

FIG. 1

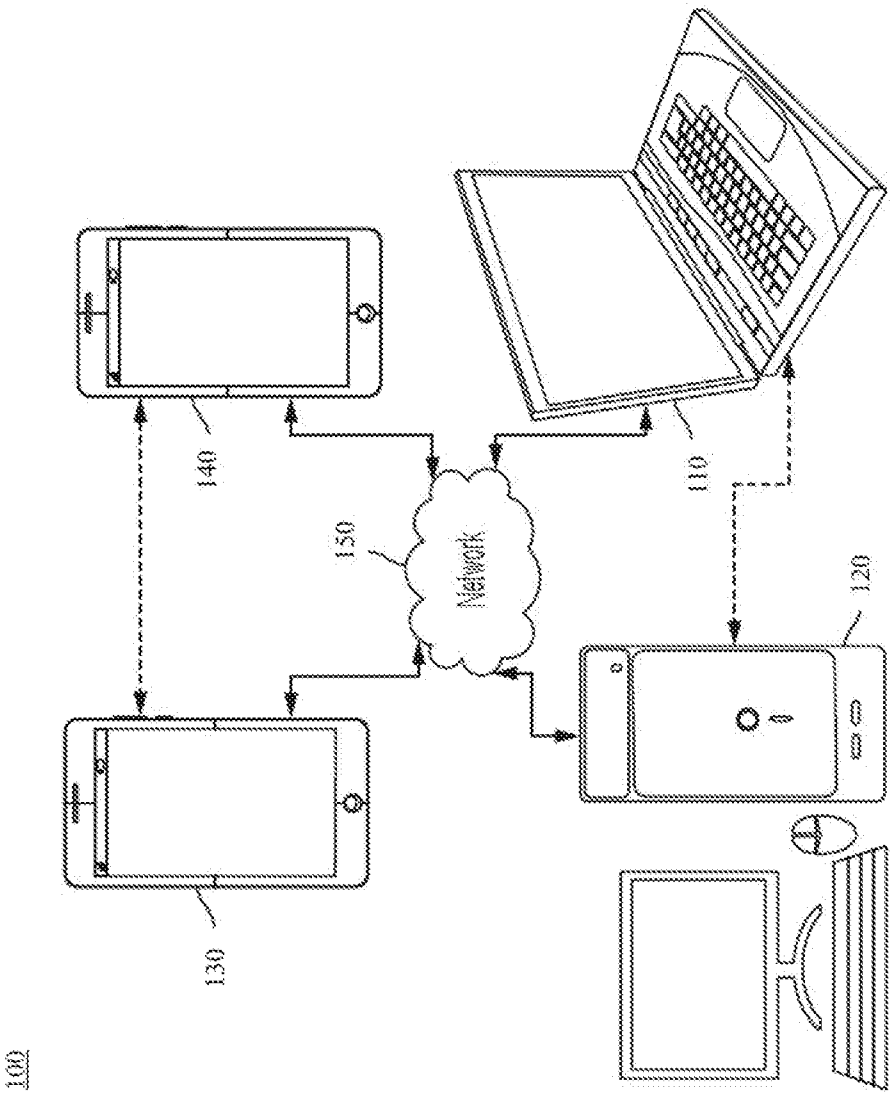
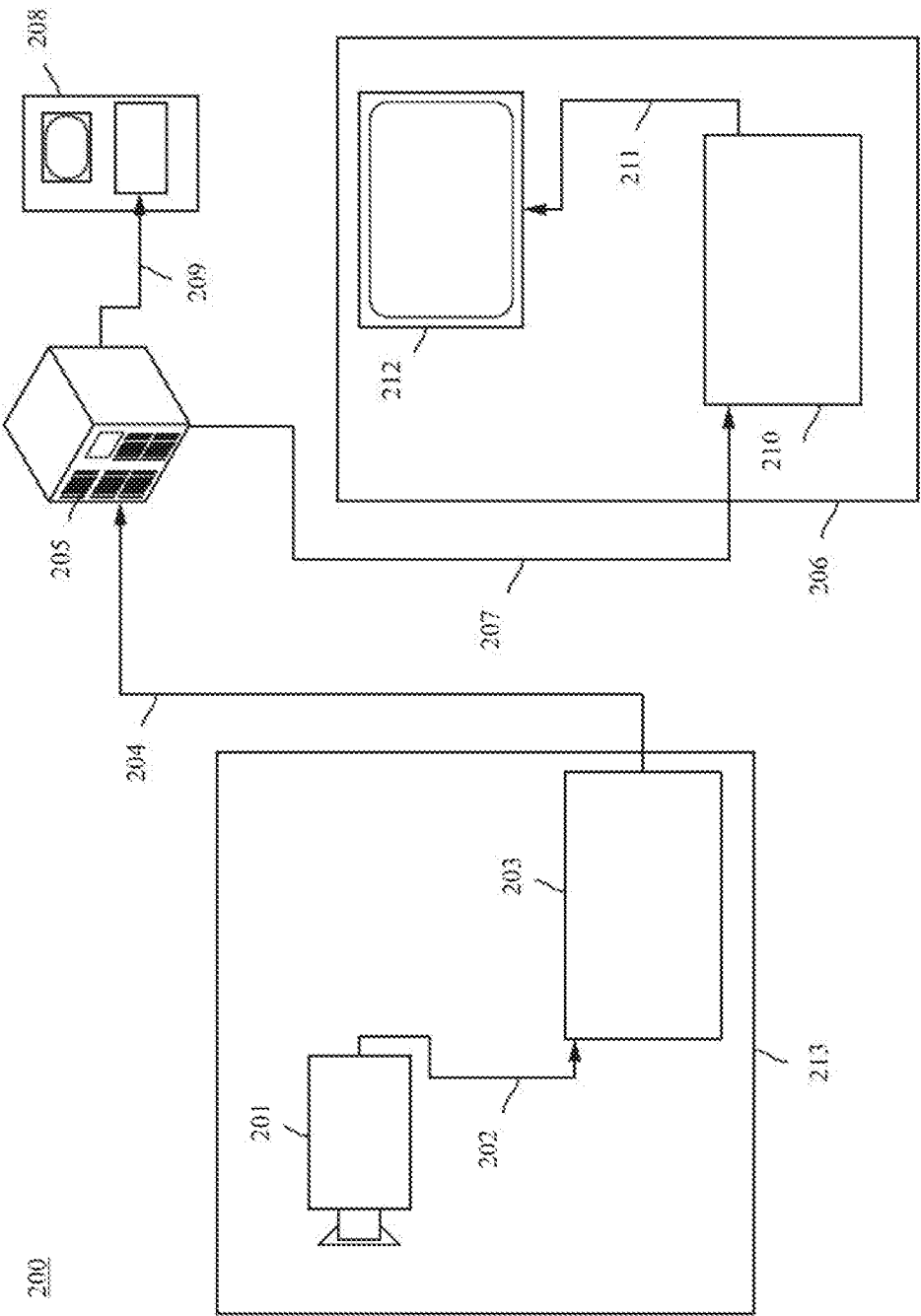


FIG. 2



3/21

FIG. 3

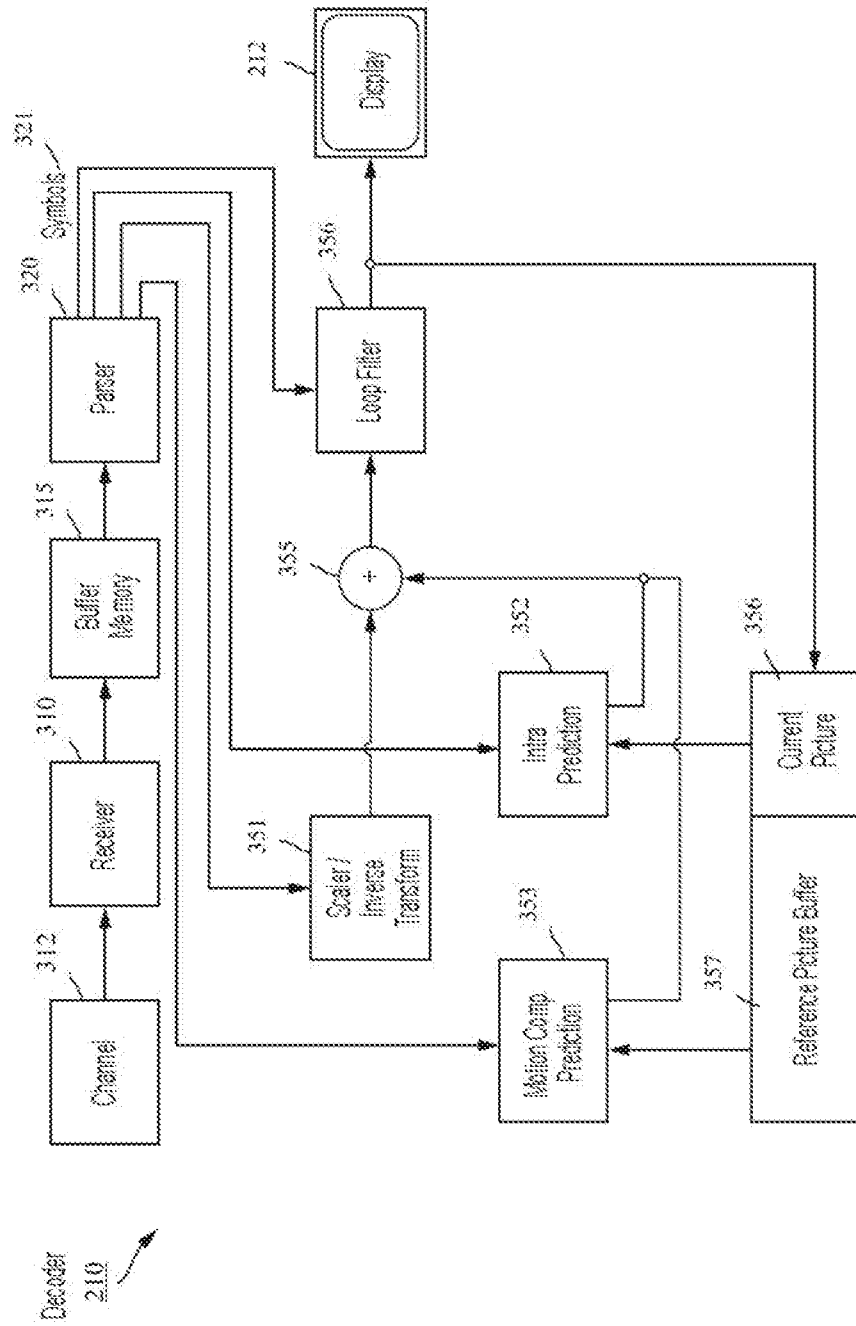


FIG. 4

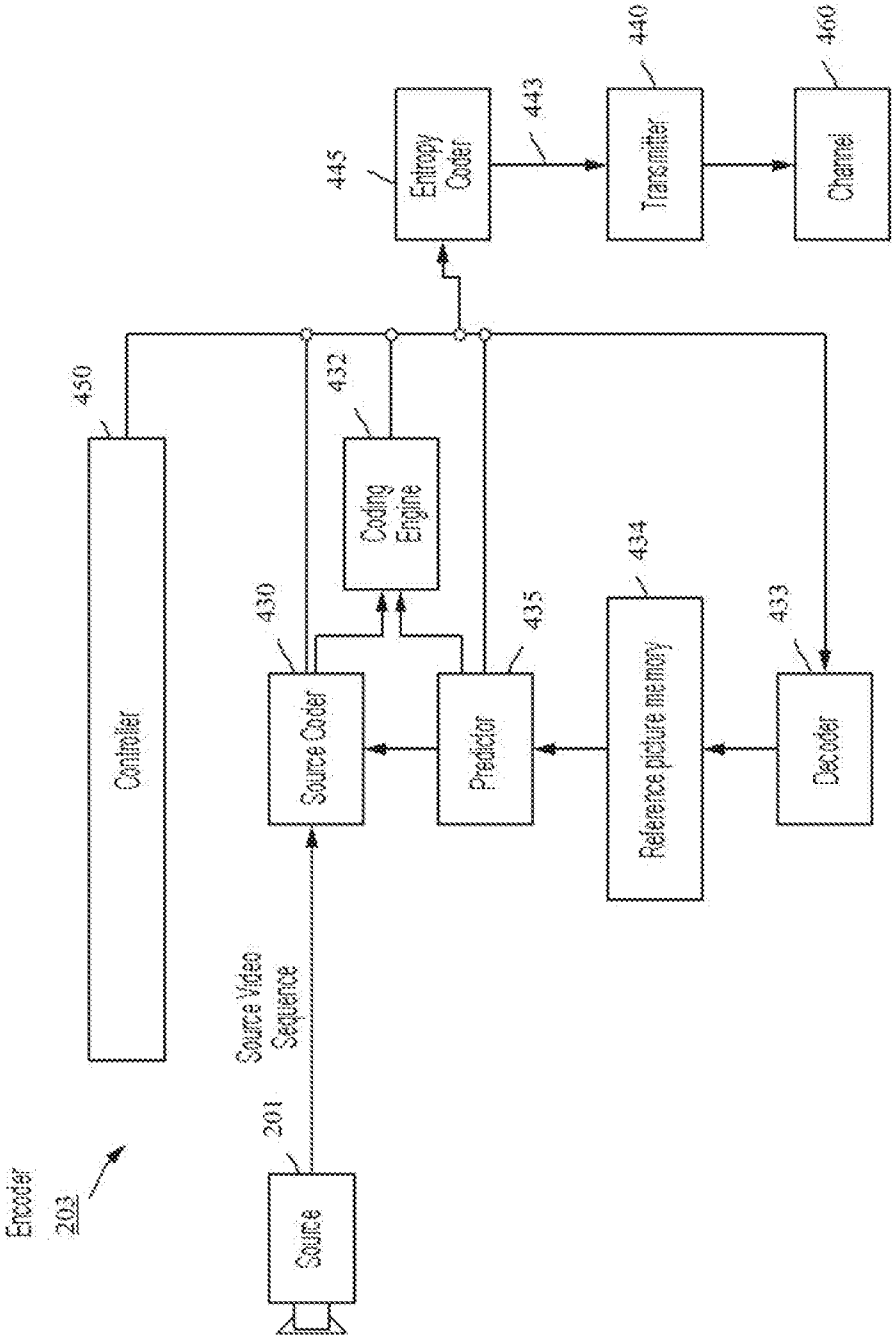


FIG. 5A
(related art)

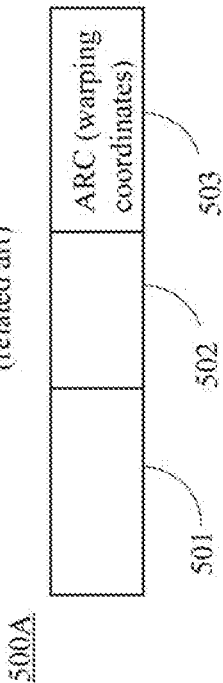


FIG. 5B
(related art)

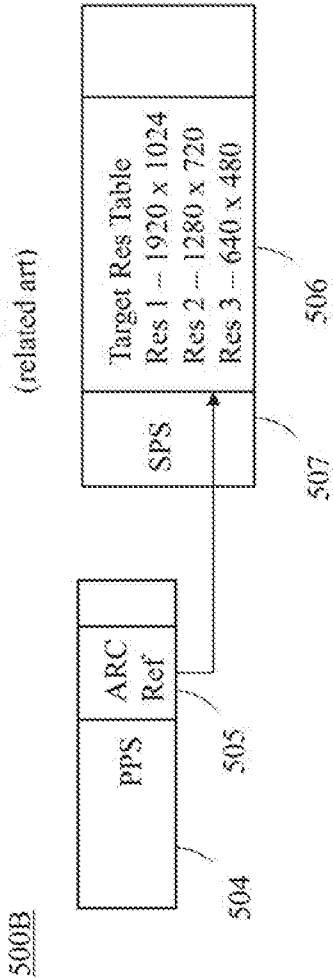


FIG. 5C

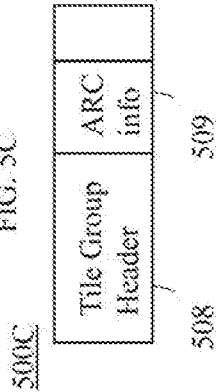


FIG. 5D

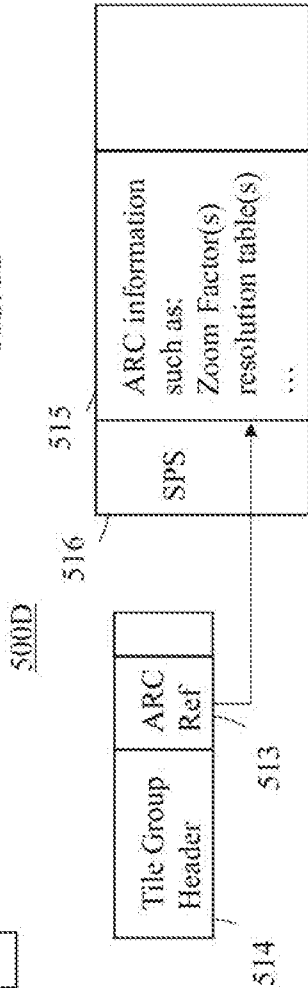


FIG. 5E

500E

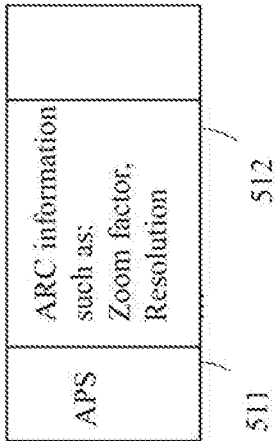


FIG. 6

600

601	tile_group_header() {		
	...		
603	if(adaptive_pic_resolution_change_flag) {		
602	dec_pic_size_idx	u(1)	
	}		
	...		
	}		
610	seq_parameter_set_rbsp() {		Descriptor
	...		
611	adaptive_pic_resolution_change_flag	u(1)	
612	if(adaptive_pic_resolution_change_flag) {		
	output_pic_width_in_luma_samples	ue(v)	
613	output_pic_height_in_luma_samples	ue(v)	
614	reference_pic_size_present_flag	u(1)	
	if(reference_pic_size_present_flag)		
	{		
	reference_pic_width_in_luma_samples	ue(v)	
615	reference_pic_height_in_luma_samples	ue(v)	
	}		
616	num_dec_pic_size_in_luma_samples_minus1	ue(v)	
	for(i = 0; i <= num_dec_pic_size_in_luma_samples_minus1; i++) {		
617	dec_pic_width_in_luma_samples[i]	ue(v)	
	dec_pic_height_in_luma_samples[i]	ue(v)	
	}		
	}		
	...		
	}		

FIG. 7

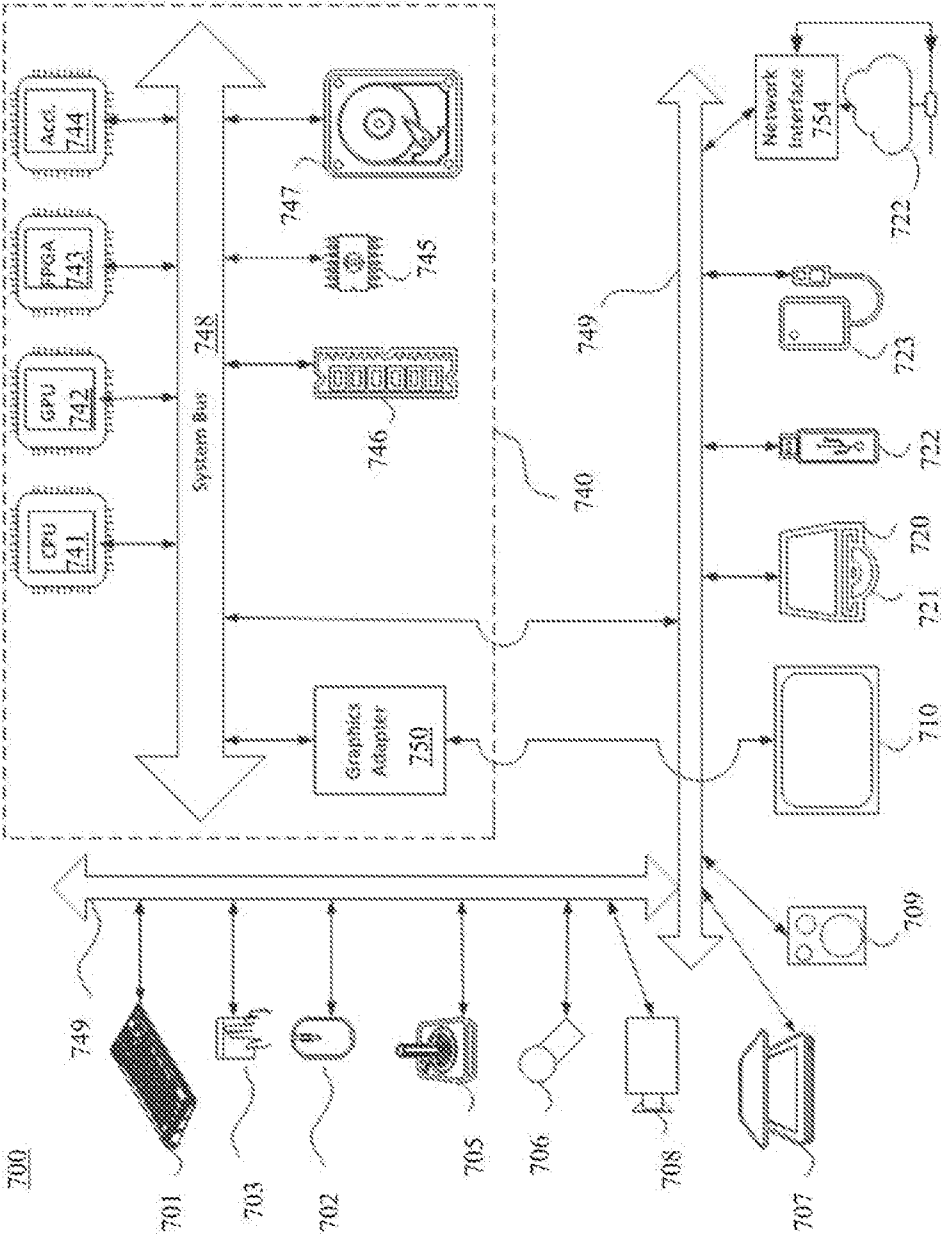


FIG. 8

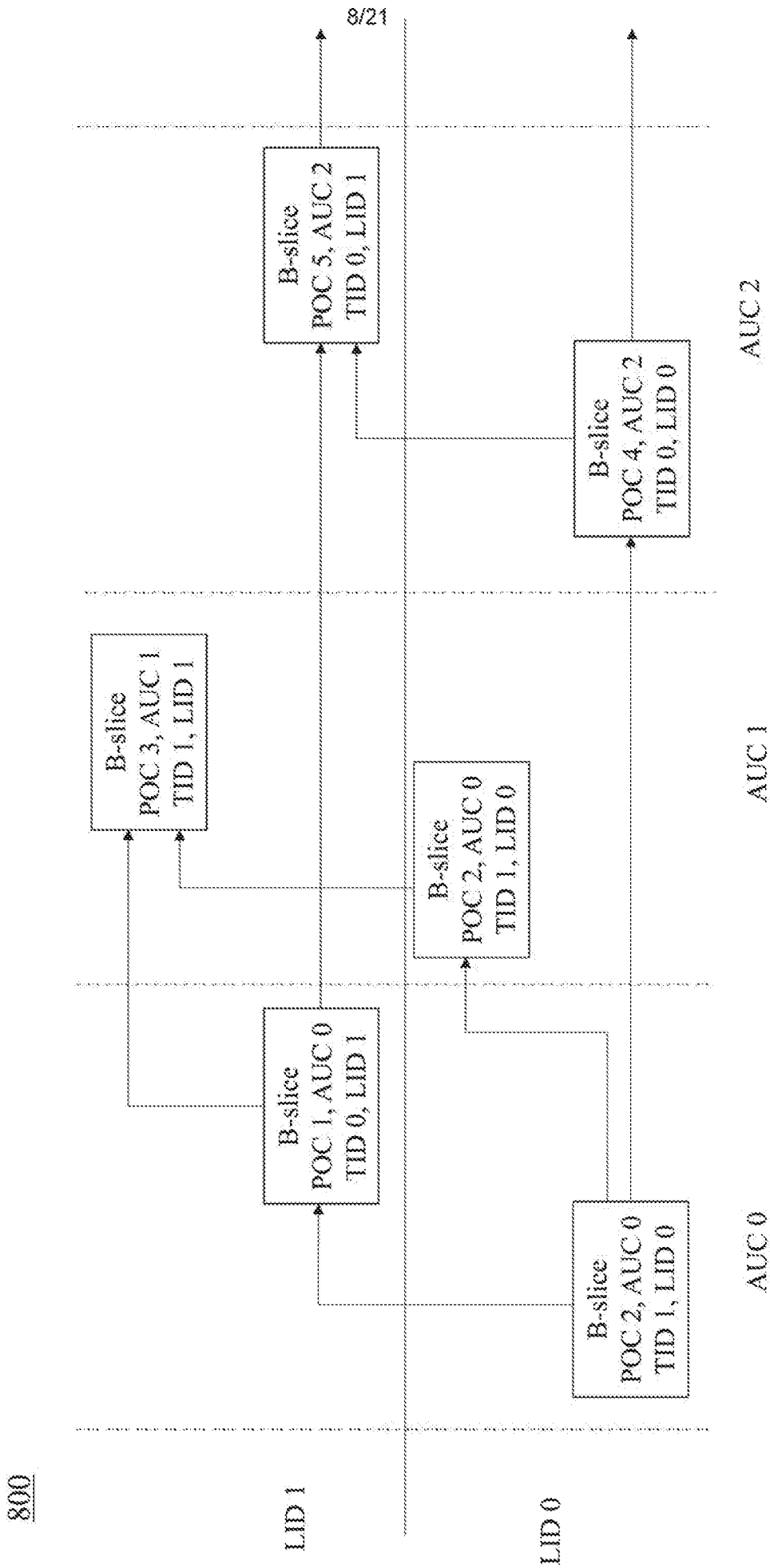
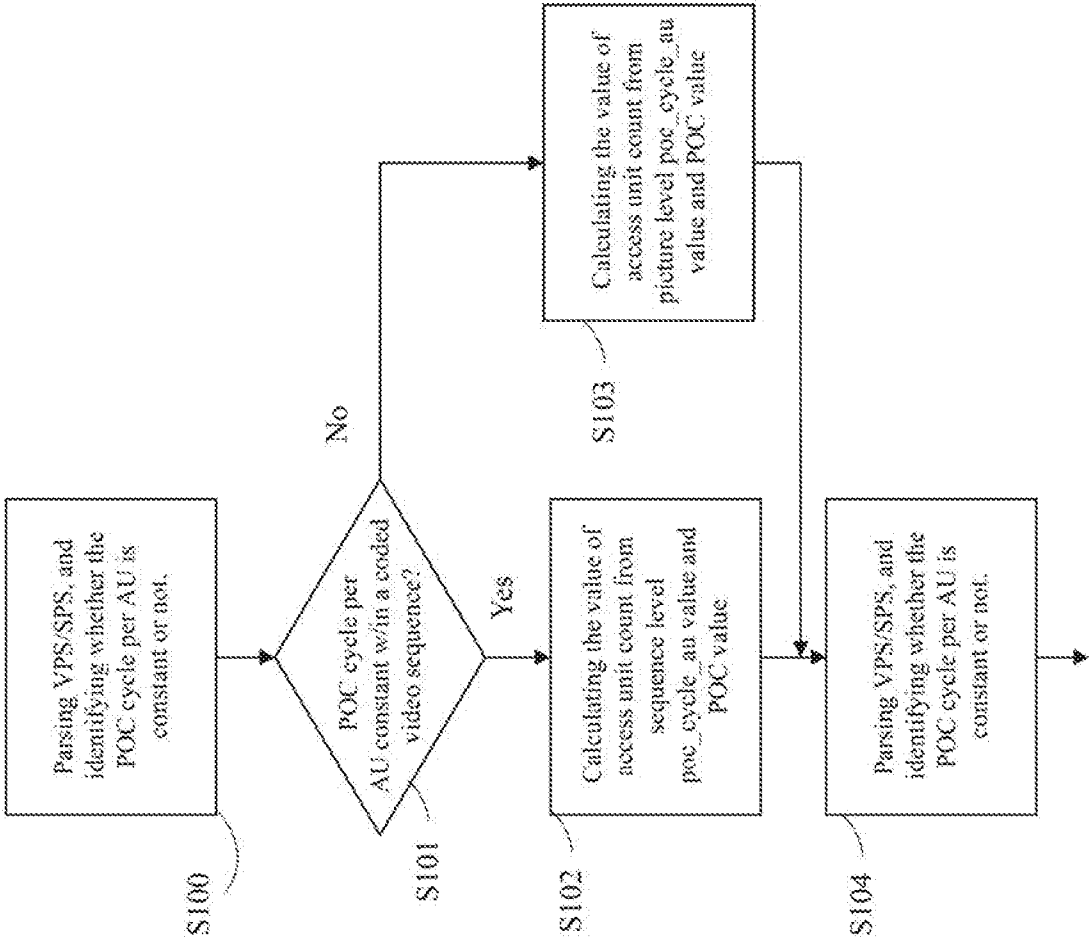


Fig. 9

video_parameter_set_rbsp() {	Descriptor
vps_video_parameter_set_id	u(4)
vps_max_layers_minus1	u(8)
for(i = 0; i <= vps_max_layers_minus1; i++) {	
vps_included_layer_id[i]	u(7)
vps_reserved_zero_bit	u(1)
}	
vps_constraint_info_present_flag	u(1)
vps_constant_poc_cycle_per_au	u(1)
if(vps_constant_poc_cycle_per_au)	
vps_poc_cycle_au	u(8)
...	
}	
slice_header() {	Descriptor
slice_pic_parameter_set_id	ue(v)
if(rect_slice_flag NumBricksInPic > 1)	
slice_address	u(v)
if(!rect_slice_flag && !single_brick_per_slice_flag)	
num_bricks_in_slice_minus1	ue(v)
slice_type	ue(v)
if(NalUnitType == GRA_NUT)	
recovery_poc_cnt	se(v)
slice_pic_order_cnt_lsb	u(v)
...	
if(!vps_constant_poc_cycle_per_au)	
slice_poc_cycle_au	u(8)
}	

Fig. 10



1000

Fig.11

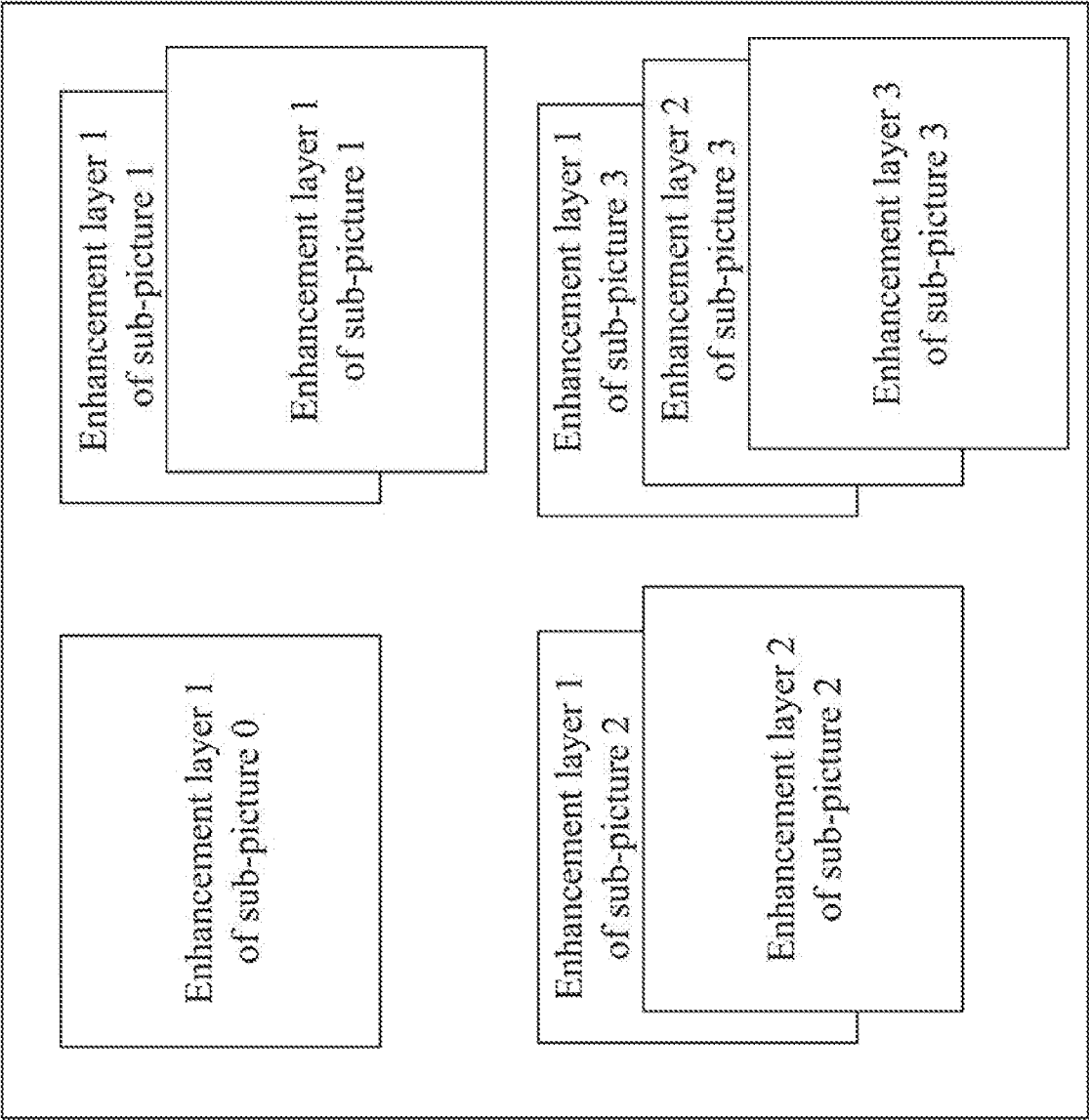


FIG. 12

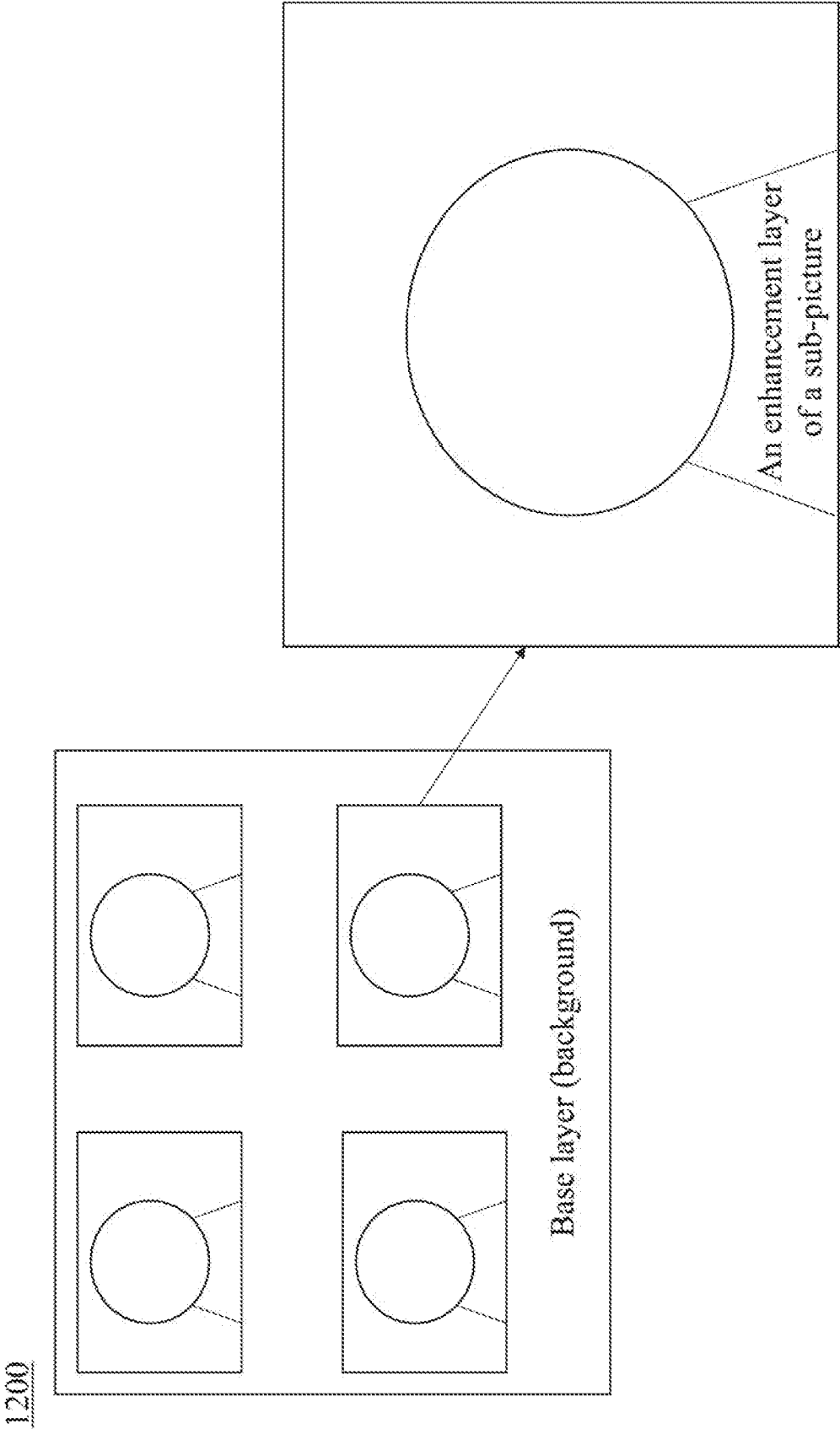


FIG. 13

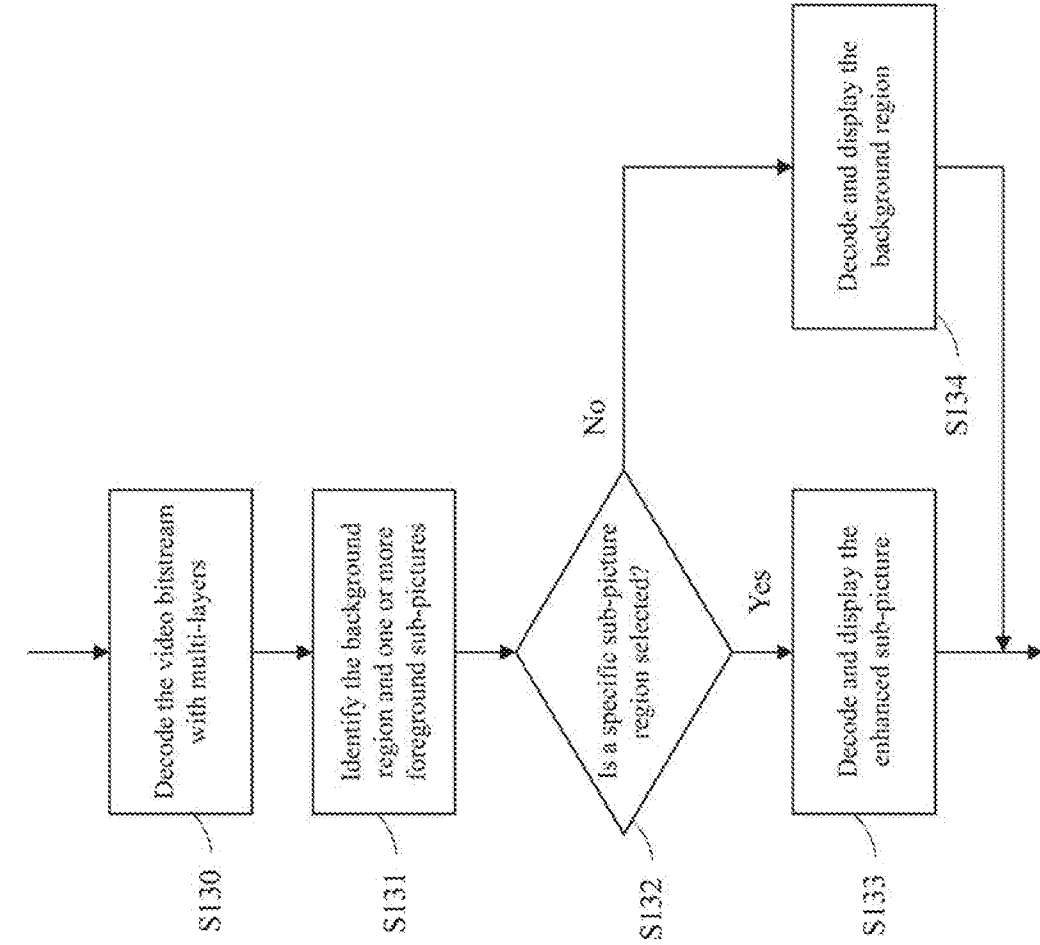
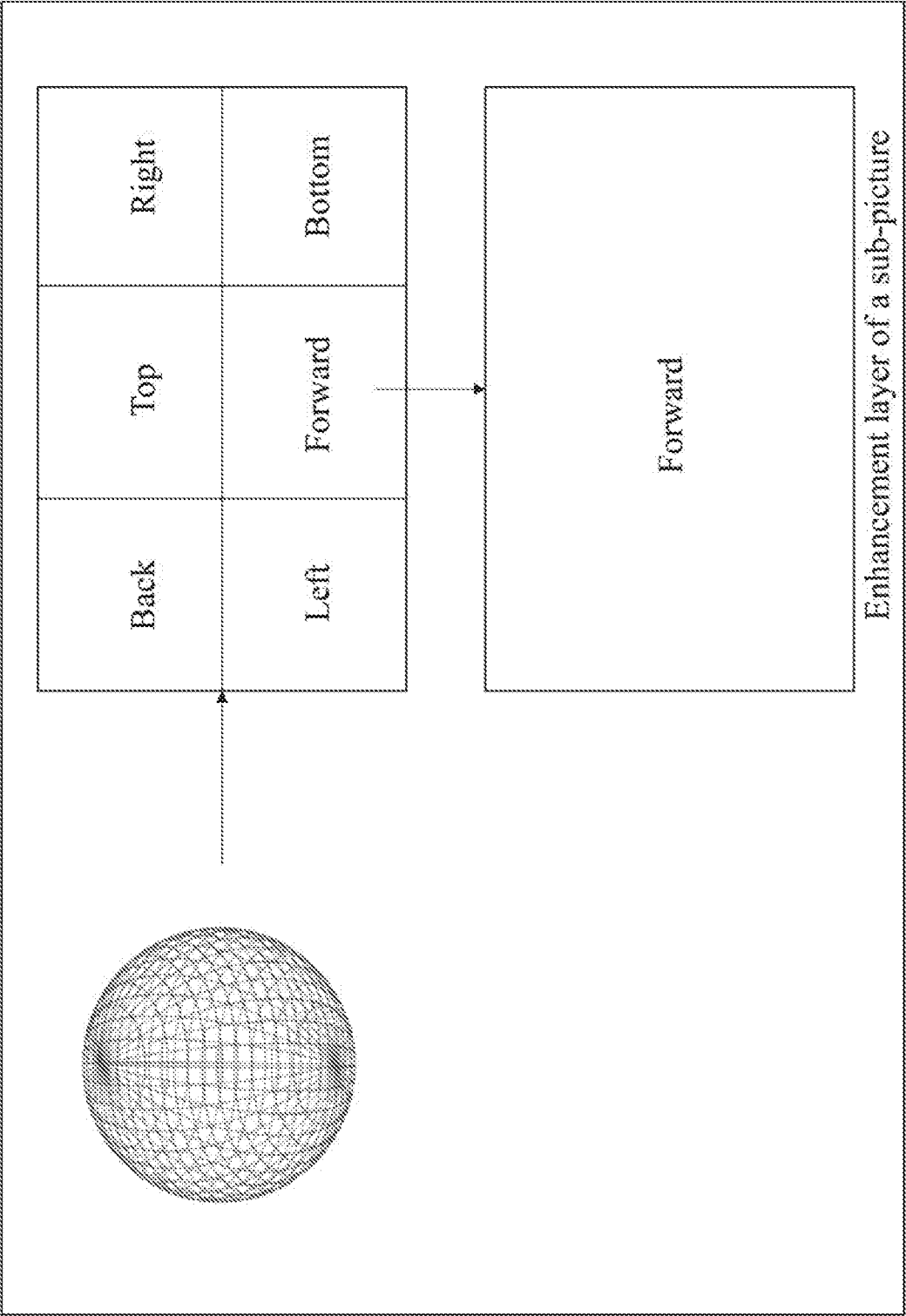


FIG. 14

1400



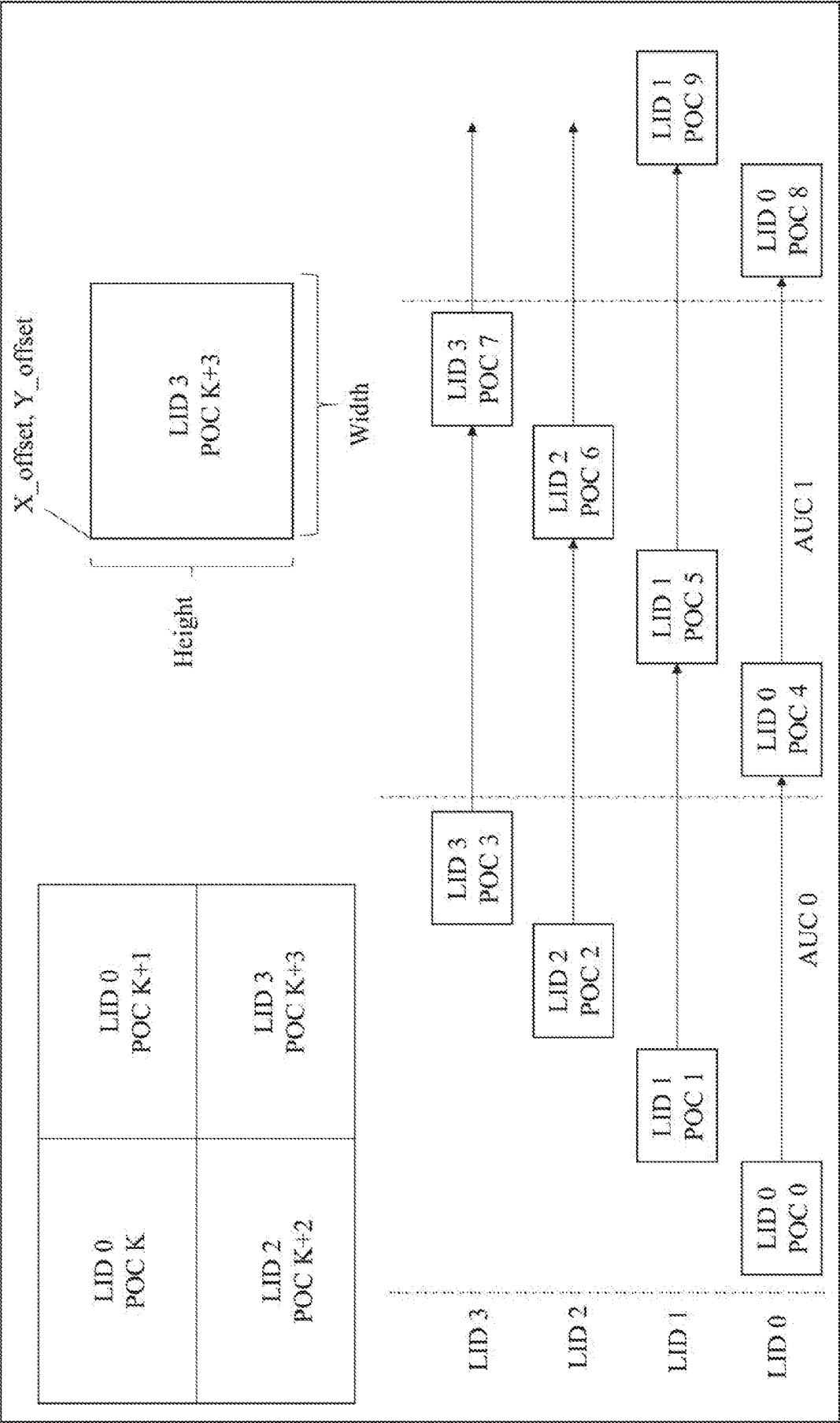


Fig. 15

1600

Fig. 16

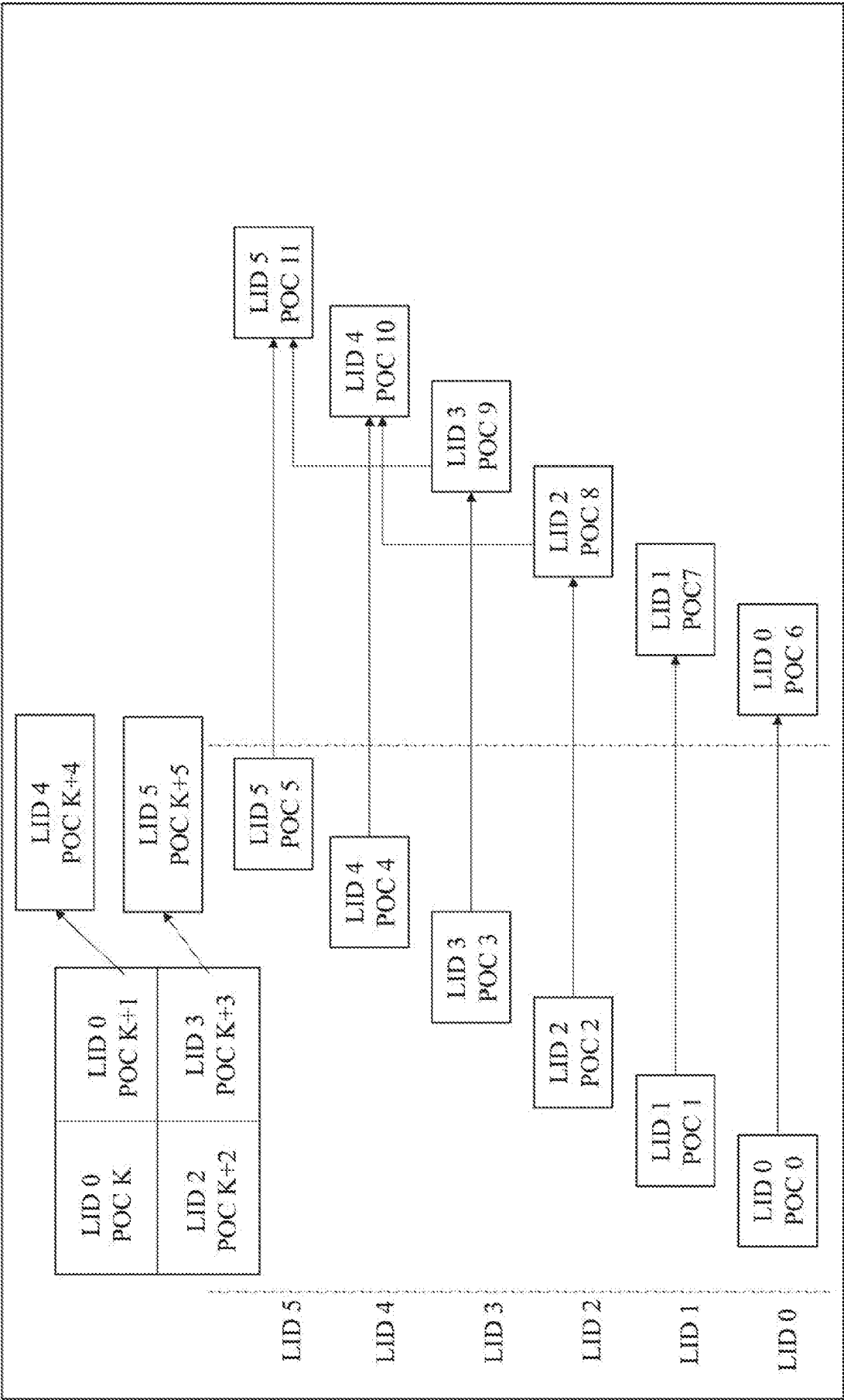


Fig. 17

1700

	Descriptor
video_parameter_set_rbsp() {	
vps_video_parameter_set_id	u(4)
vps_max_layers_minus1	u(8)
for(i = 0; i <= vps_max_layers_minus1; i++) {	
vps_included_layer_id[i]	u(7)
vps_reserved_zero_bit	u(1)
}	
...	
vps_sub_picture_dividing_flag	u(1)
if(vps_sub_picture_dividing_flag) {	
vps_full_pic_width_in_luma_samples	ue(v)
vps_full_pic_height_in_luma_samples	ue(v)
}	
...	
}	

	Descriptor
seq_parameter_set_rbsp() {	
sps_decoding_parameter_set_id	u(4)
sps_video_parameter_set_id	u(4)
sps_max_sub_layers_minus1	u(3)
...	
pic_width_in_luma_samples	ue(v)
pic_height_in_luma_samples	ue(v)
if(vps_sub_picture_dividing_flag) {	
pic_offset_x	ue(v)
pic_offset_y	ue(v)
}	
...	
}	

FIG. 18

1800

sub_region_partitioning_info(payloadSize) {	Descriptor
num_sub_region	uc(v)
num_layers	uc(v)
for (i = 0; i <= num_layers; i++)	
layer_id [i]	uc(v)
for (i = 1; i <= num_layers; i++)	
for (j = 0; j < i; j++)	
direct_dependency_flag [i] [j]	u(1)
for(i = 0; i < num_sub_region; i++) {	
num_layers_for_region [i]	uc(v)
for(i = 0; j < num_layers_for_region [i]; j++)	
sub_region_layer_id [i] [j]	uc(v)
sub_region_offset_x [i]	uc(v)
sub_region_offset_y [i]	uc(v)
sub_region_width [i]	uc(v)
sub_region_height [i]	uc(v)
}	
...	
}	

FIG. 19

1900

	Descriptor
video_parameter_set_rbsp() {	
...	
vps_max_layers_minus1	u(6)
num_output_layer_sets	ue(v)
num_profile_tier_level	ue(v)
for(i = 0; i < num_profile_tier_level; i++)	
profile_tier_level (vps_max_sub_layers_minus1)	
for(i = 0; i < num_output_layer_sets; i++)	
for(j = 0; j < NumLayersInList [i]; j++) {	
output_layer_flag[i][j]	u(1)
profile_tier_level_idx[i][j]	u(v)
}	
...	
}	

FIG. 20

2000

video parameter set_rbsp() {	Descriptor
...	
vps_max_layers_minus1	u(6)
if(vps_max_layers_minus1>0) {	
num_output_layer_sets	ue(v)
num_profile_tier_level	ue(v)
}	
for(i = 0; i < num_profile_tier_level; i++)	
profile_tier_level(vps_max_sub_layers_minus1)	
for(i = 0; i < num_output_layer_sets; i++)	
vps_output_layers_mode[i]	u(2)
vps_ptl_signal_flag[i]	u(1)
for(j = 0; j < NumLayersInIdList [i]; j++) {	
if(vps_output_layers_mode[i] == 2)	
output_layer_flag[i][j]	u(1)
if(vps_pts_signal_flag[i])	
profile_tier_level_idx[i][j]	u(v)
}	
}	
...	
}	

Fig. 21

	Descriptor
video_parameter_set_rbsp() {	
...	
vps_max_layers_minus1	u(6)
if(vps_max_layers_minus1 > 0) {	
num_output_layer_sets	ue(v)
num_profile_tier_level	ue(v)
}	
max_subpics_minus1	u(8)
for(i = 0; i < max_subpics_minus1; i++) {	
sub_pic_id[i]	u(8)
}	
for(i = 0; i < num_profile_tier_level; i++)	
profile_tier_level(vps_max_sub_layers_minus1)	
for(i = 0; i < num_output_layer_sets; i++)	
vps_output_layers_mode[i]	u(2)
vps_ptl_signal_flag[i]	u(1)
for(j = 0; j < NumLayersInList [i]; j++) {	
num_output_subpics_layer[i][j]	ue(v)
for(k = 0; k < num_output_subpic_layers[i][j]; k++)	
sub_pic_id_layer[i][j][k]	u(8)
if(vps_output_layers_mode[i] == 2)	
output_layer_flag[i][j]	u(1)
if(vps_pts_signal_flag[i])	
profile_tier_level_idx[i][j]	u(v)
}	
}	
}	
...	
}	