

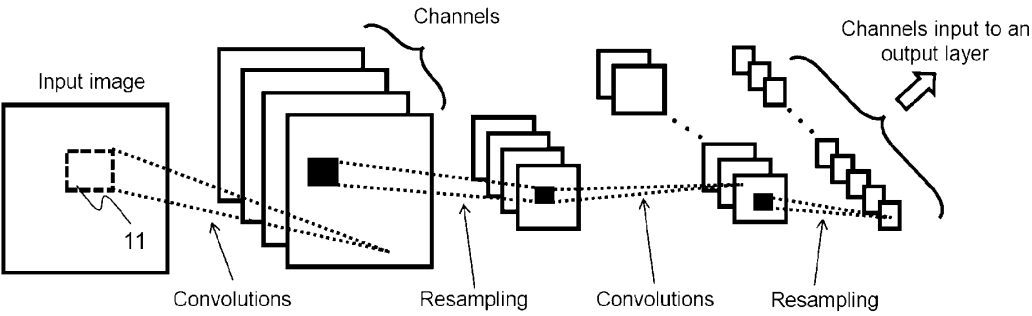


FIG. 1

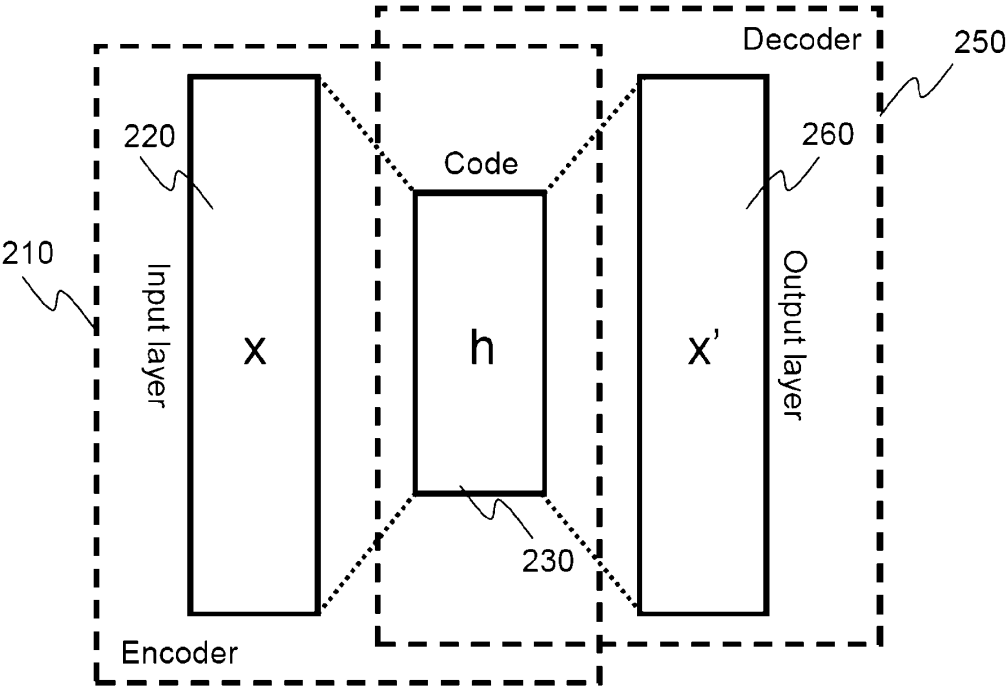


FIG. 2

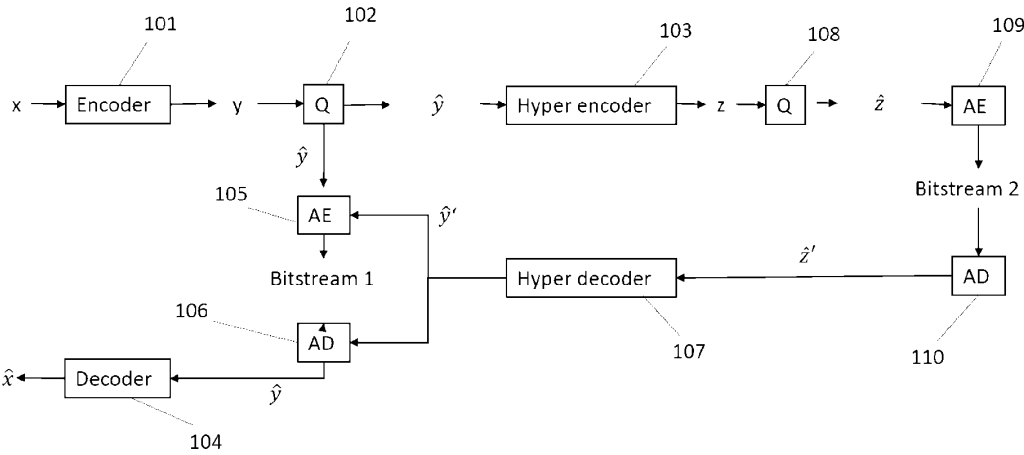


FIG. 3A

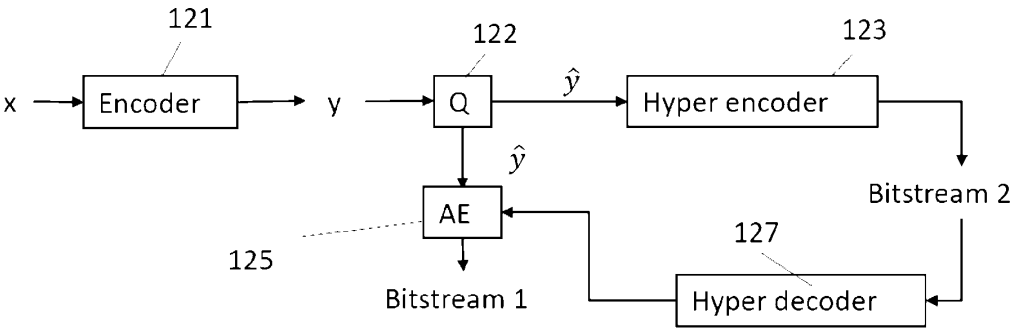


FIG. 3B

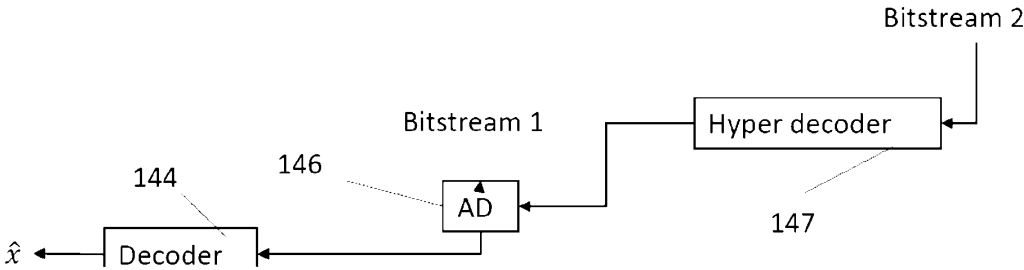


FIG. 3C

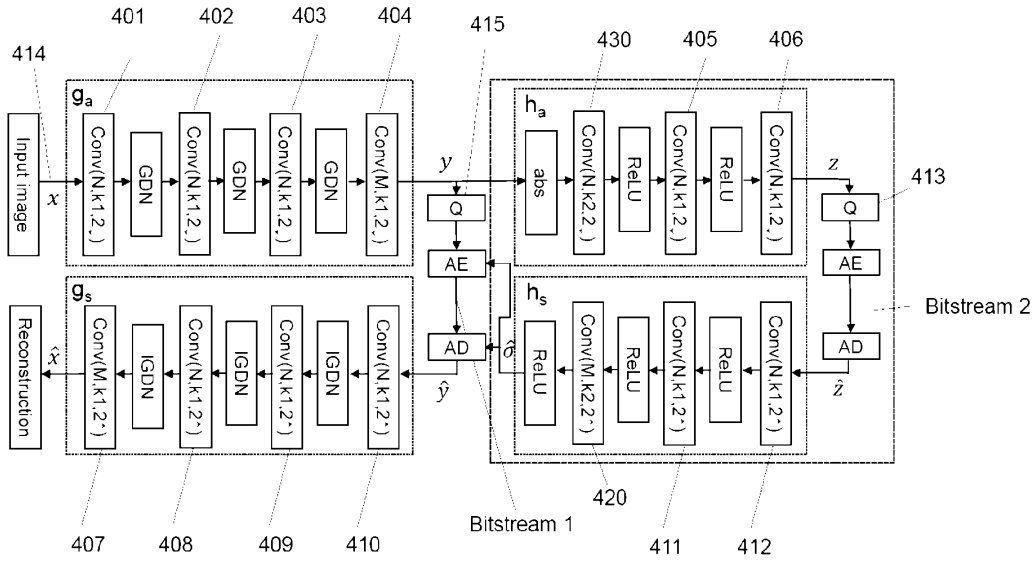


FIG. 4

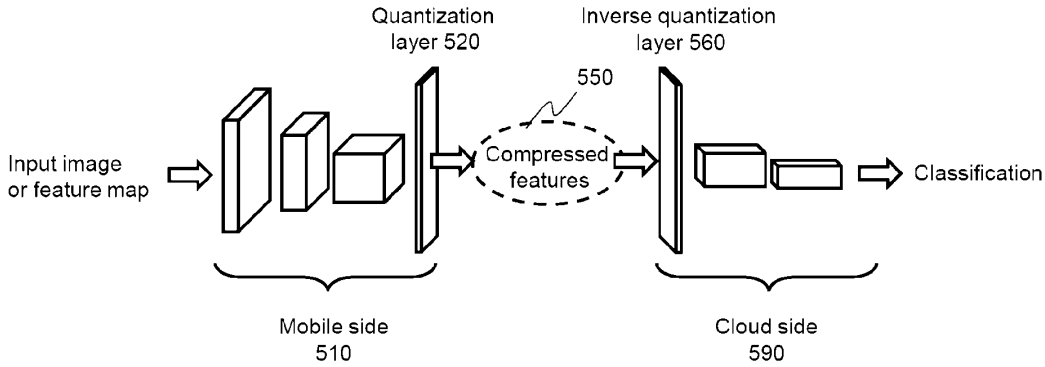


FIG. 5

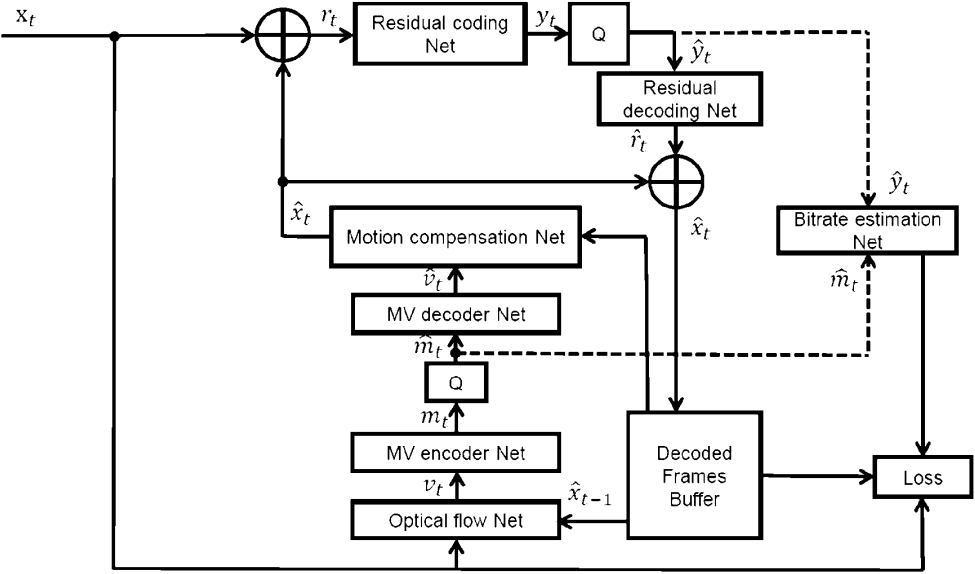


FIG. 6A

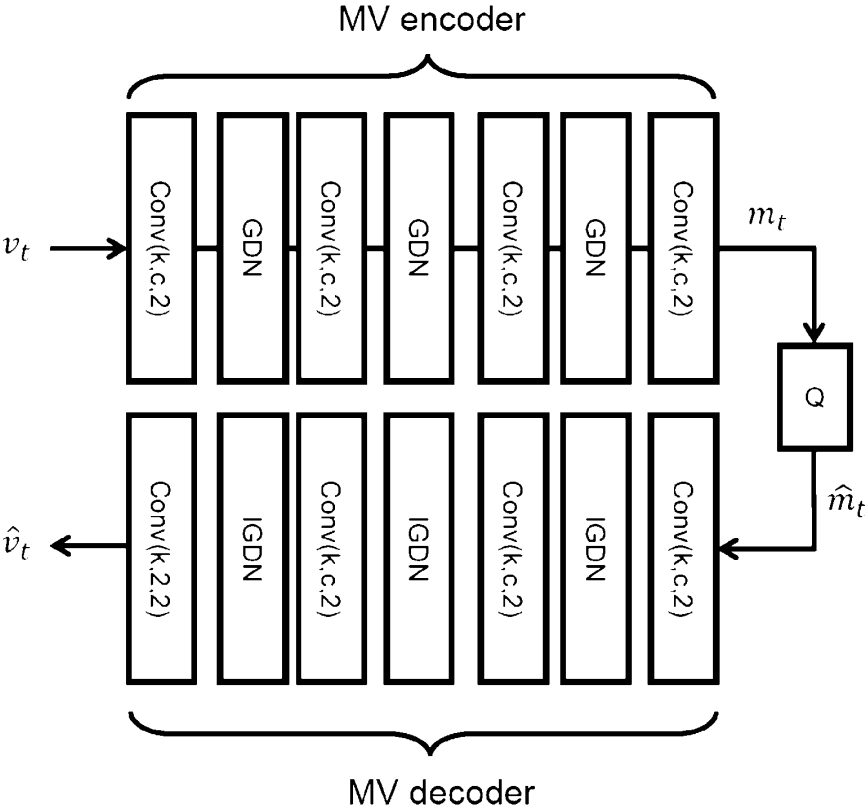


FIG. 6B

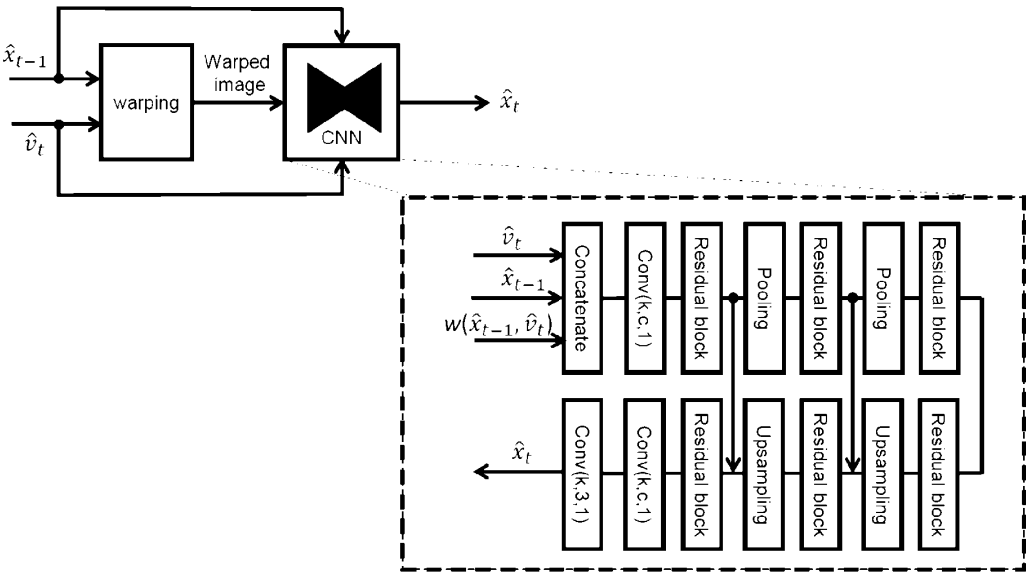


FIG. 6C

Input alphabet: {0, ... M-1}, alphabet size=M
Output alphabet: {0,1}

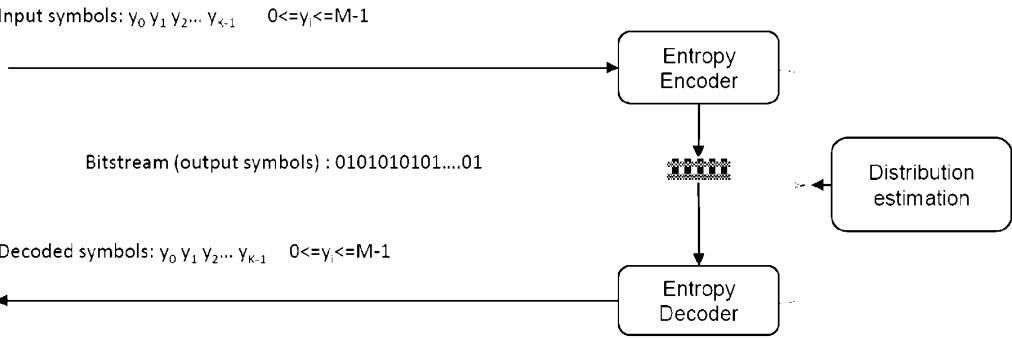


FIG. 7

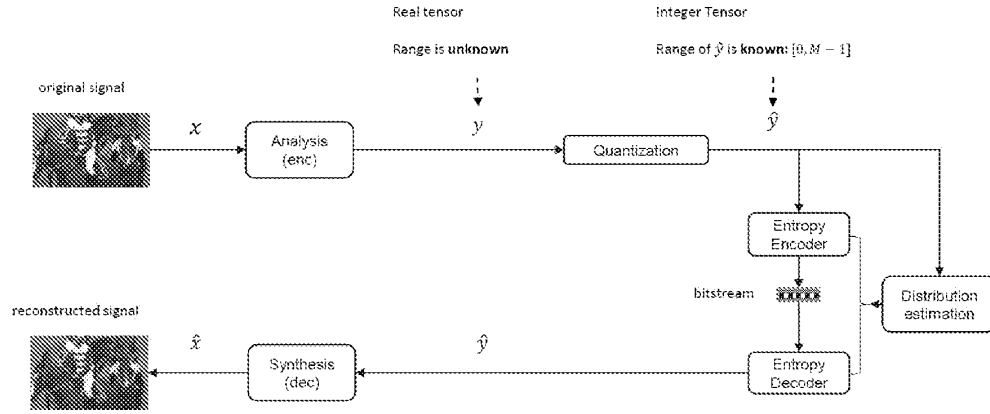


FIG. 8

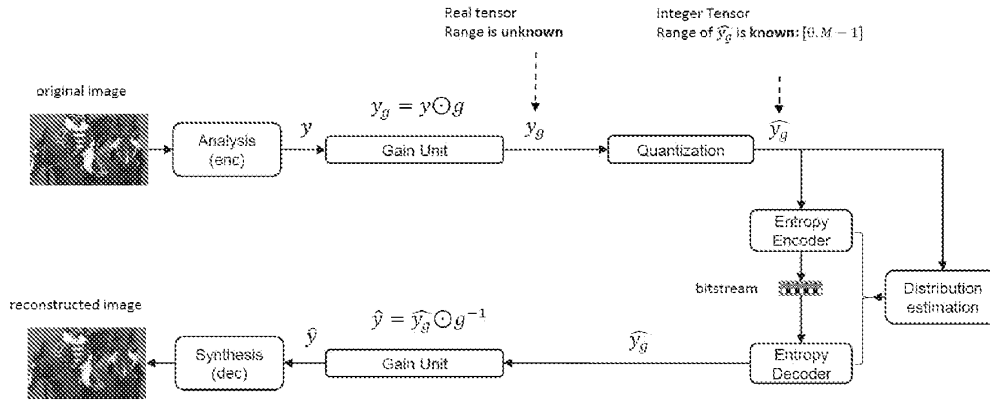


FIG. 9

Signalled values and decoder operations

- Signalled values:
1. Model index $\in [0, 3]$
 2. $\beta_{int} \in [0, 65535]$ - 16 bits

Decoder operations for obtaining gain vector g :

1. $\text{beta_luma_float} = \frac{\text{beta_luma}}{65536}$
2. $\text{beta_displacement_luma} = \frac{\text{beta_luma_float}}{\text{beta_train_float}[\text{model_idx}]}$
3. $g_{luma} = \text{scaler_table_luma_float}[\text{model_idx}] * \text{beta_displacement_luma}$
4. $\text{beta_chroma_float} = \frac{\text{beta_chroma}}{65536}$
5. $\text{beta_displacement_chroma} = \frac{\text{beta_chroma_float}}{\text{beta_train_float}[\text{model_idx}]}$
6. $g_{chroma} = \text{scaler_table_chroma_float}[\text{model_idx}] * \text{beta_displacement_chroma}$

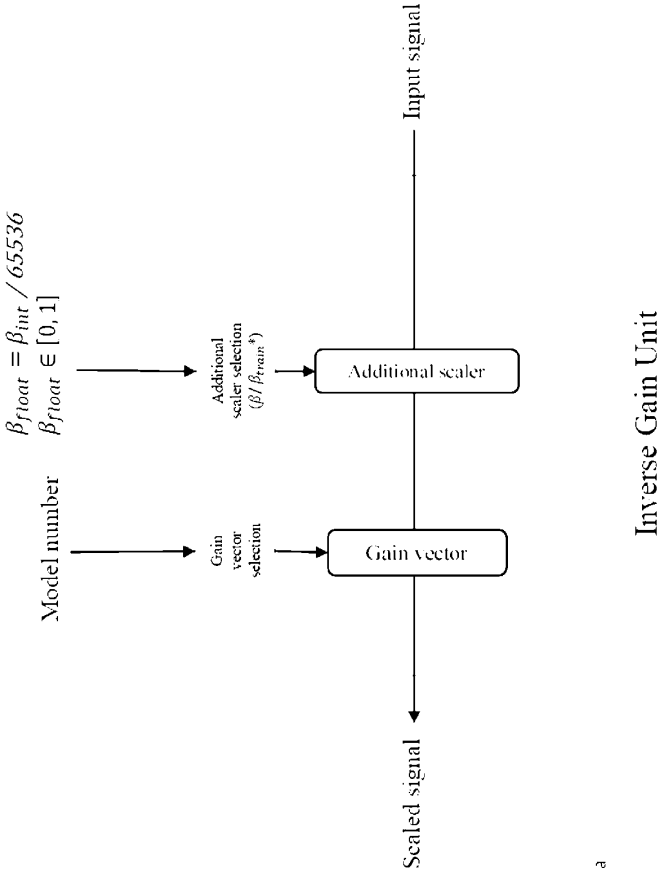


FIG. 10

Signalled values and decoder operations

- Signalled values:**
1. Model index
 2. $\beta/\beta_{train} \in [0, 1023]$ - 10 bits,
i.e., $\beta_{\text{displacement_luma}}$ in 10 bits

Decoder operations for obtaining gain vector g :

1. $g_{\text{luma}} = \text{scaler_table_luma}[\text{model_idx}] * \beta_{\text{displacement_luma}}$
2. $g_{\text{chroma}} = \text{scaler_table_chroma}[\text{model_idx}] * \beta_{\text{displacement_chroma}}$

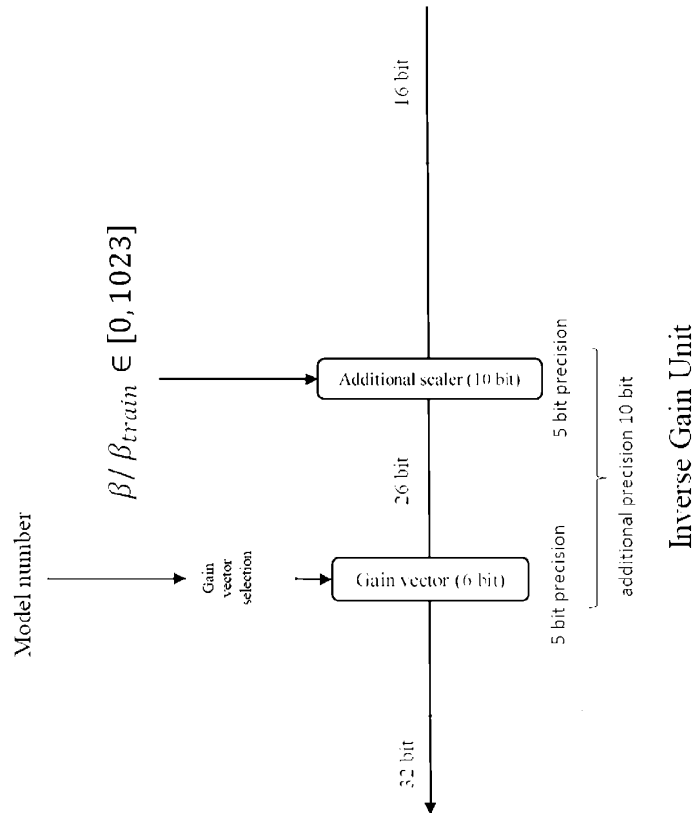


FIG. 11

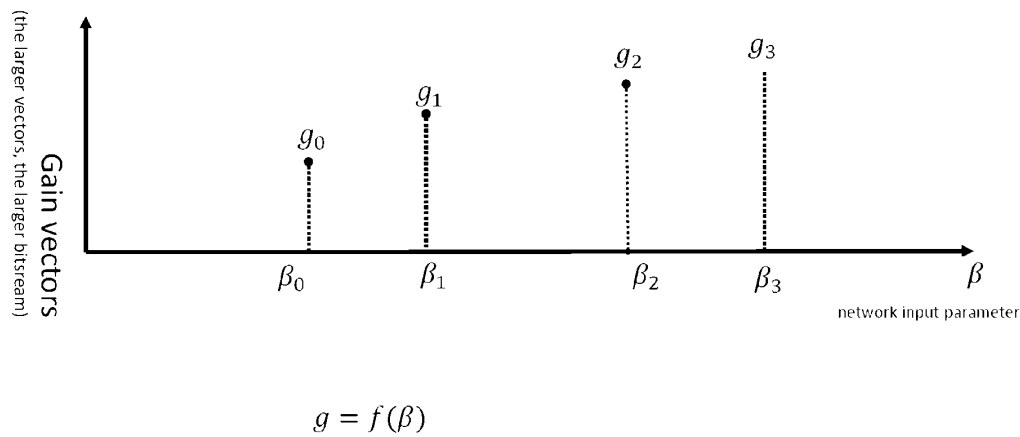


FIG. 12

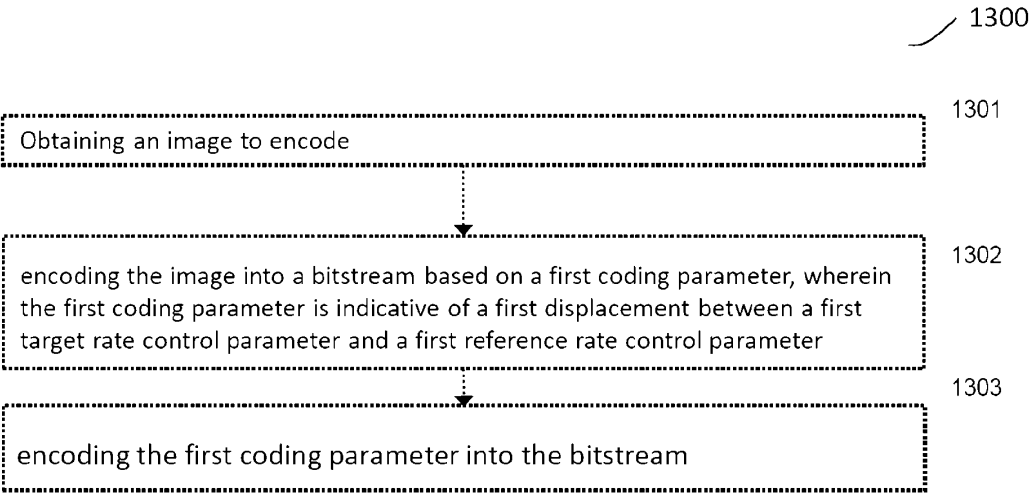


FIG. 13

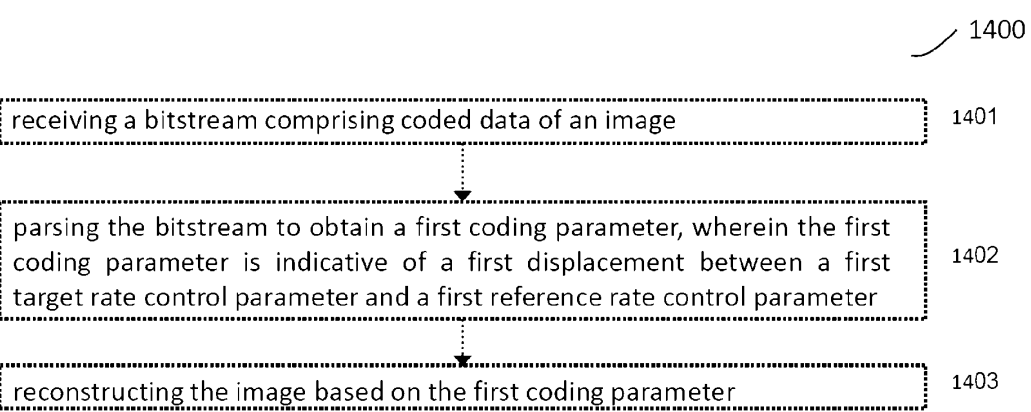


FIG. 14

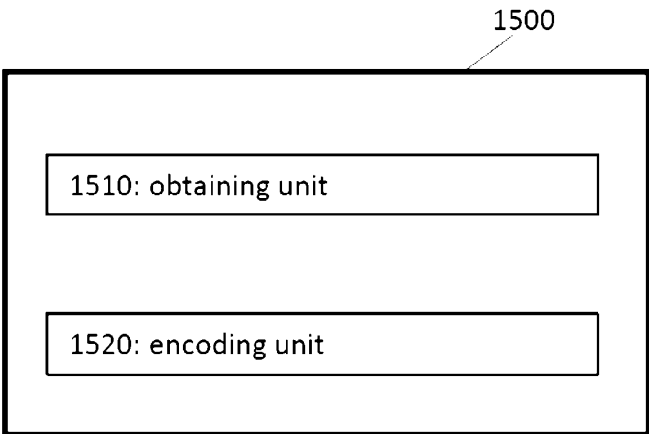


FIG. 15

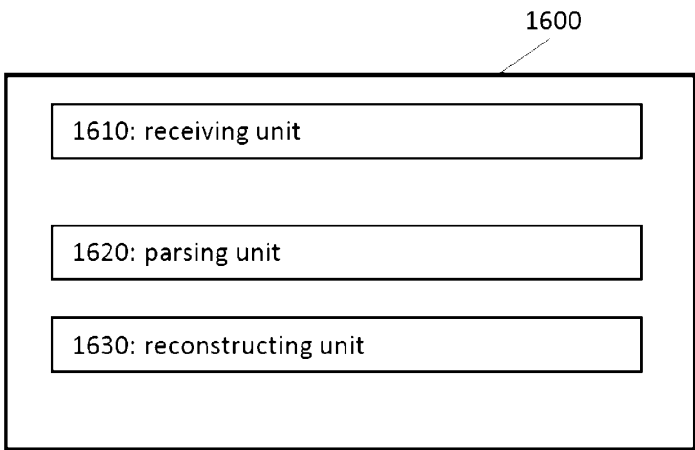


FIG. 16



FIG. 17

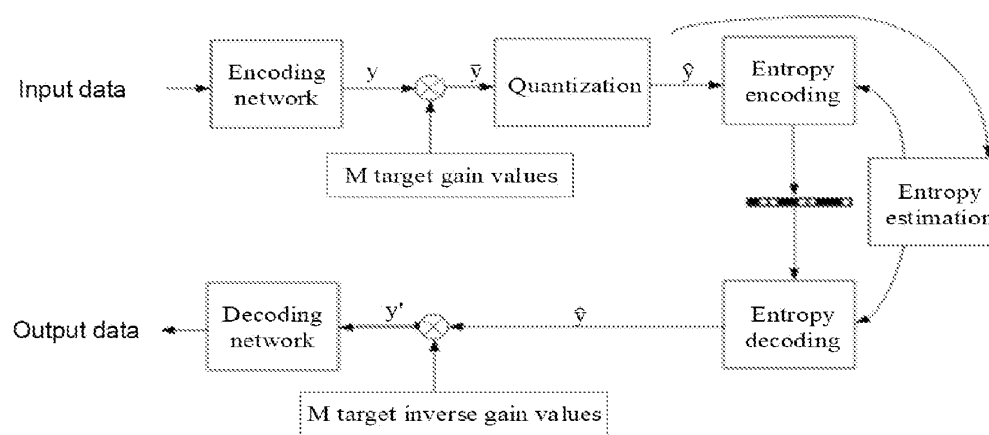


FIG. 18

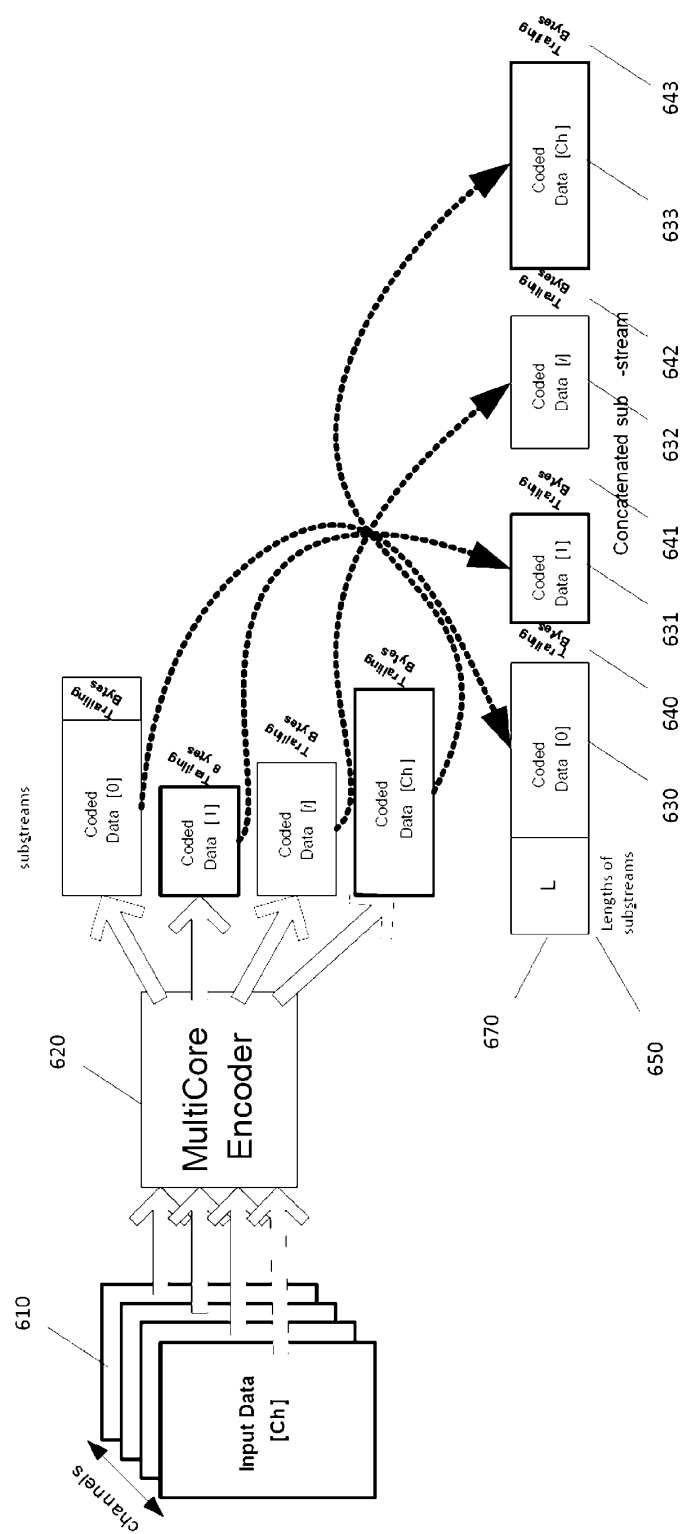


FIG. 19

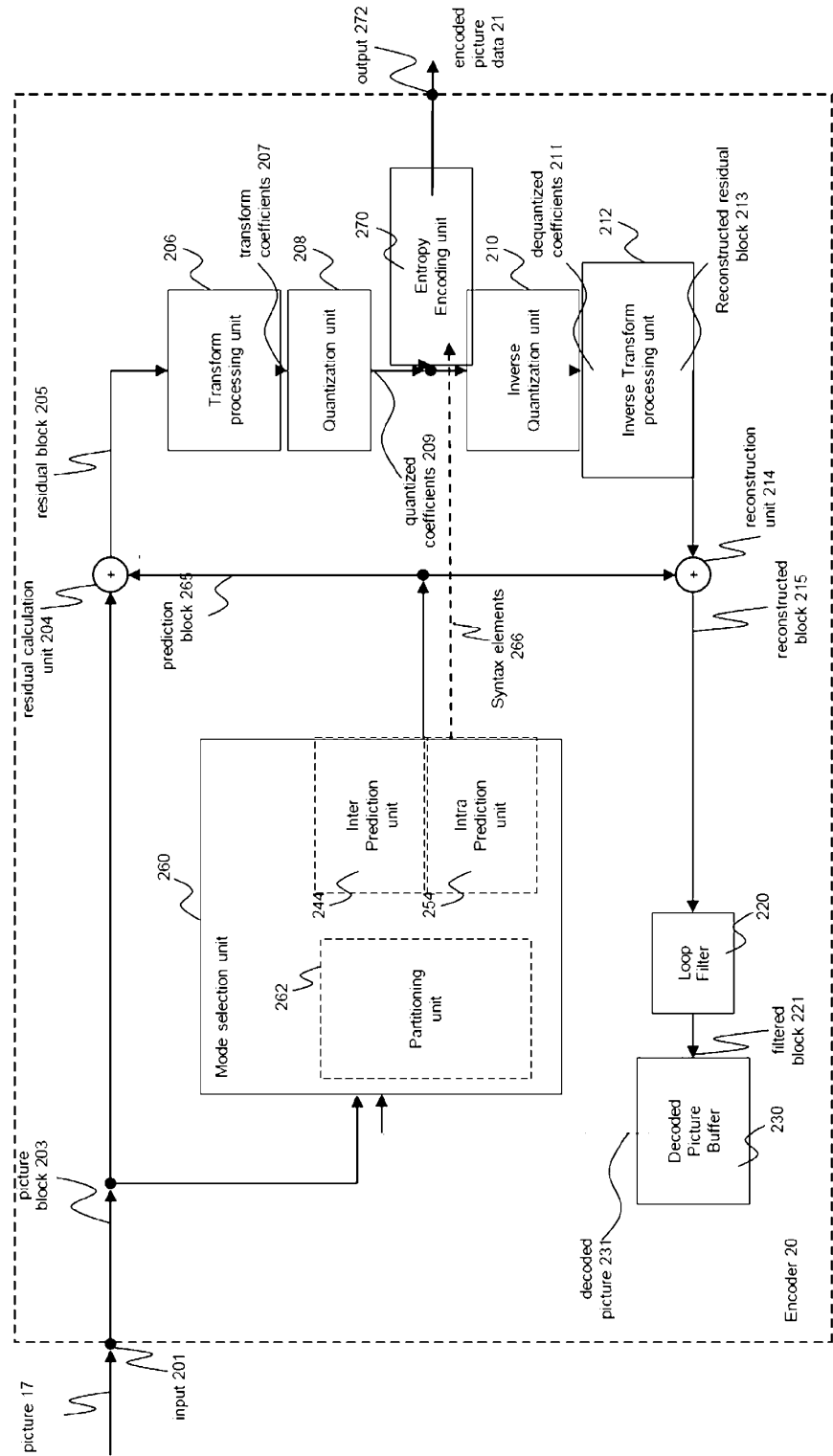


FIG. 20

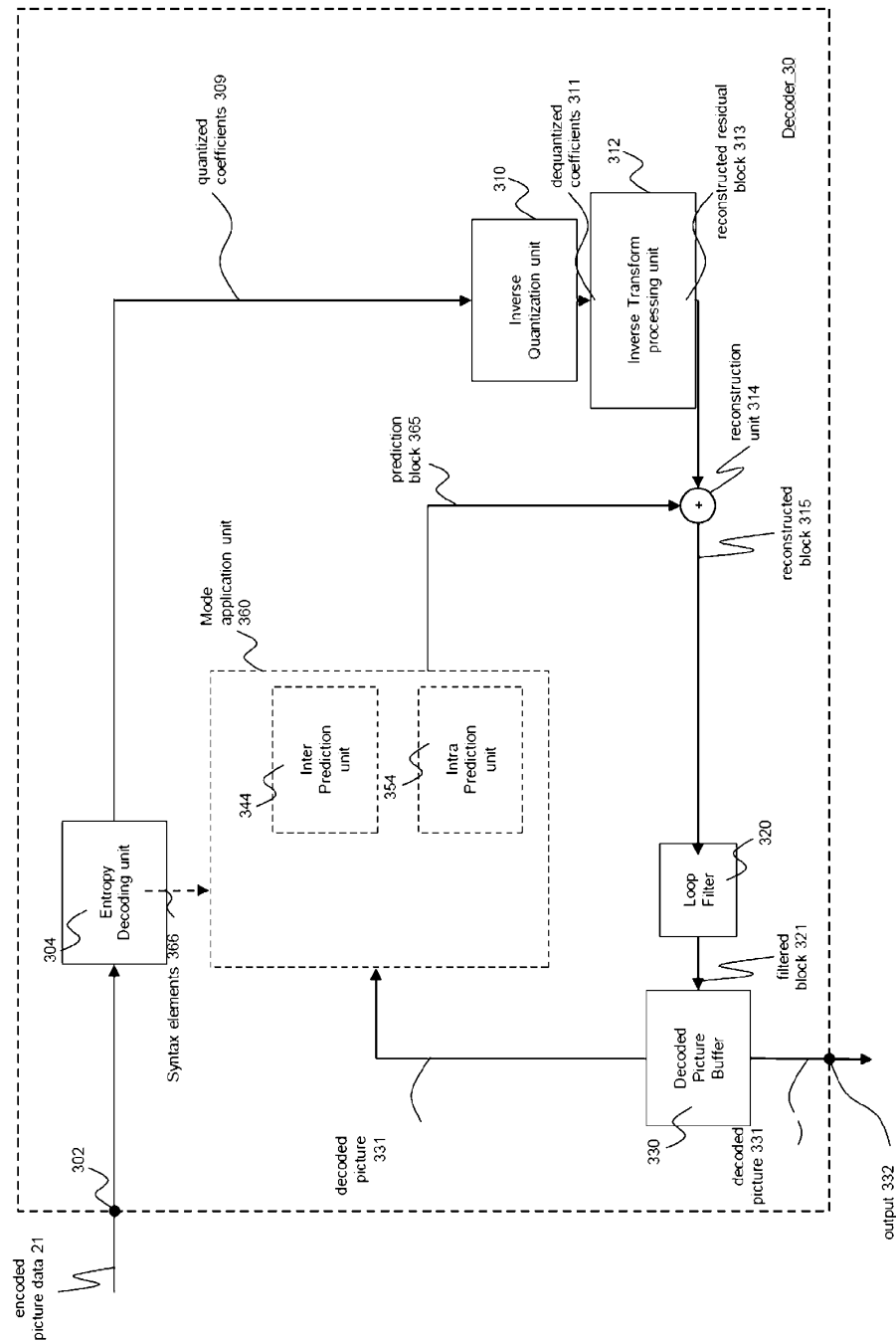


FIG. 21

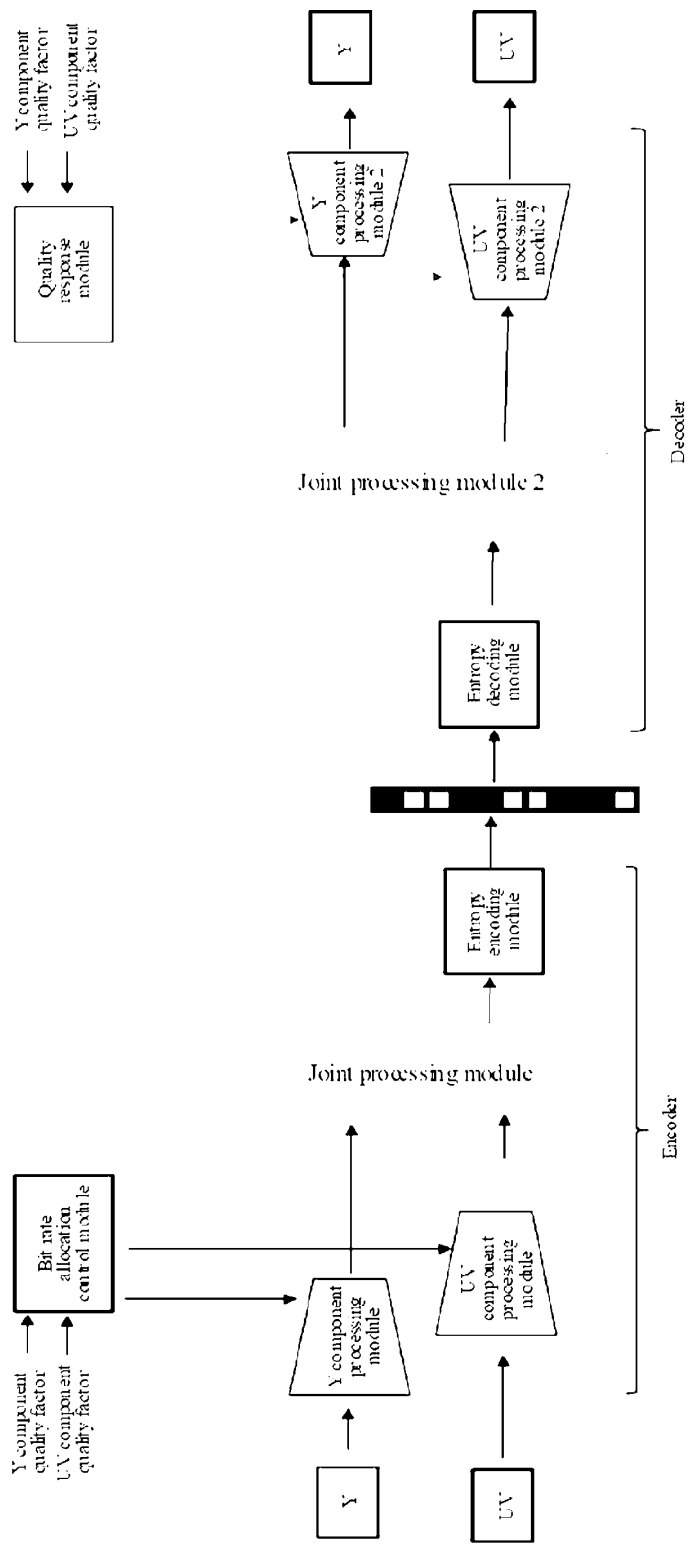


FIG. 22

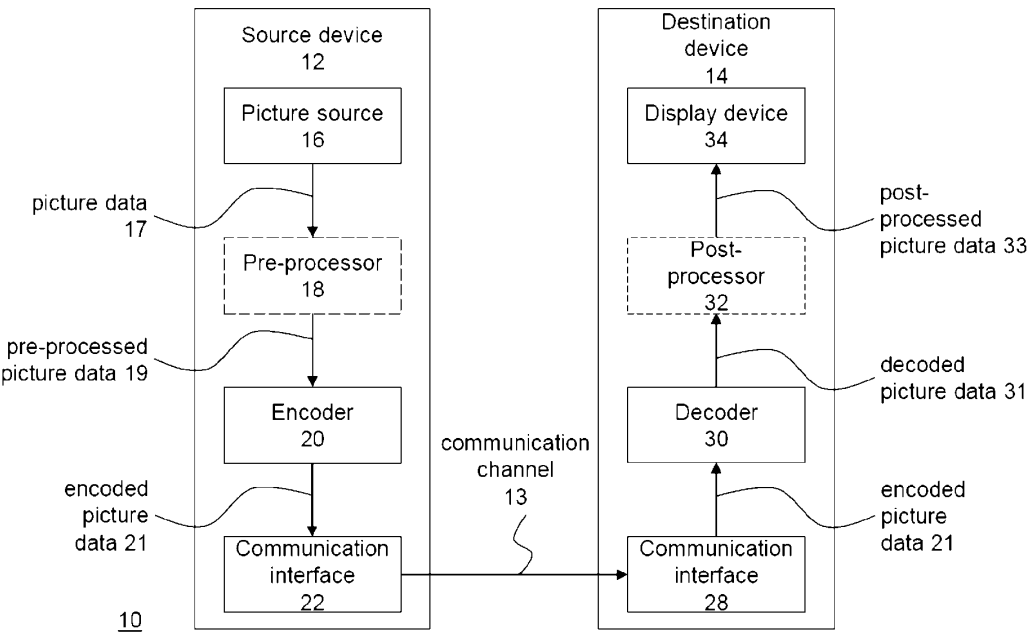


FIG. 23

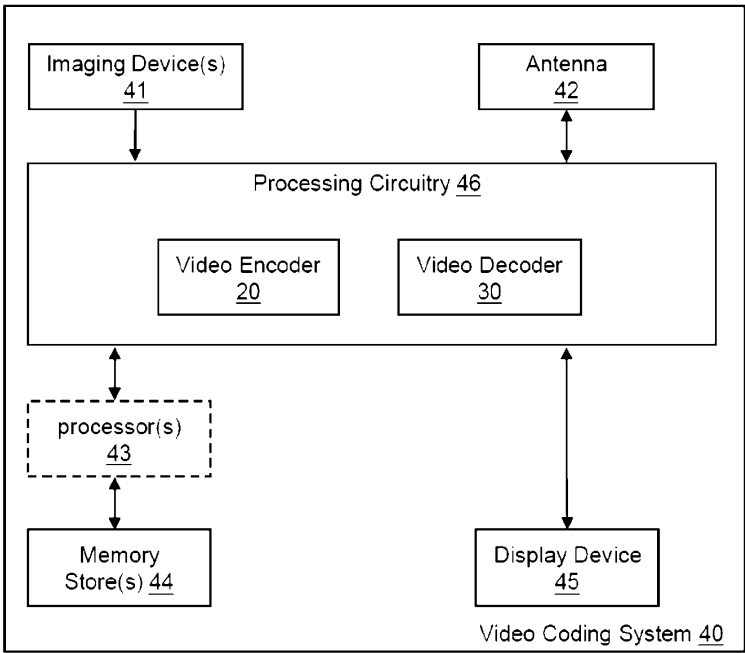


FIG. 24

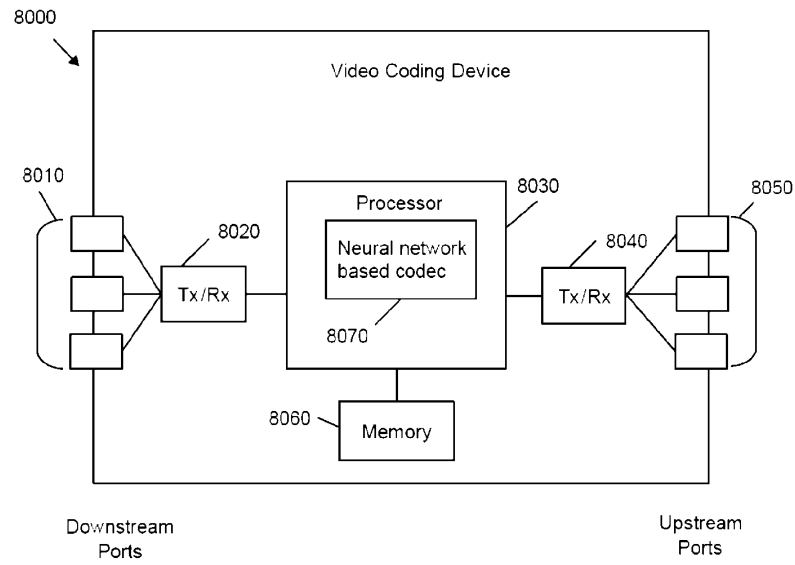


FIG. 25

3100

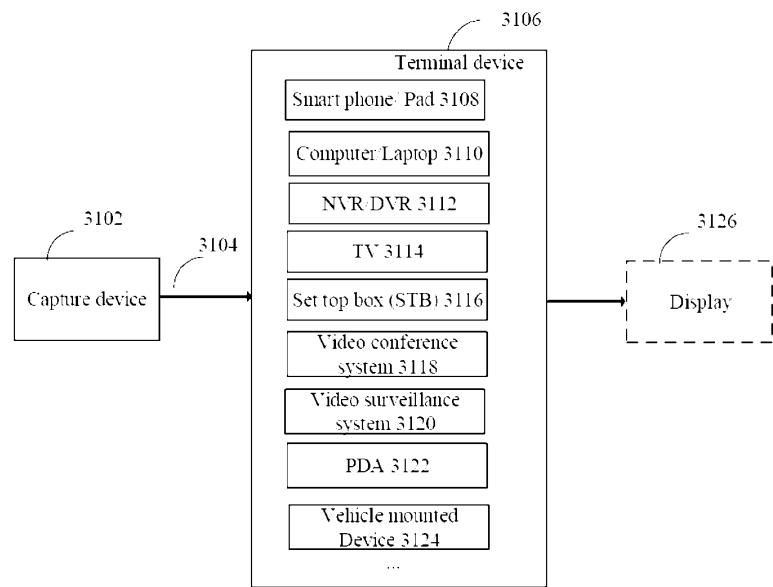


FIG. 26

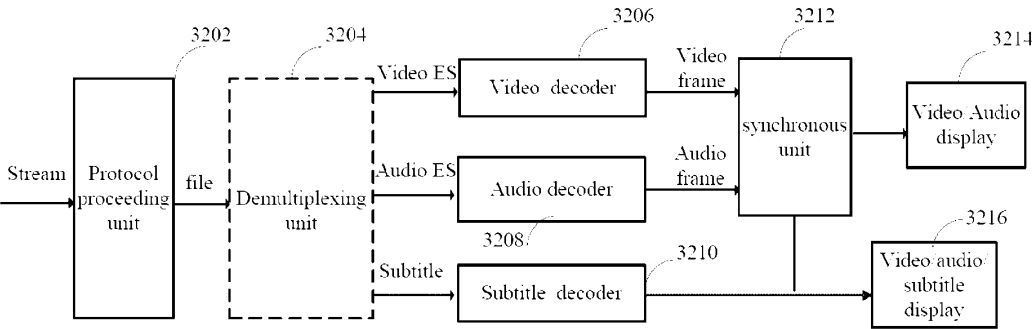


FIG. 27

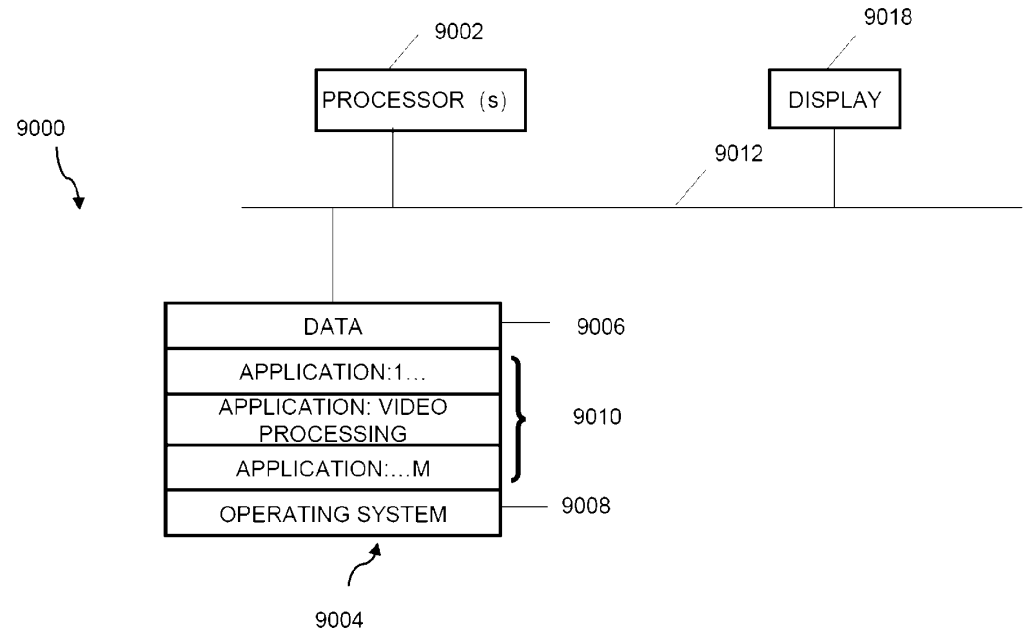


FIG. 28

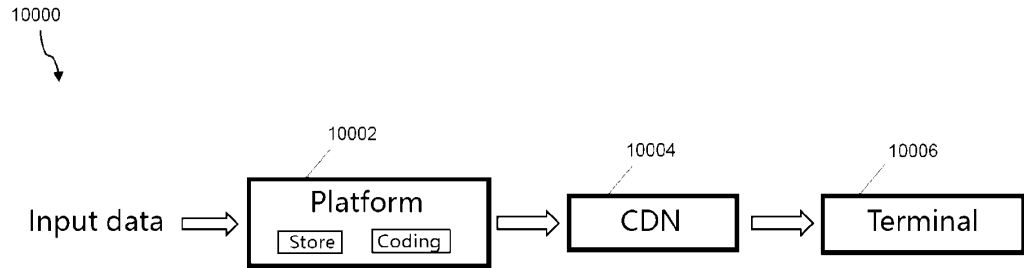


FIG. 29

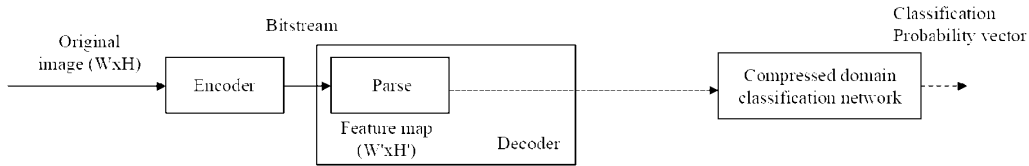


FIG. 30

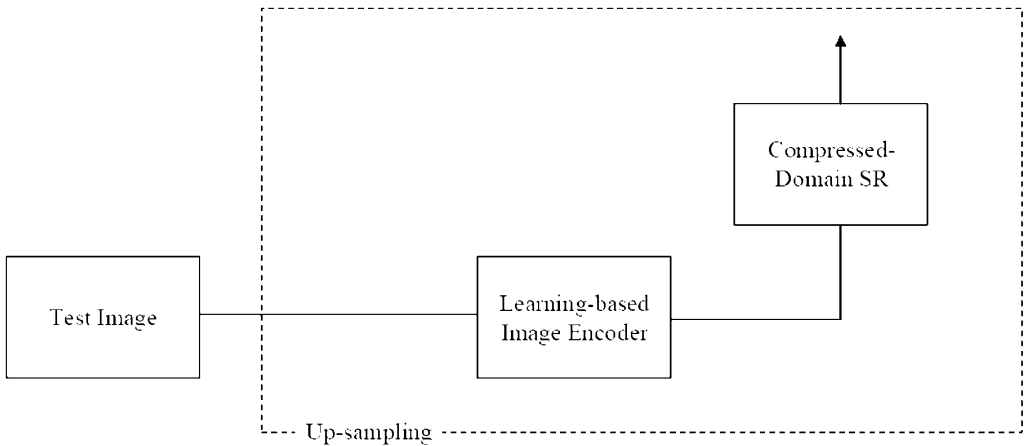


FIG. 31

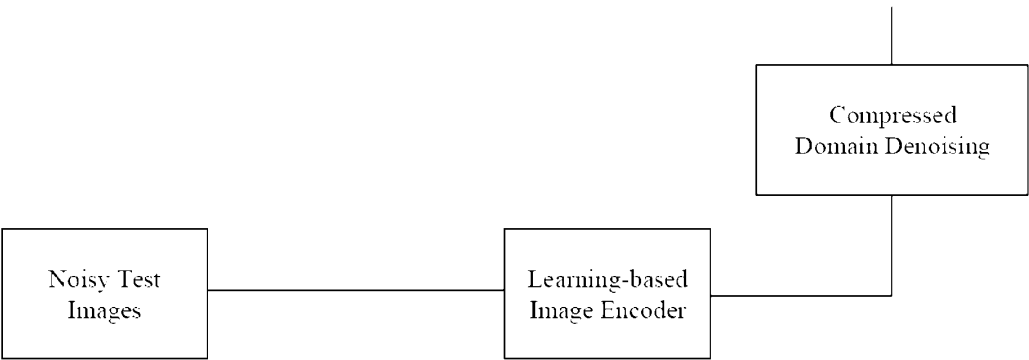


FIG. 32