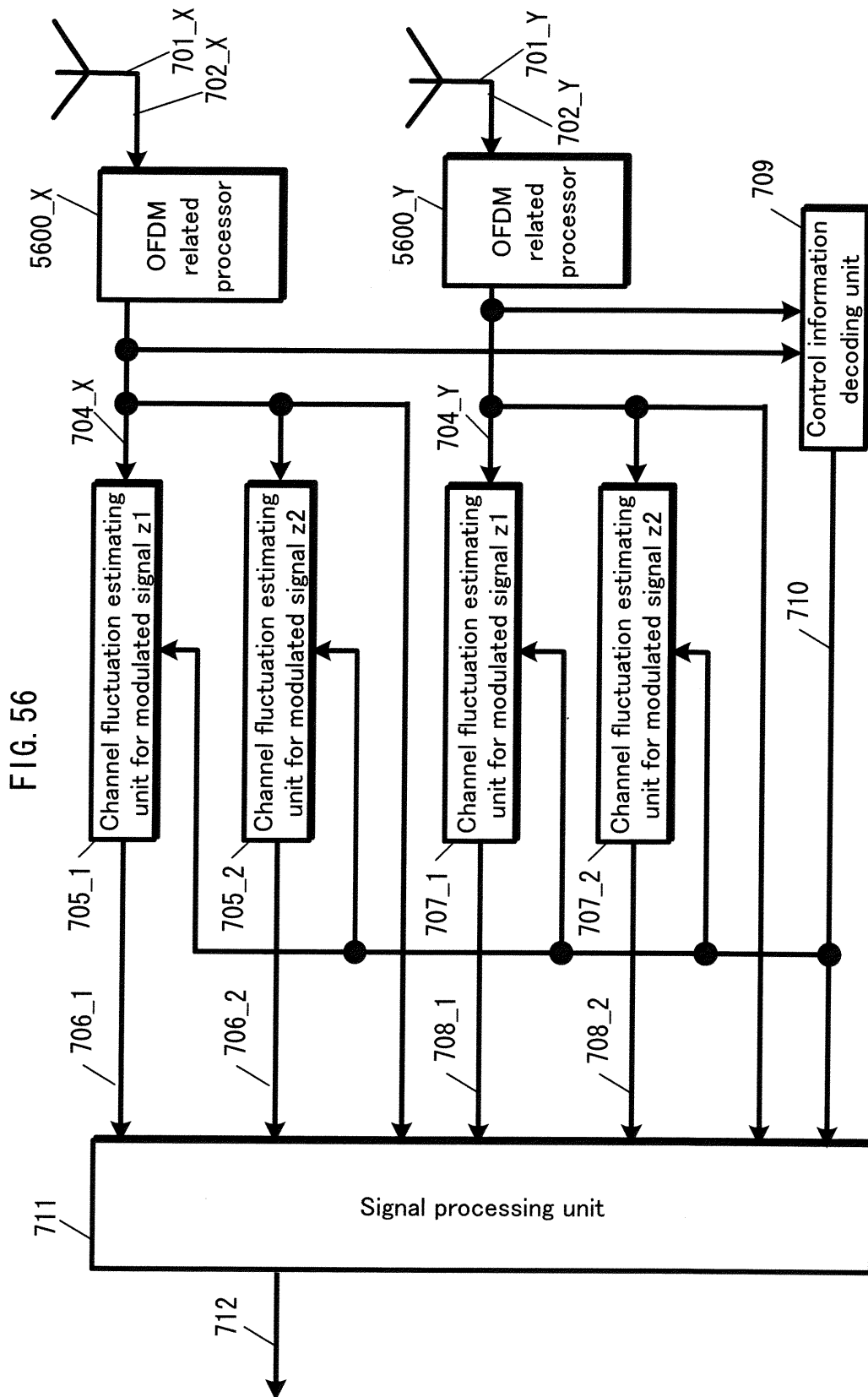


FIG. 57

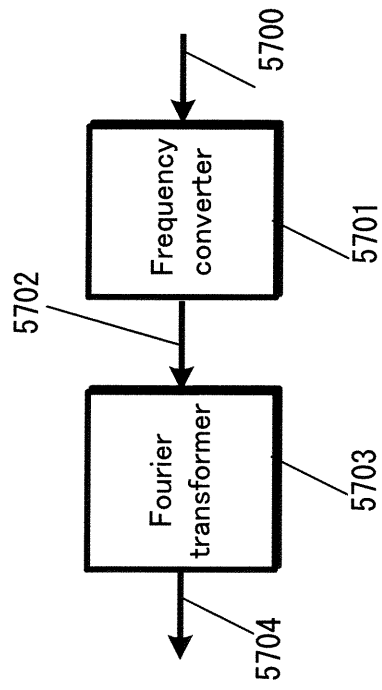


FIG. 58A

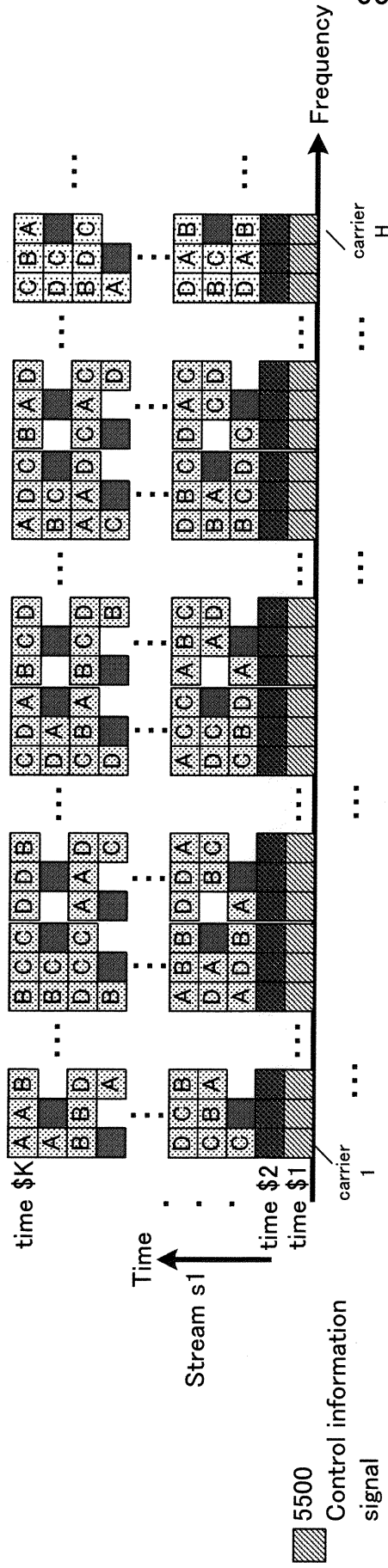


FIG. 58B

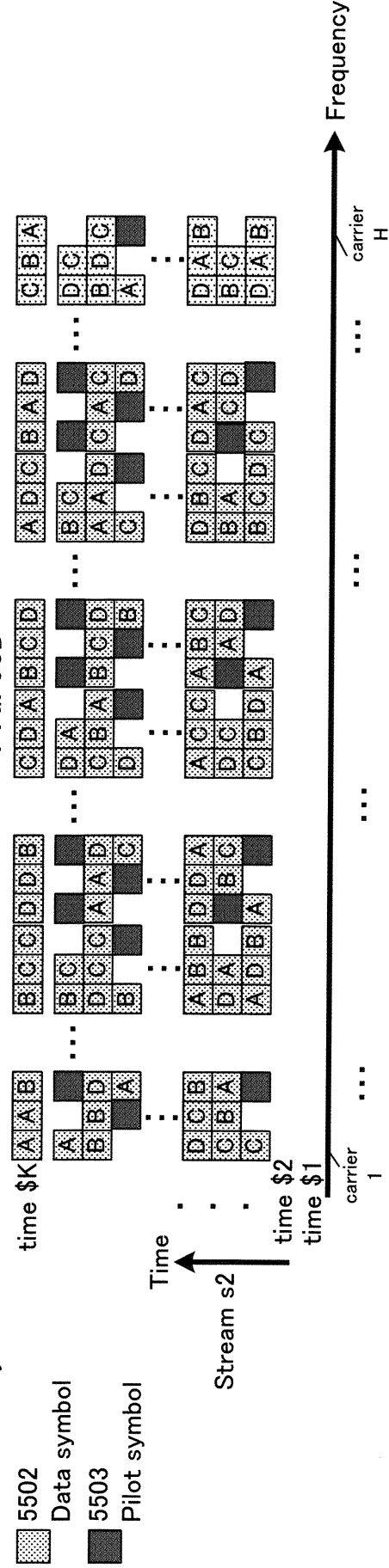


FIG. 59

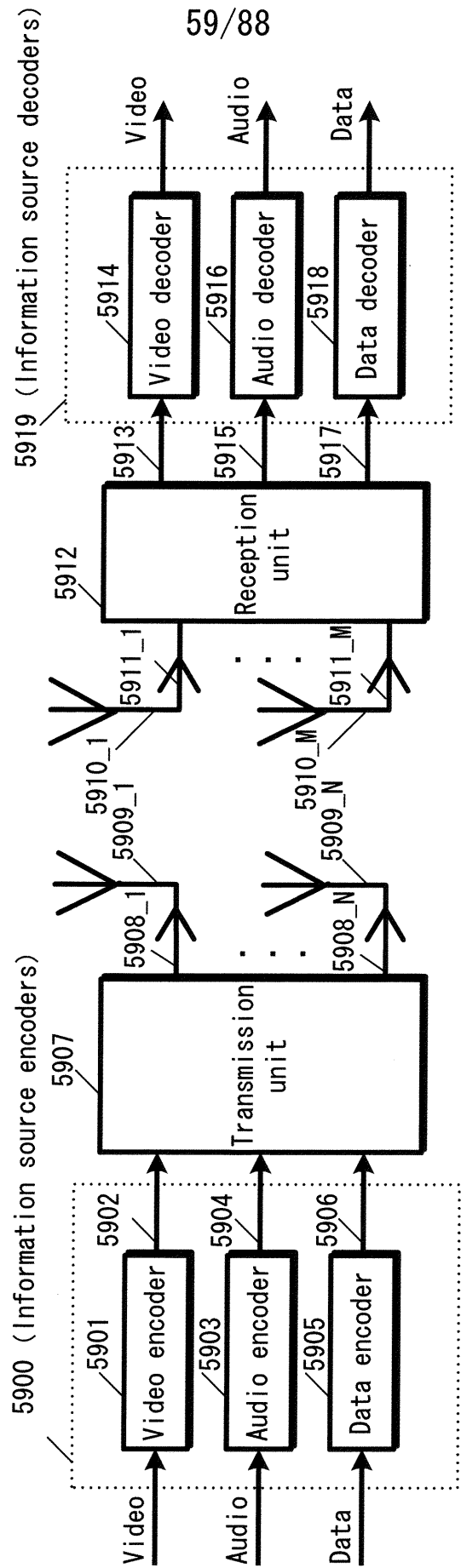


FIG. 60A

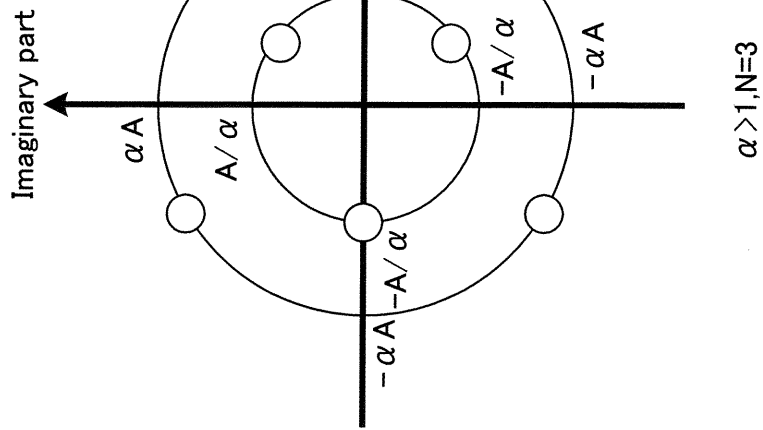


FIG. 60B

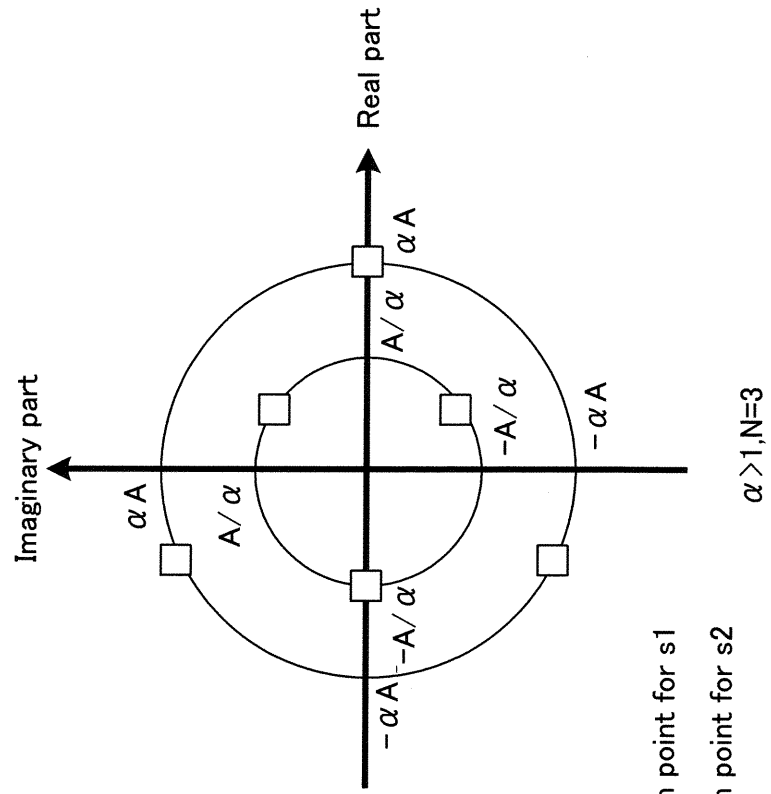


FIG. 61

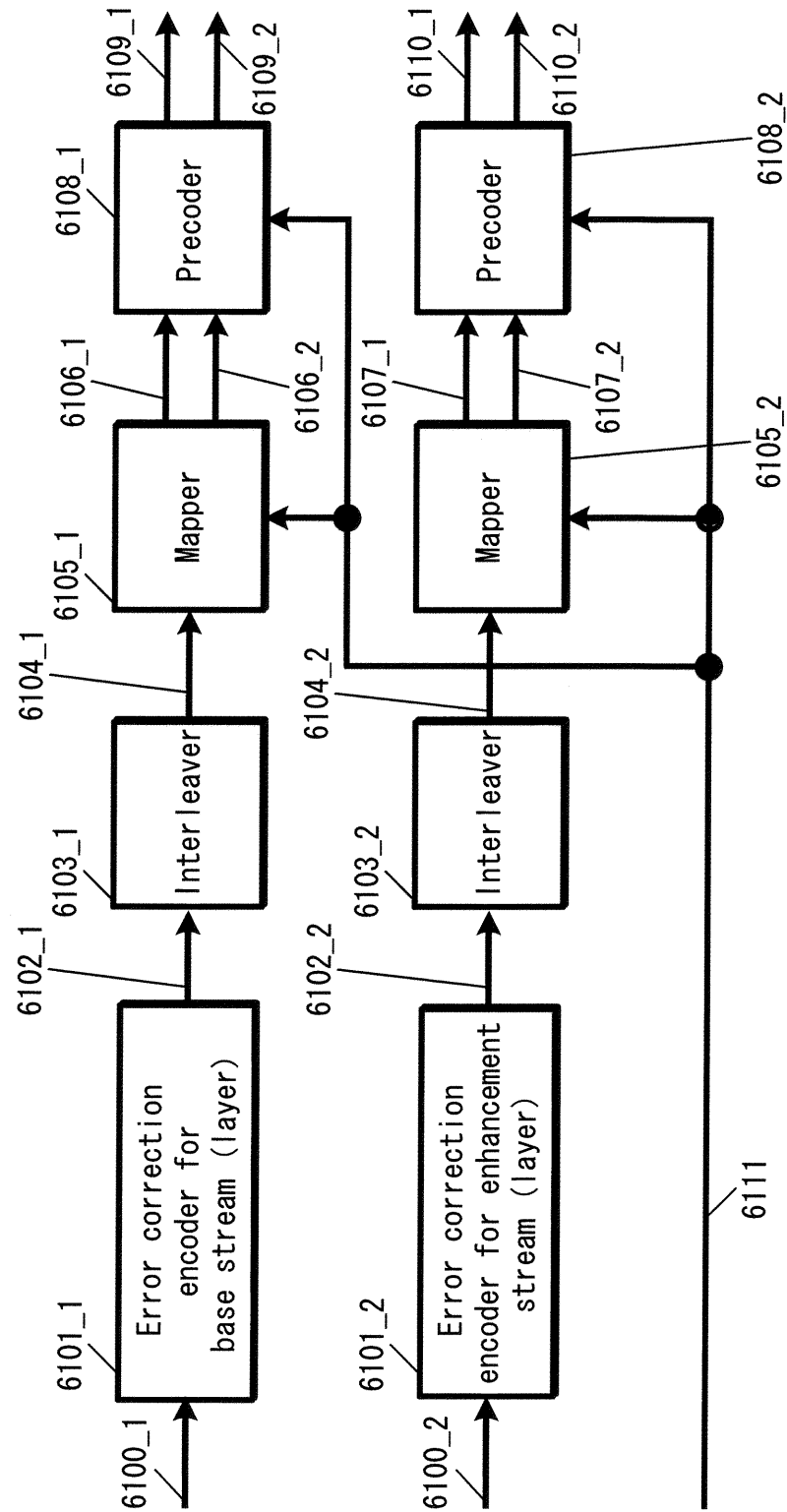


FIG. 62

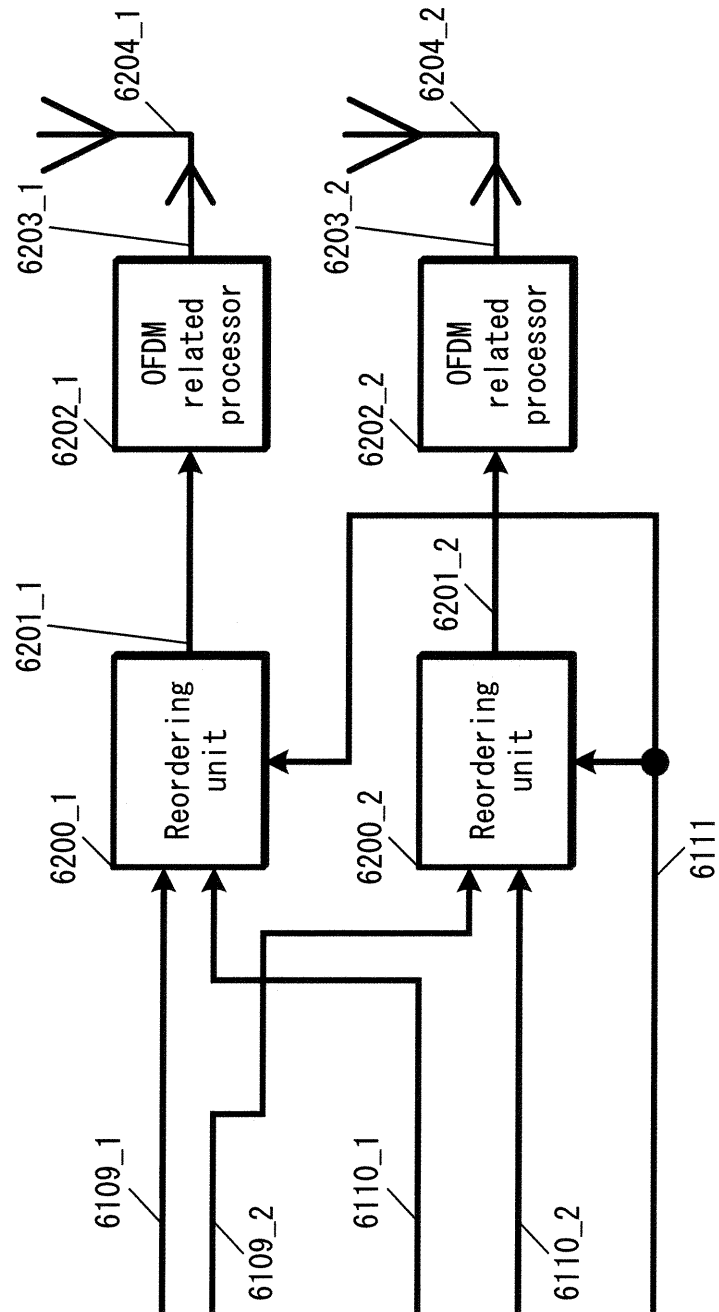


FIG. 63

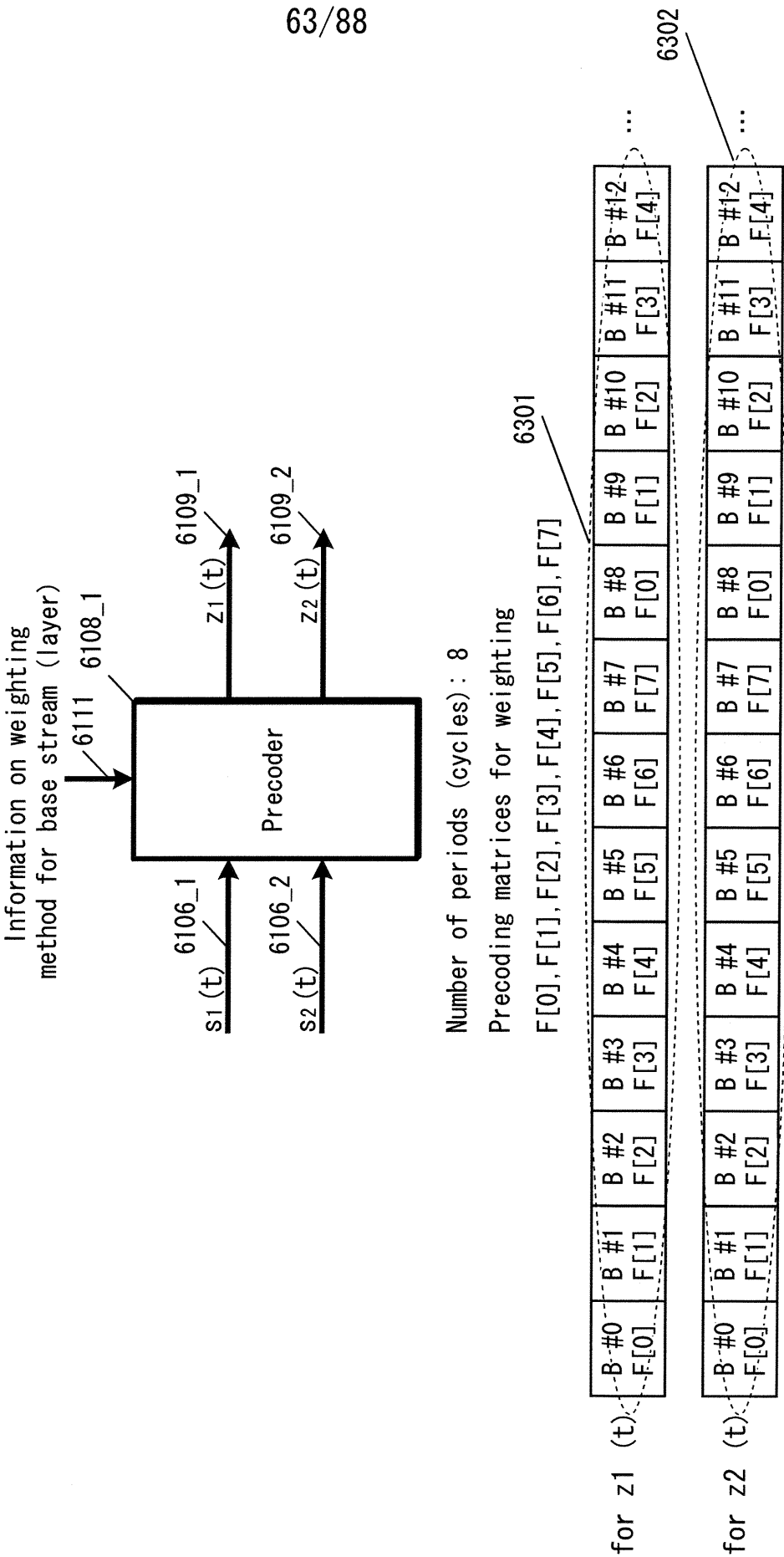


FIG. 64

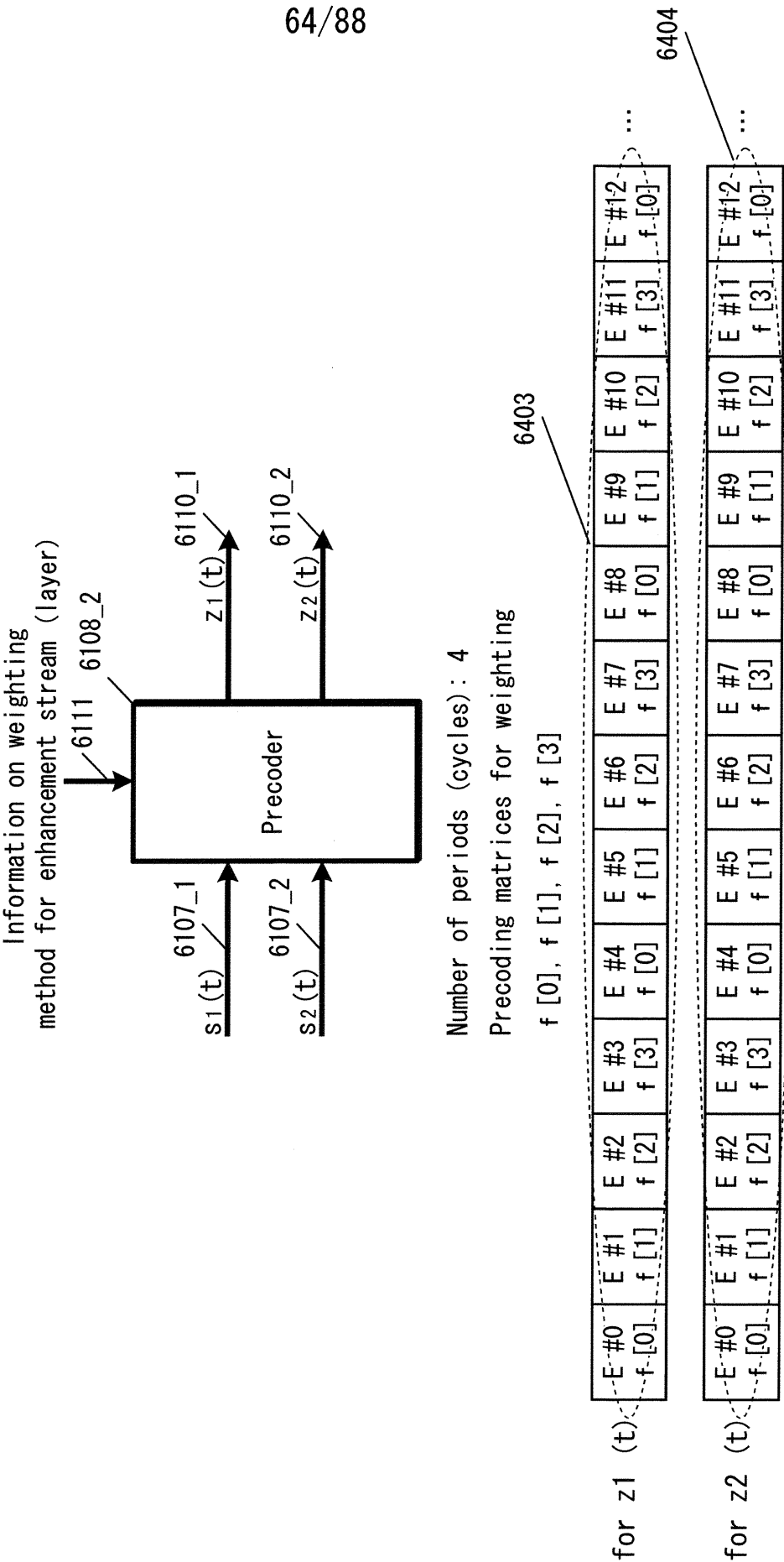


FIG. 65A

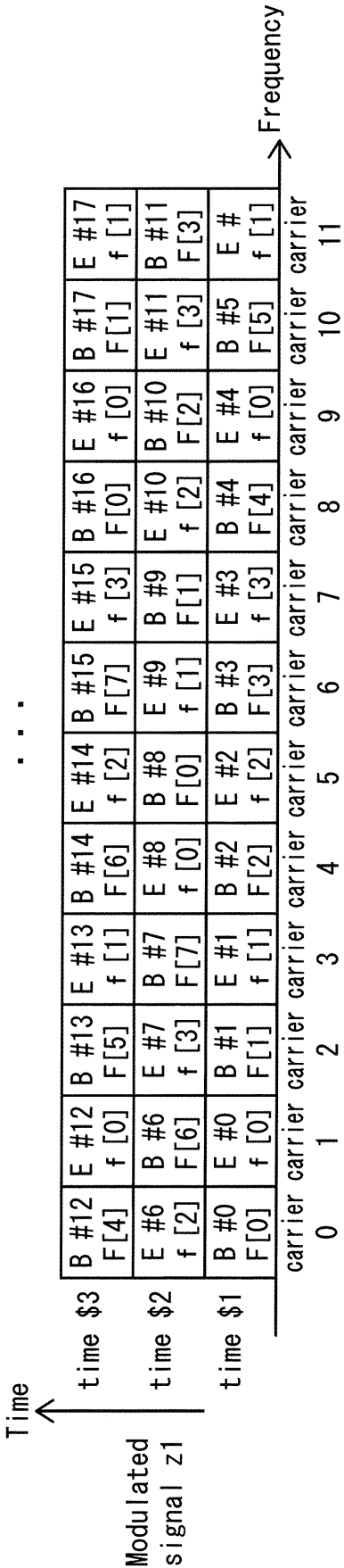


FIG. 65B

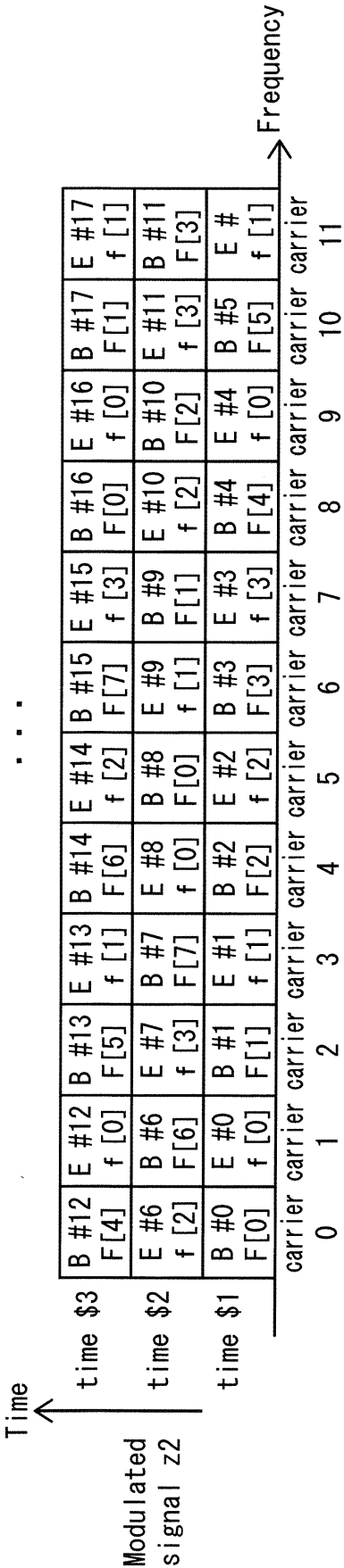


FIG. 66

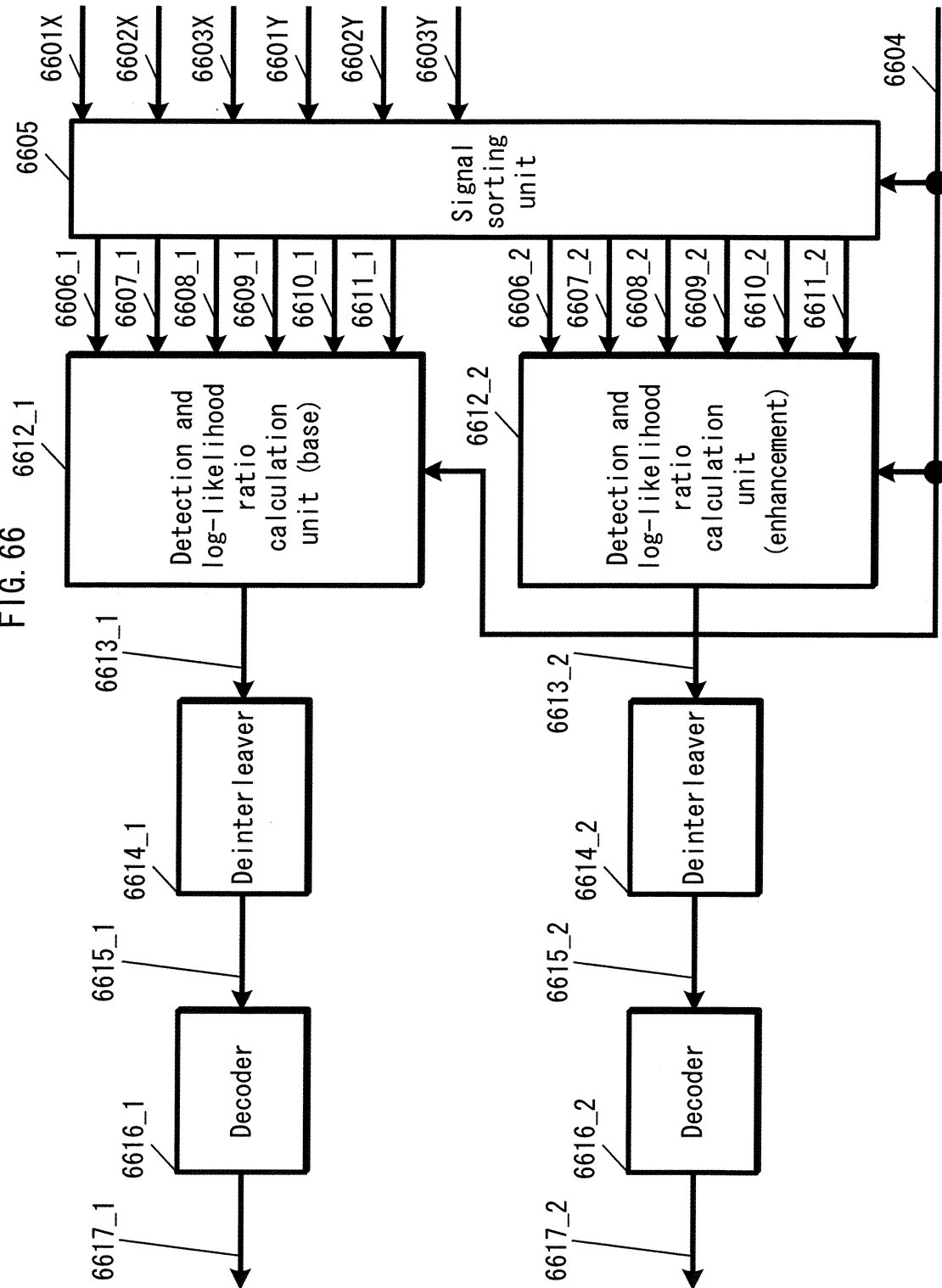


FIG. 67

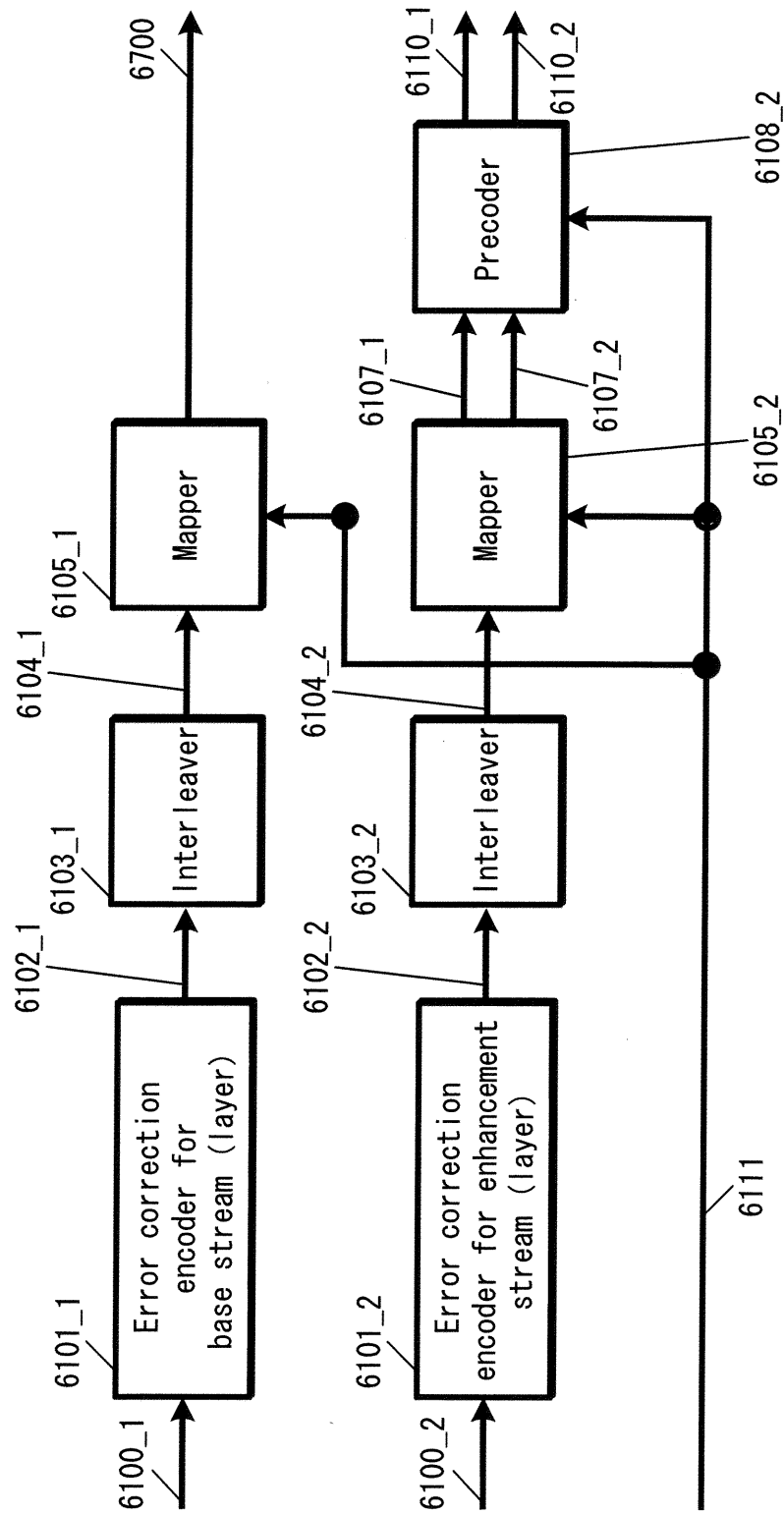


FIG. 68

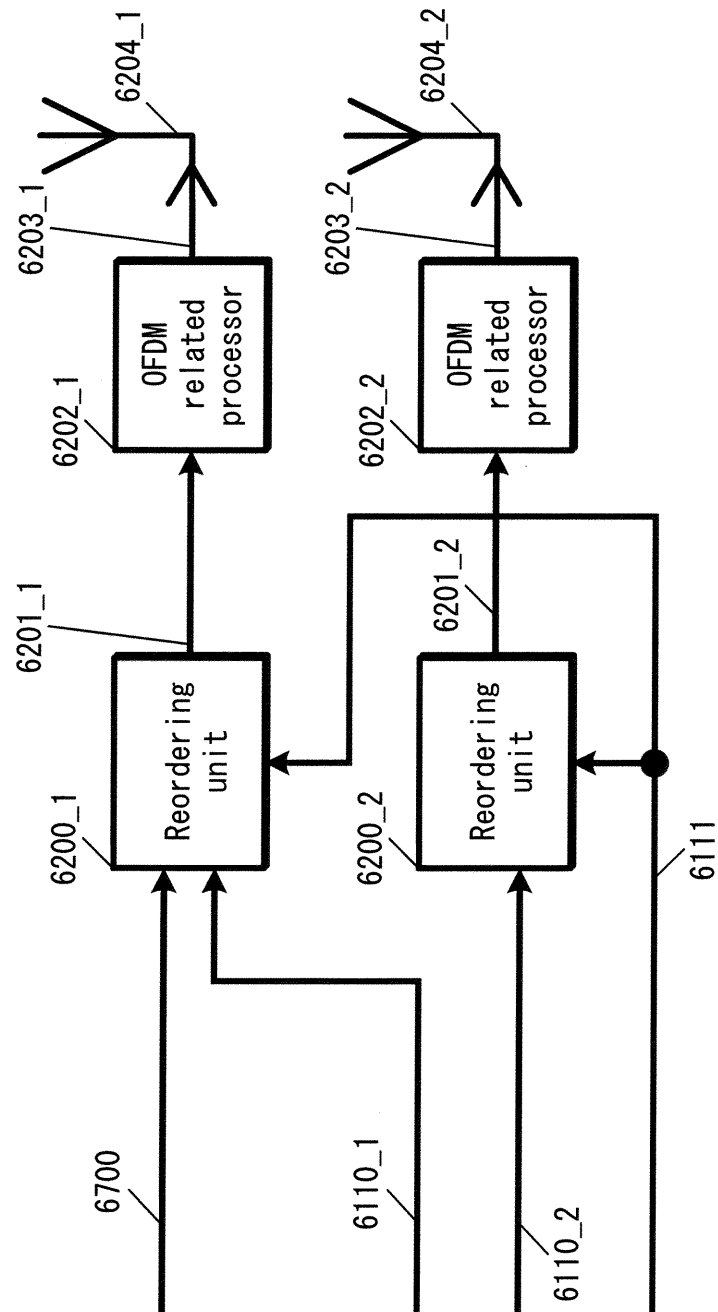


FIG. 69

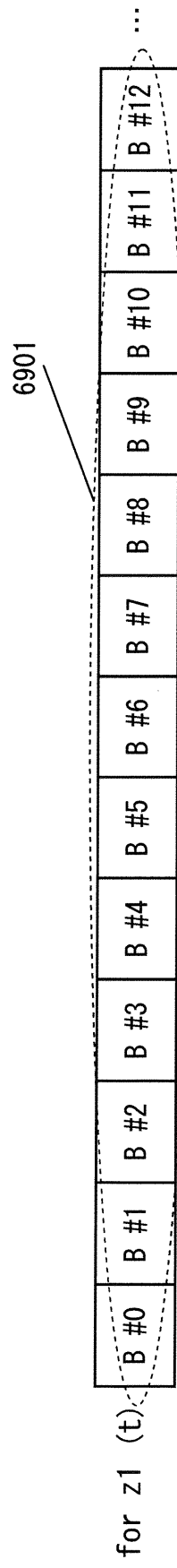


FIG. 70A

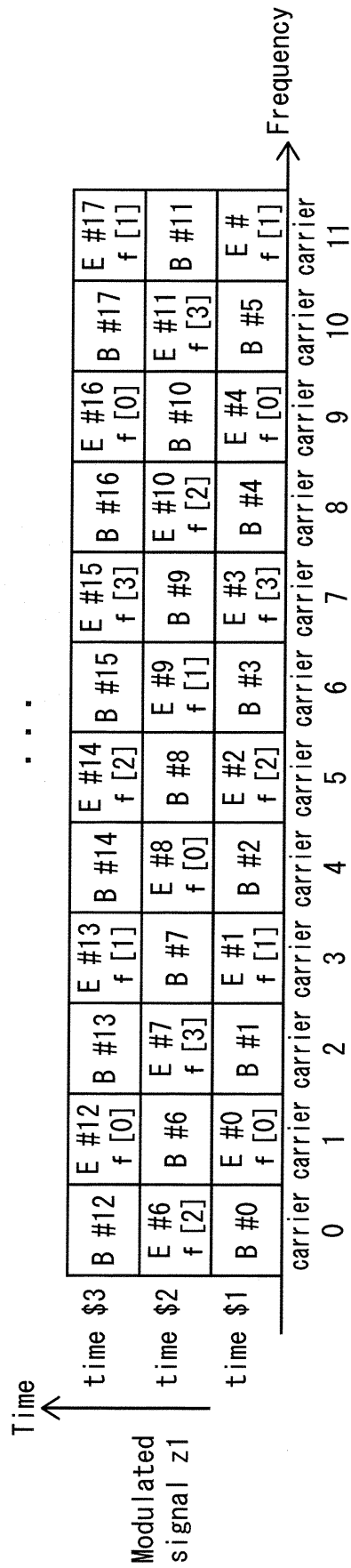


FIG. 70B

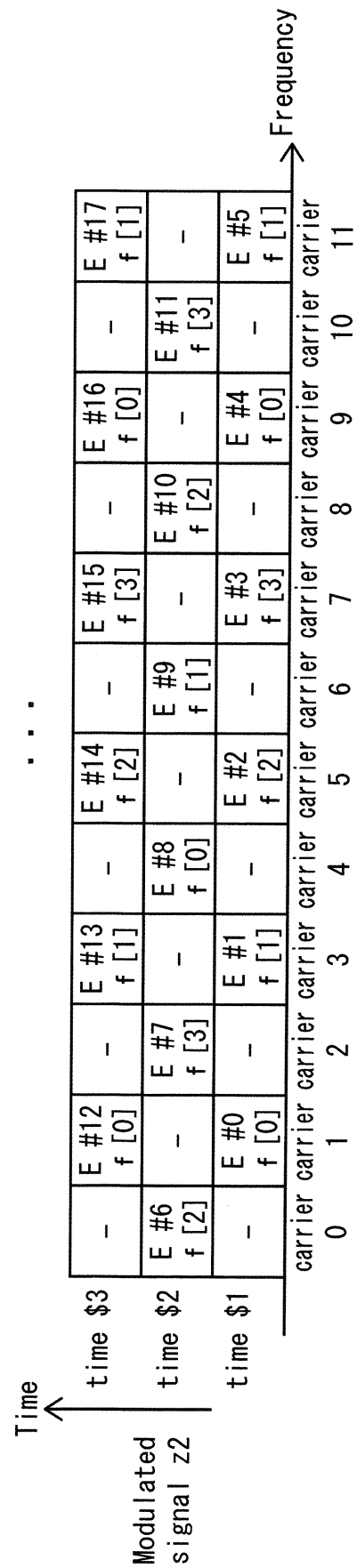


FIG. 71

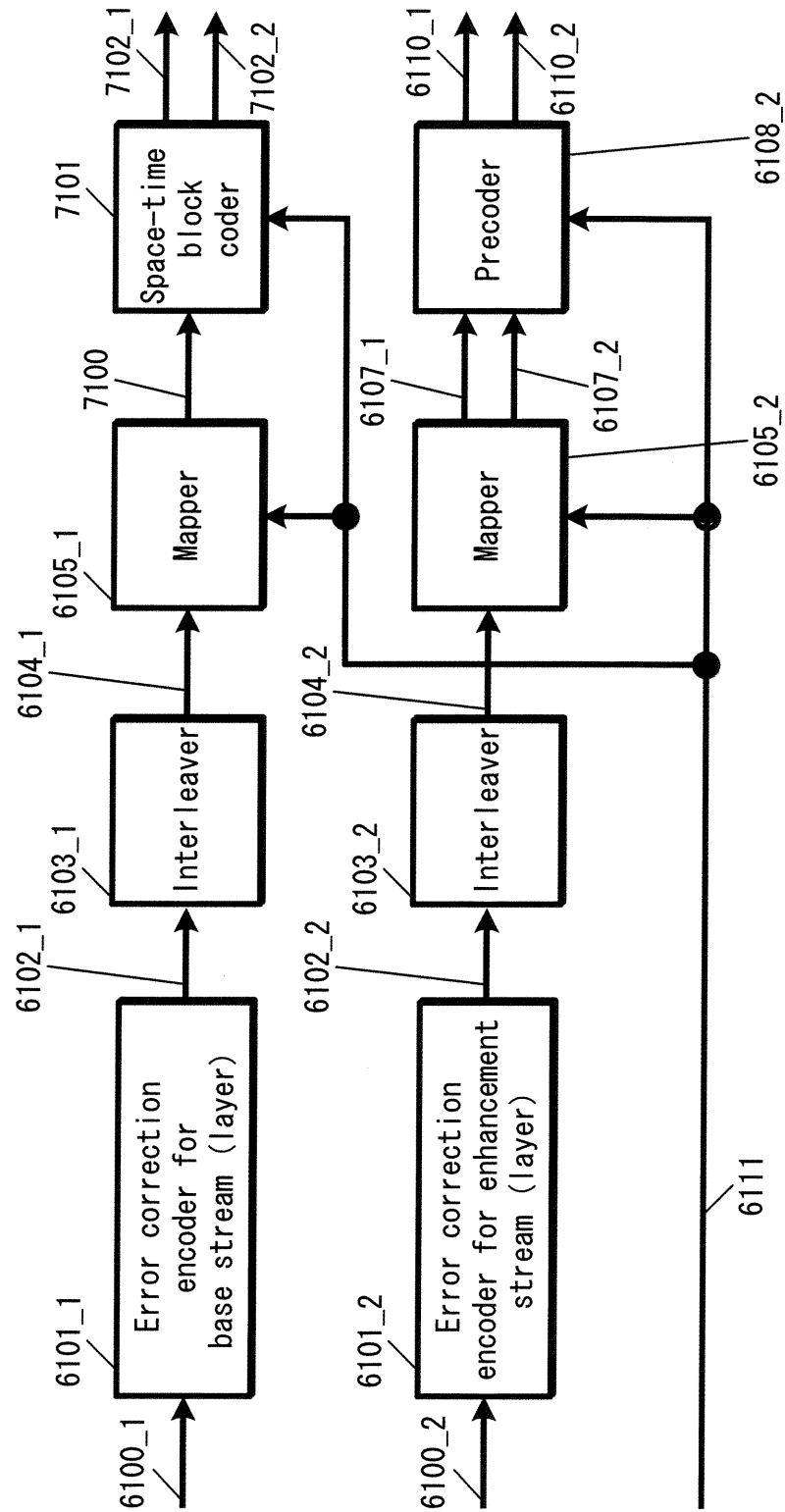


FIG. 72

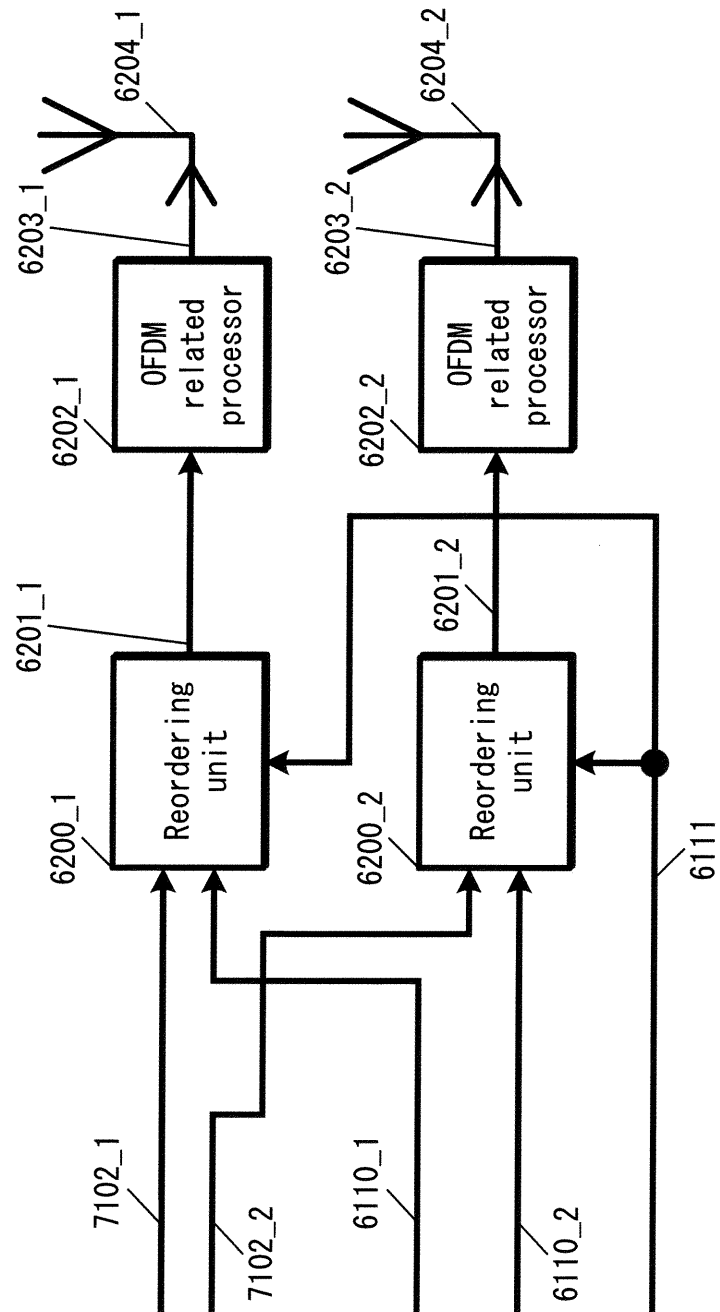


FIG. 73

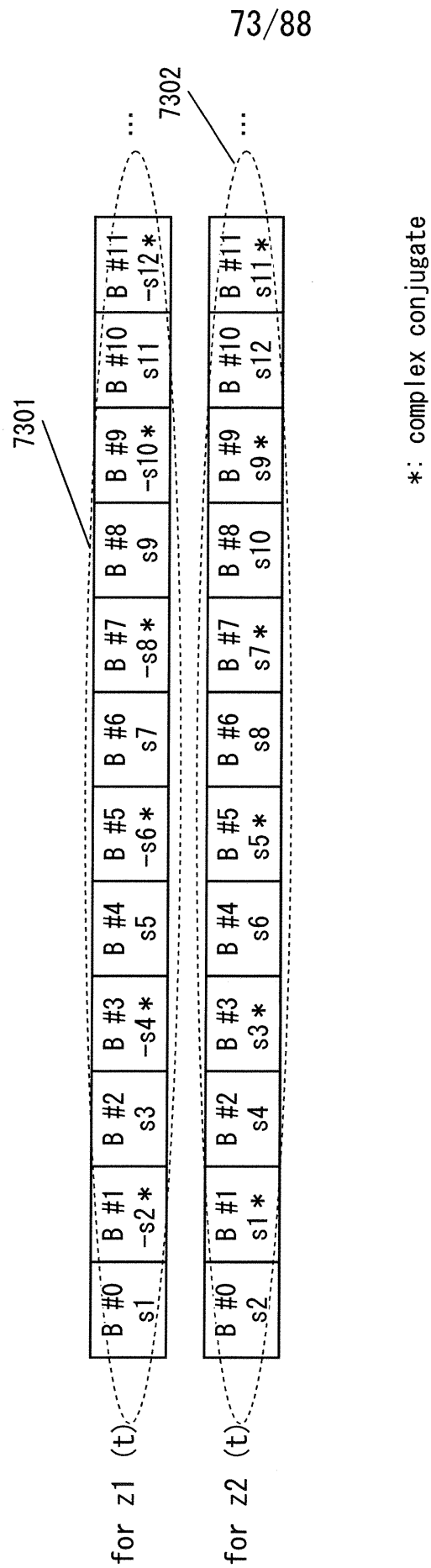


FIG. 74A

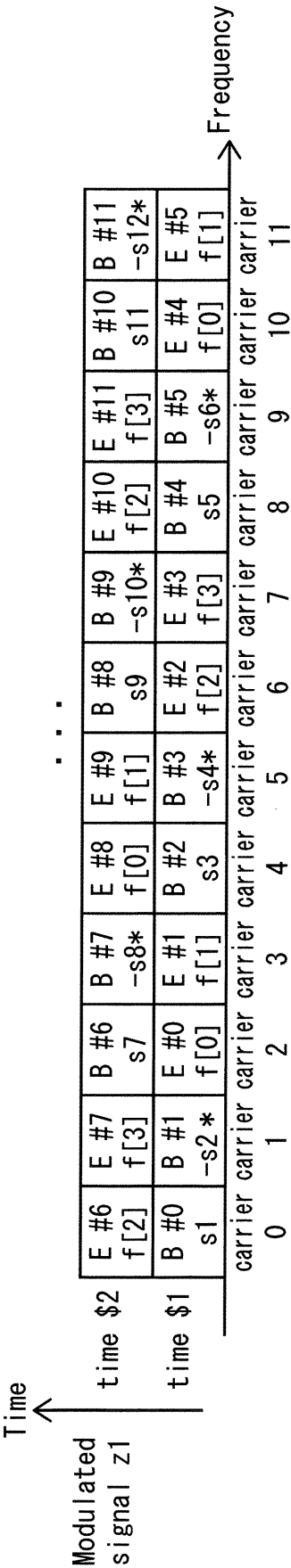


FIG. 74B

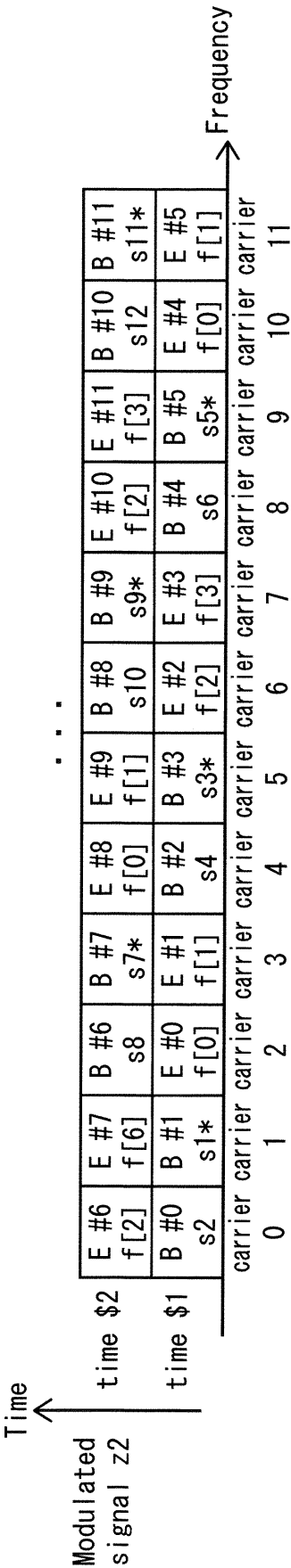


FIG. 75A

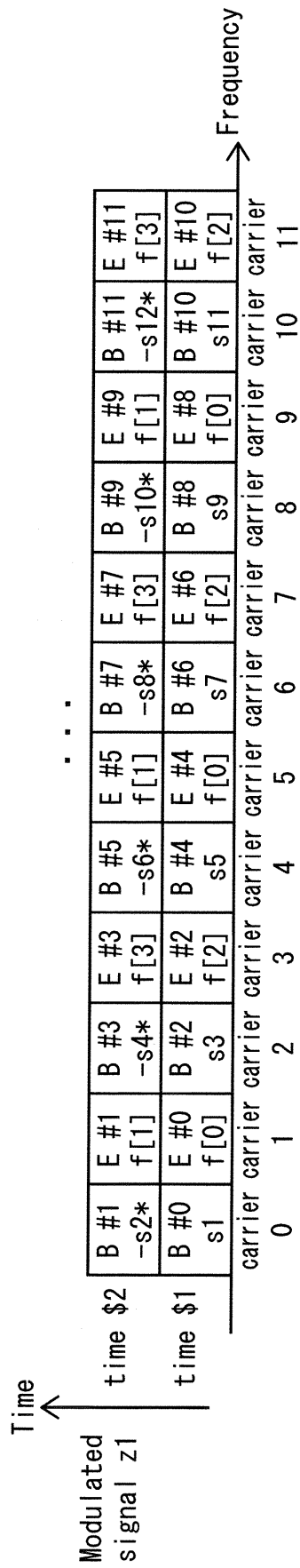


FIG. 75B

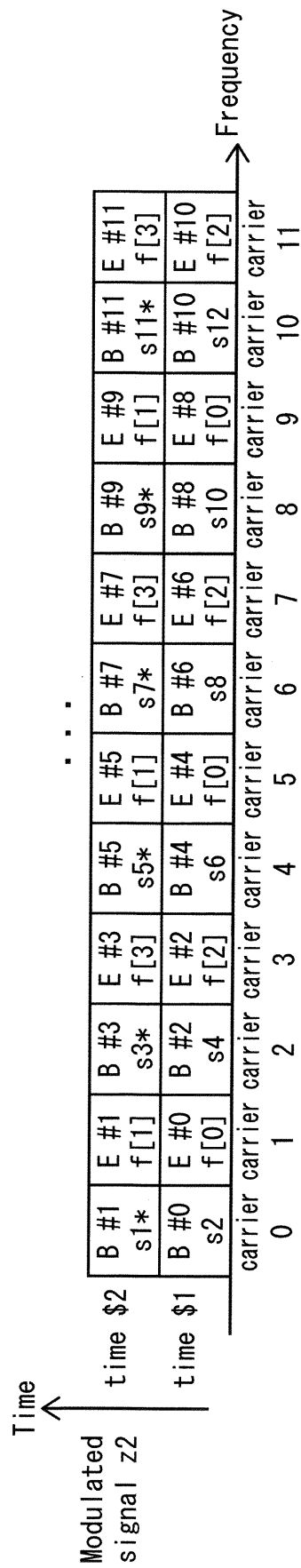


FIG. 76

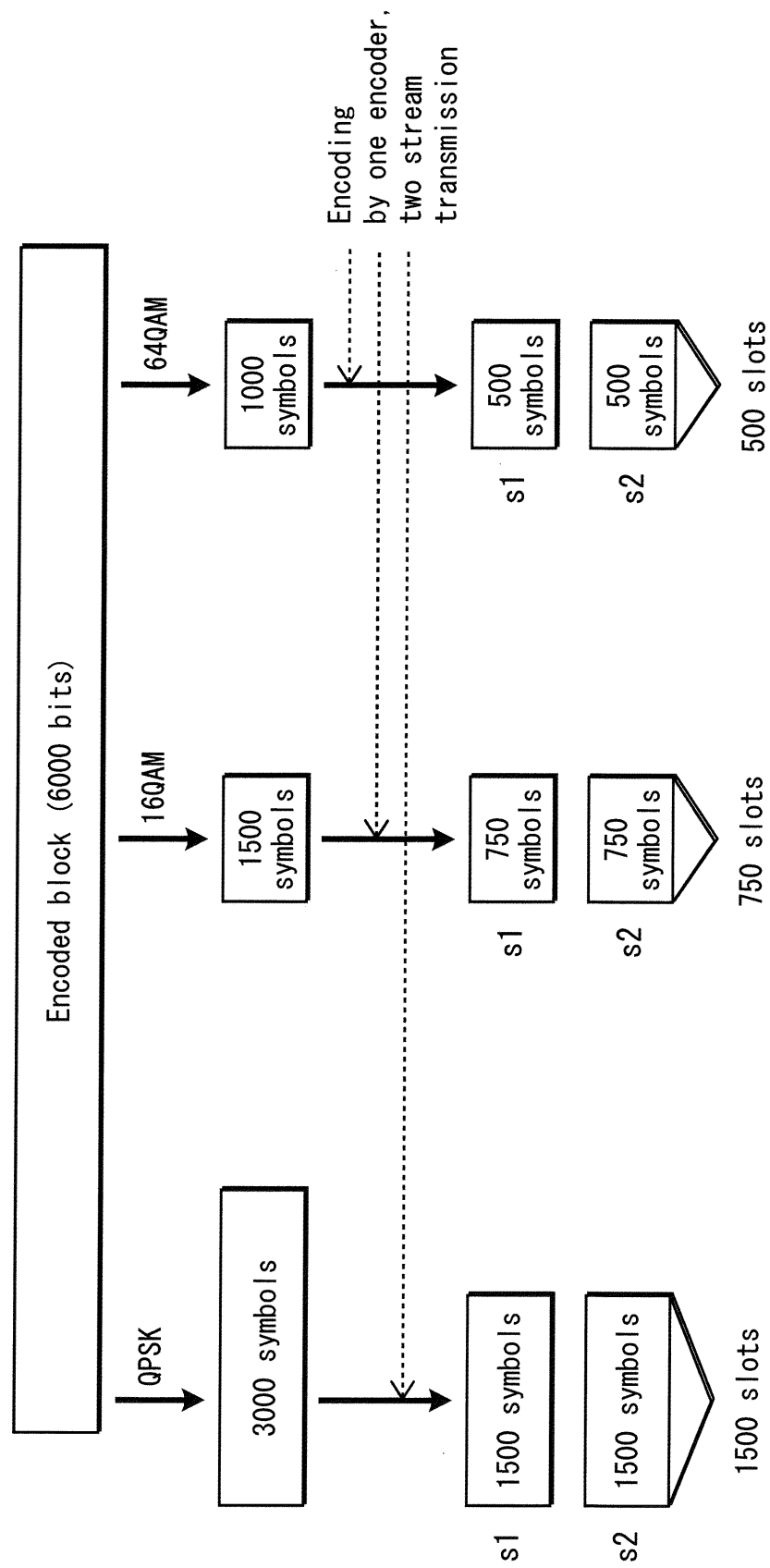
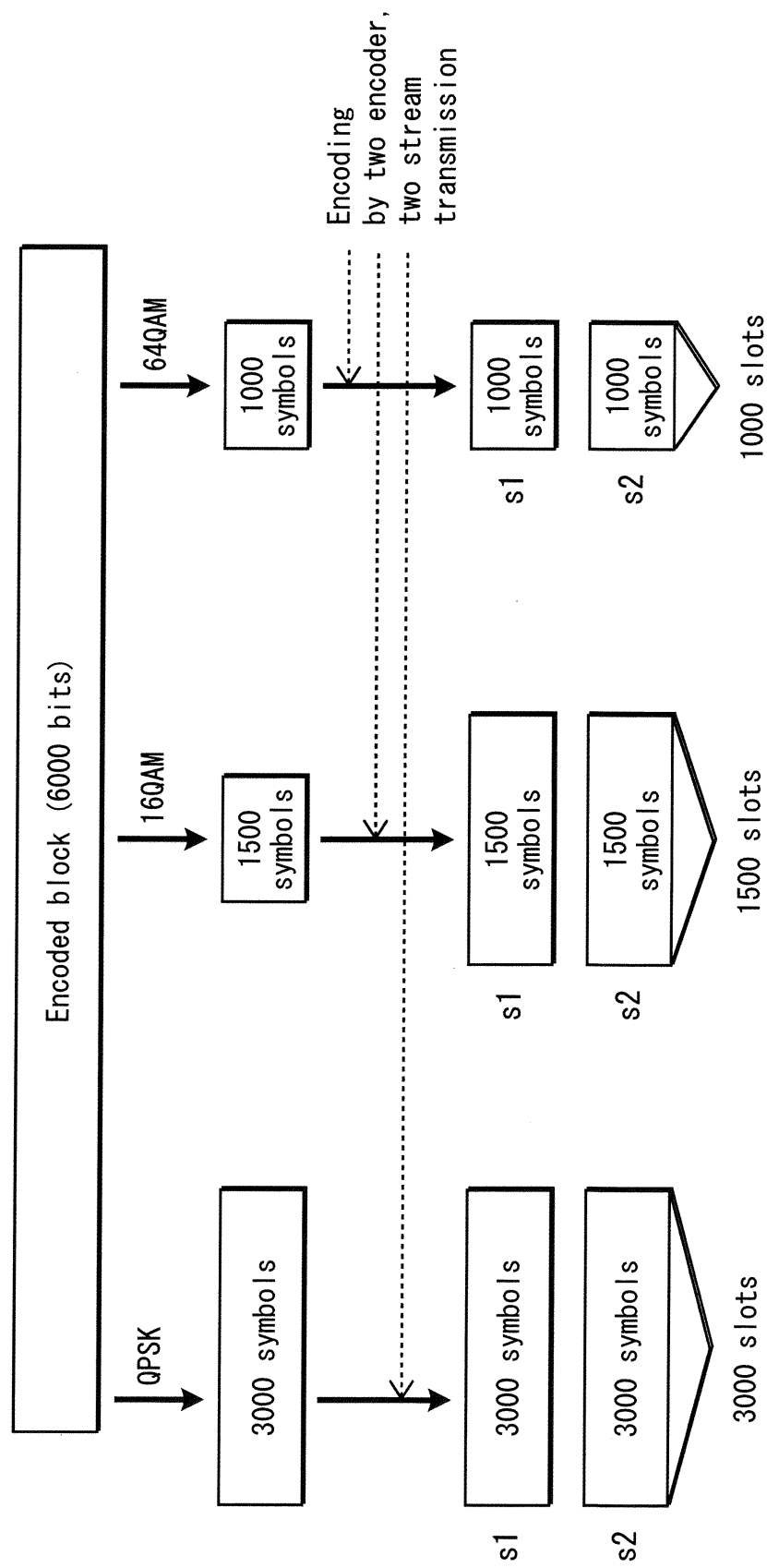
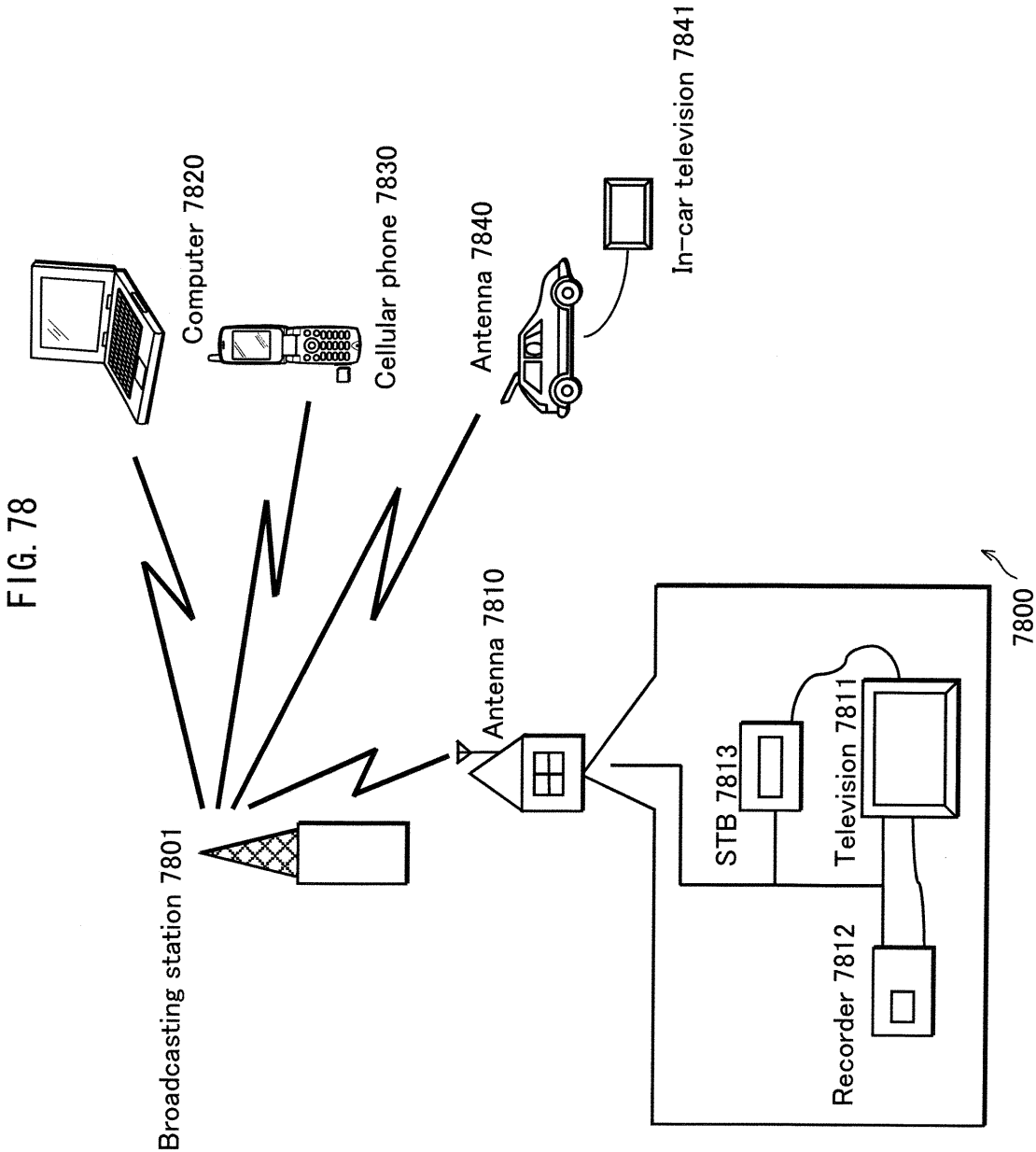


FIG. 77





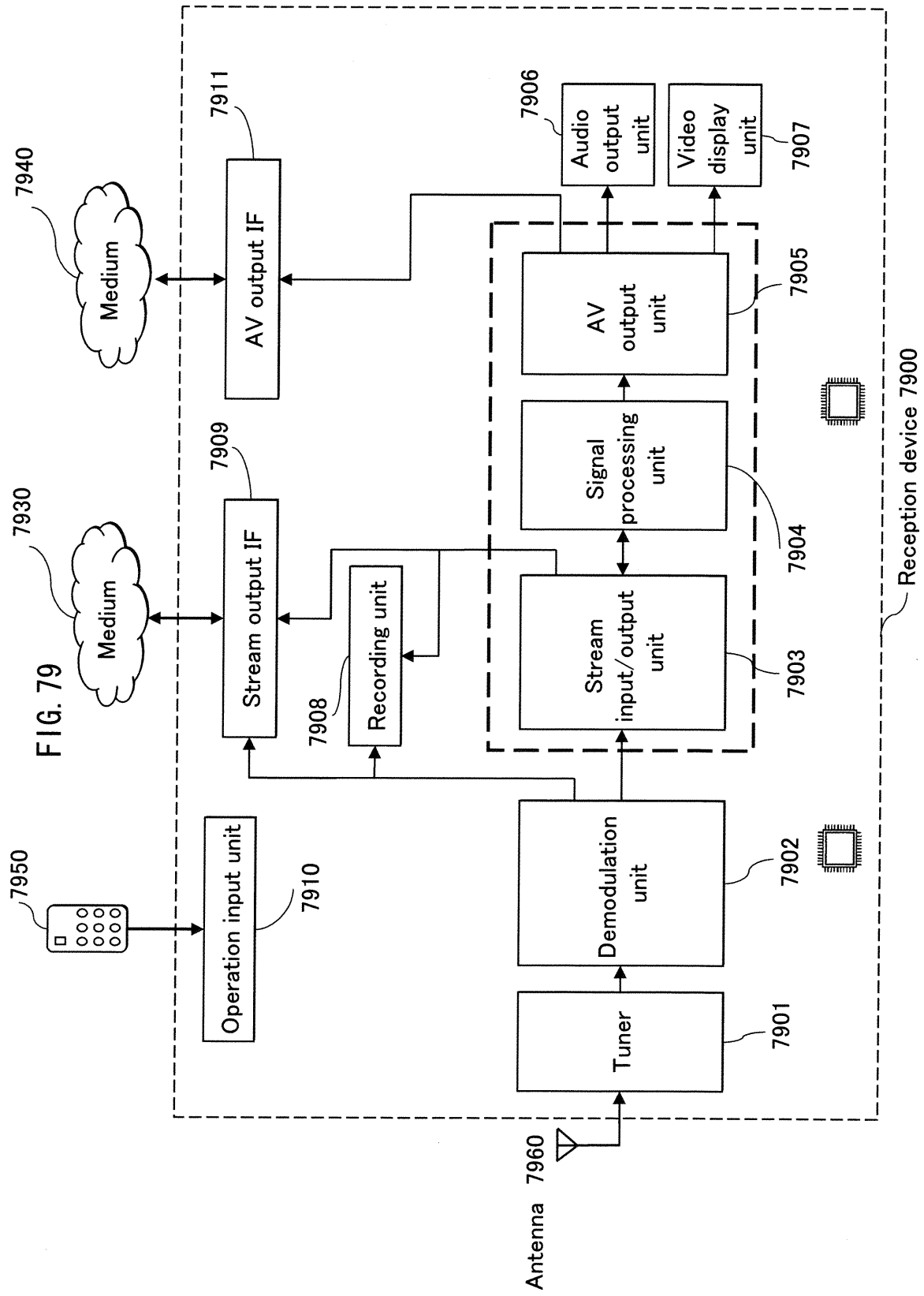


FIG. 80

Video stream (PID=0x1011 primary video)
Audio stream (PID=0x1100)
Audio stream (PID=0x1101)
Presentation graphics stream (PID=0x1200)
Presentation graphics stream (PID=0x1201)
Interactive graphics stream (PID=0x1400)
Video stream (PID=0x1B00 secondary video)
Video stream (PID=0x1B01 secondary video)

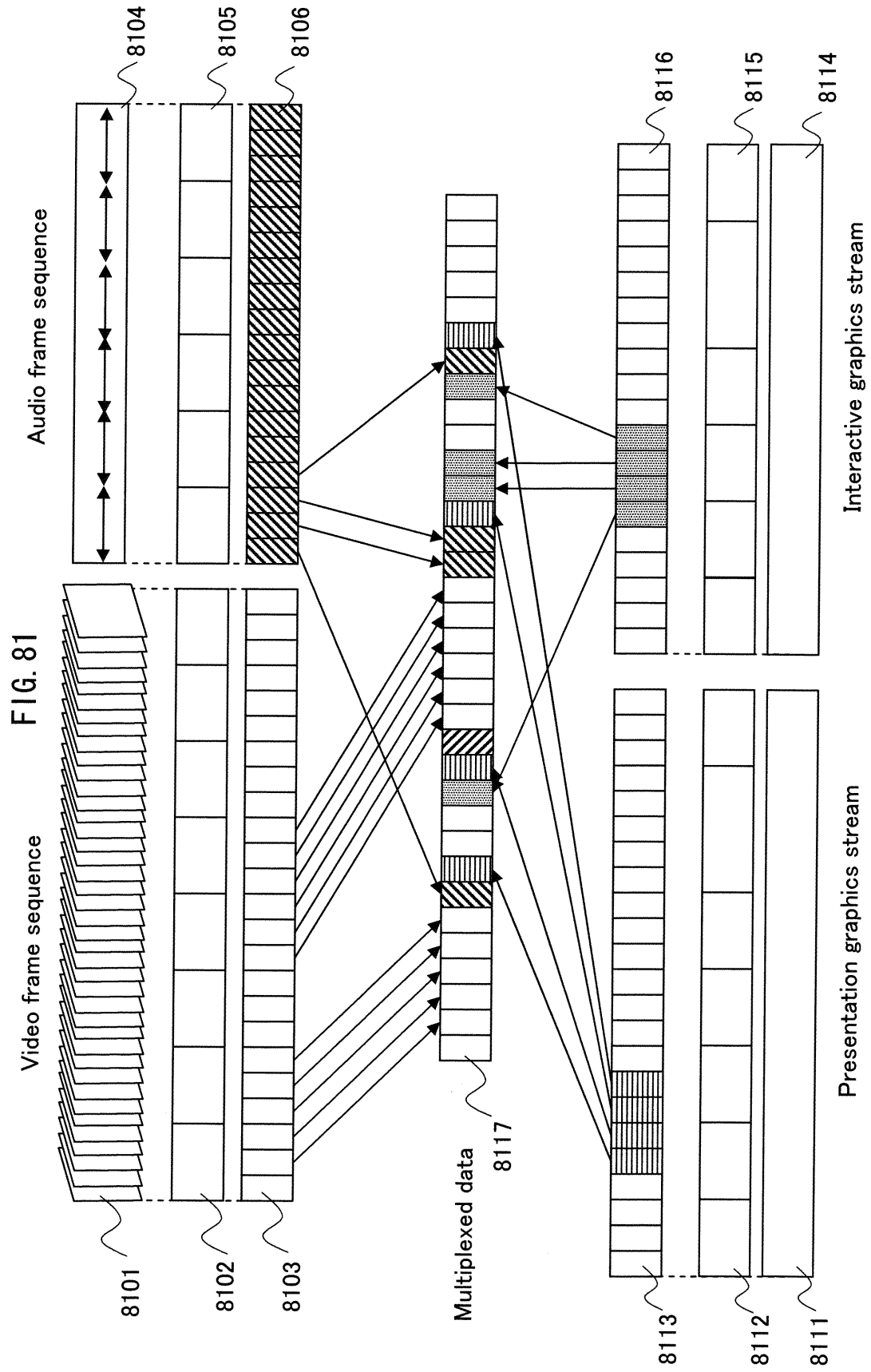


FIG. 82

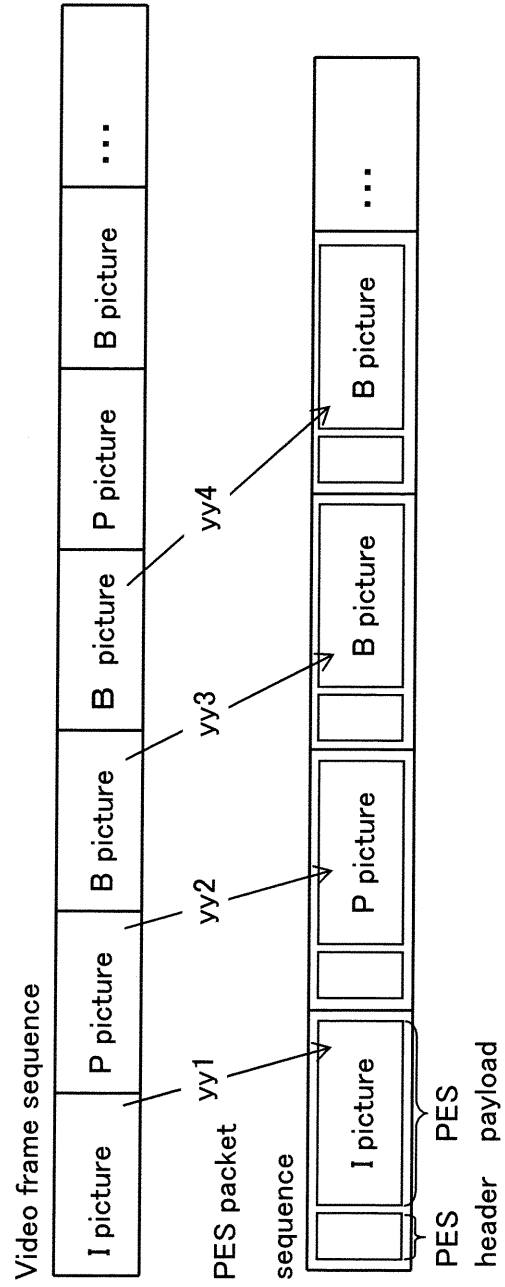


FIG. 83

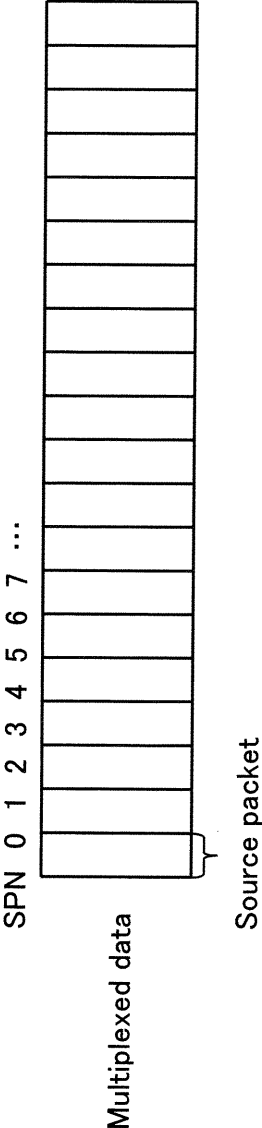
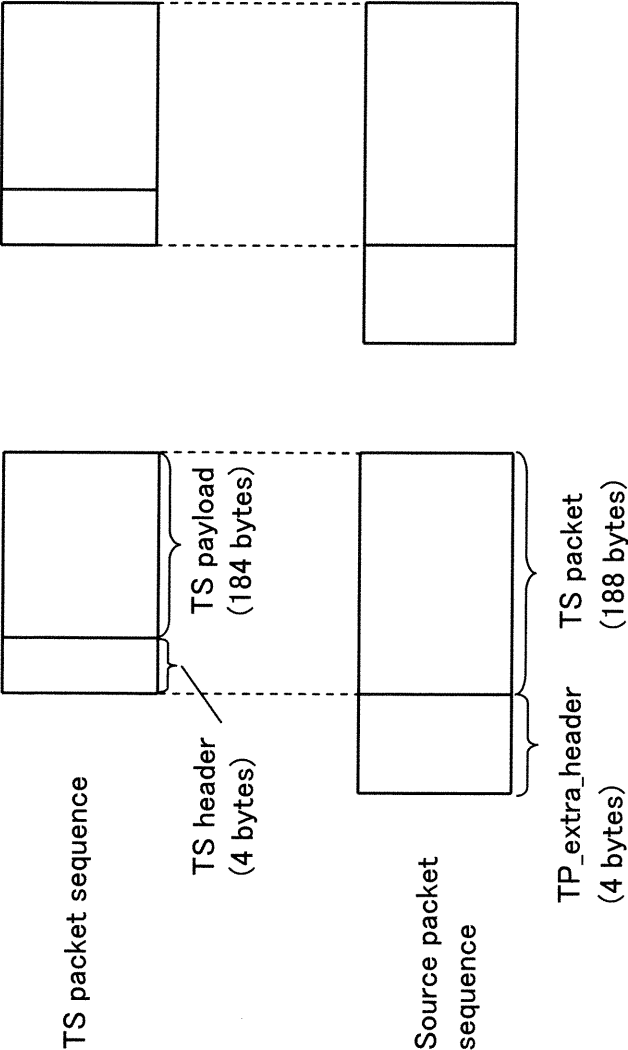


FIG. 84

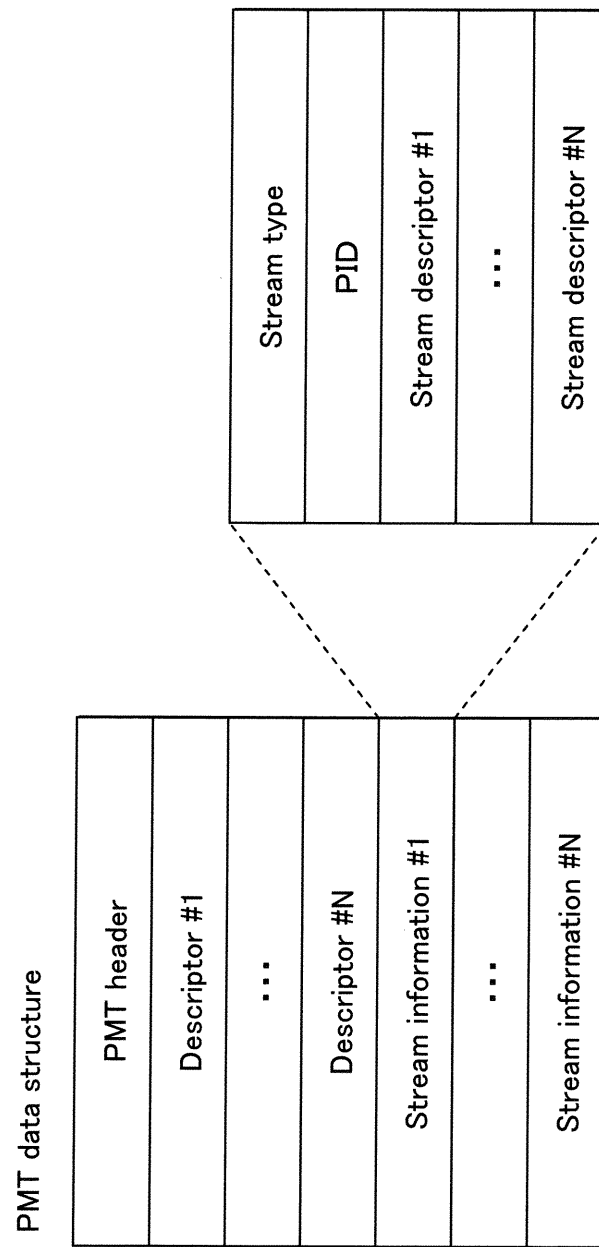


FIG. 85

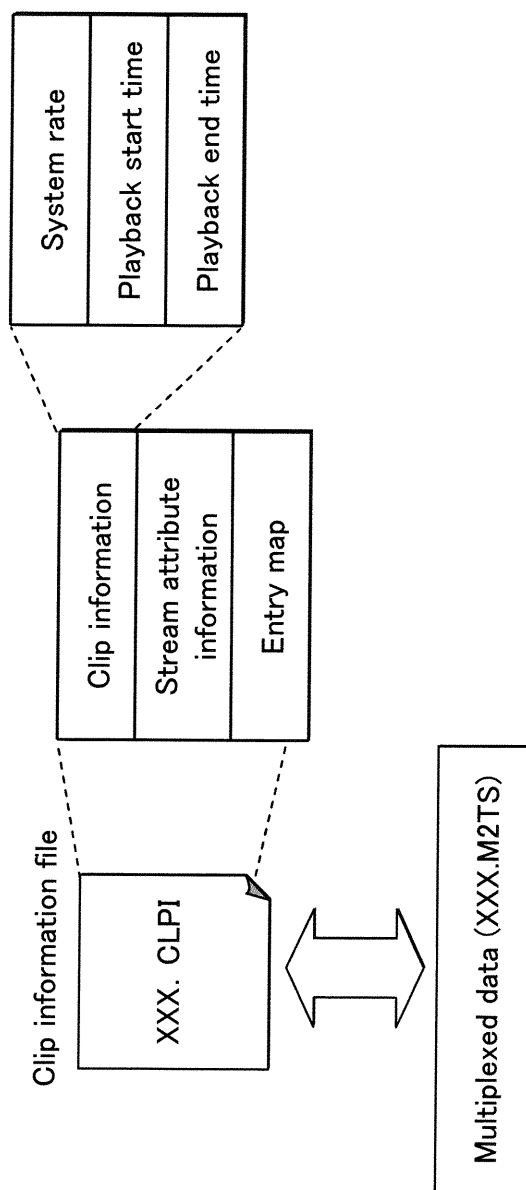
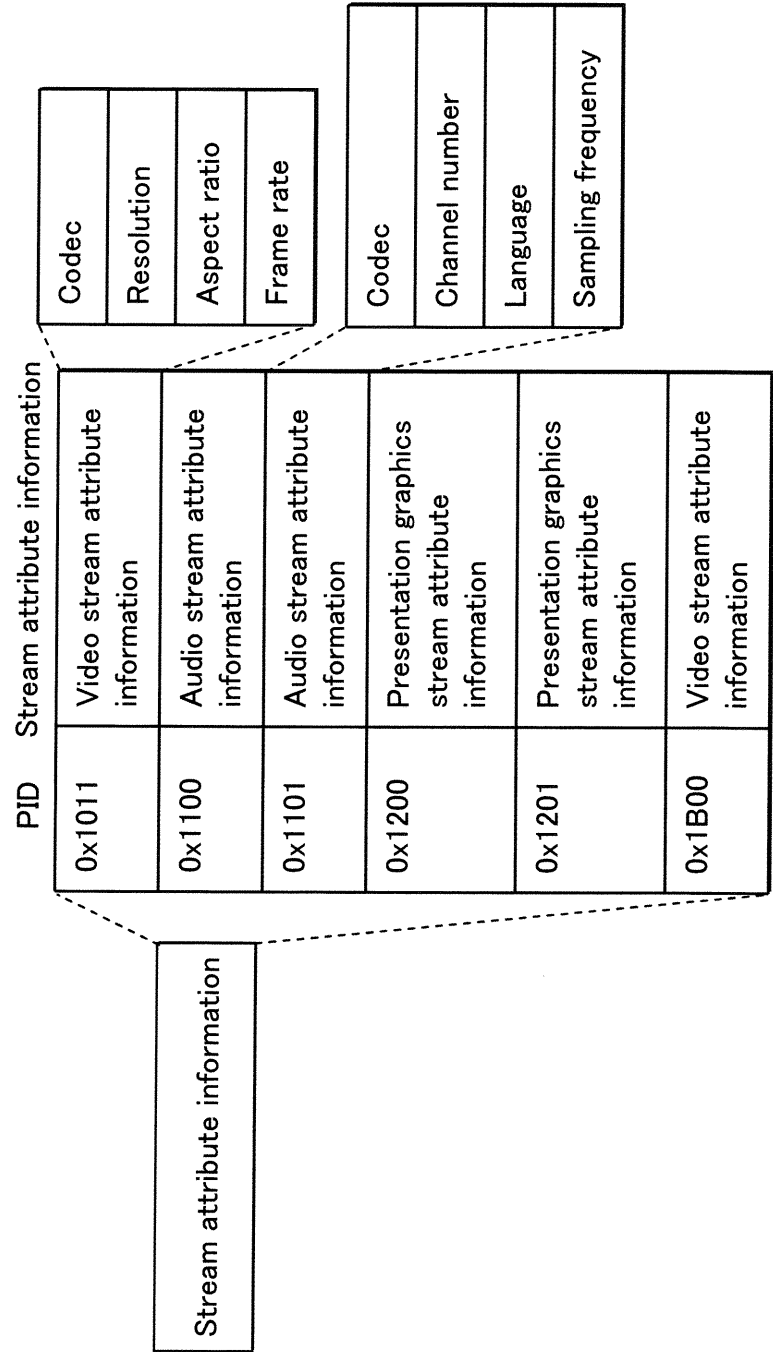


FIG. 86



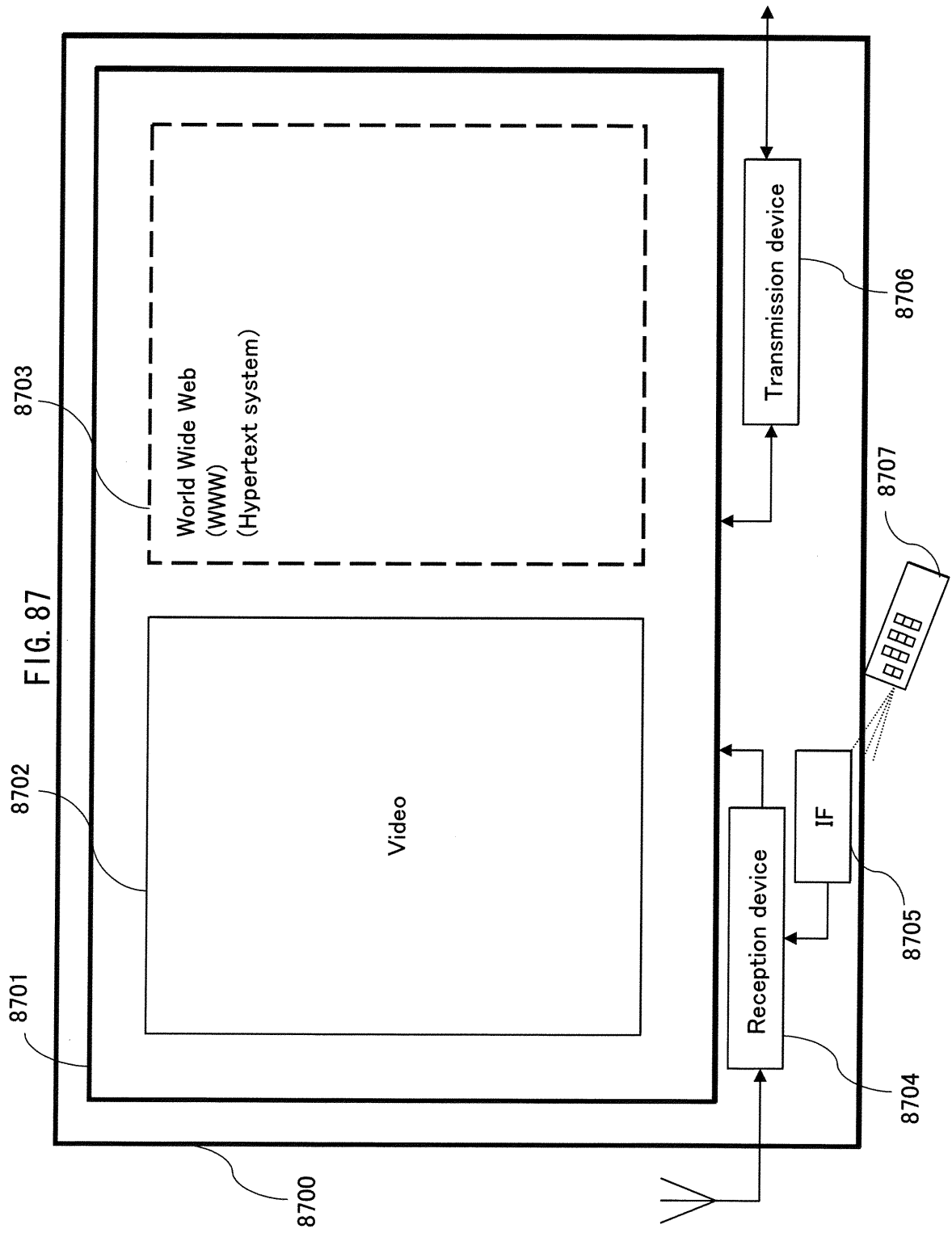


FIG. 88

