

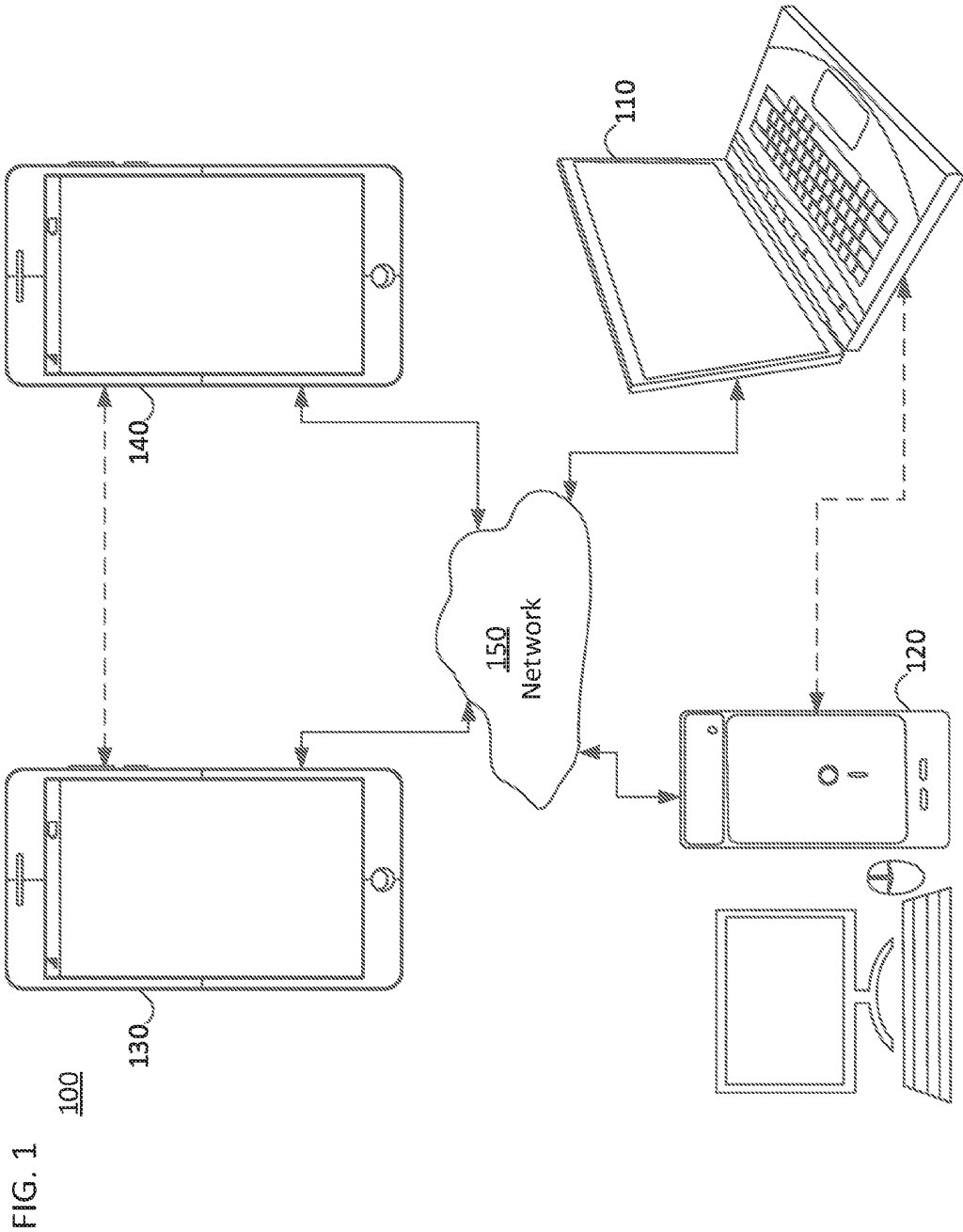
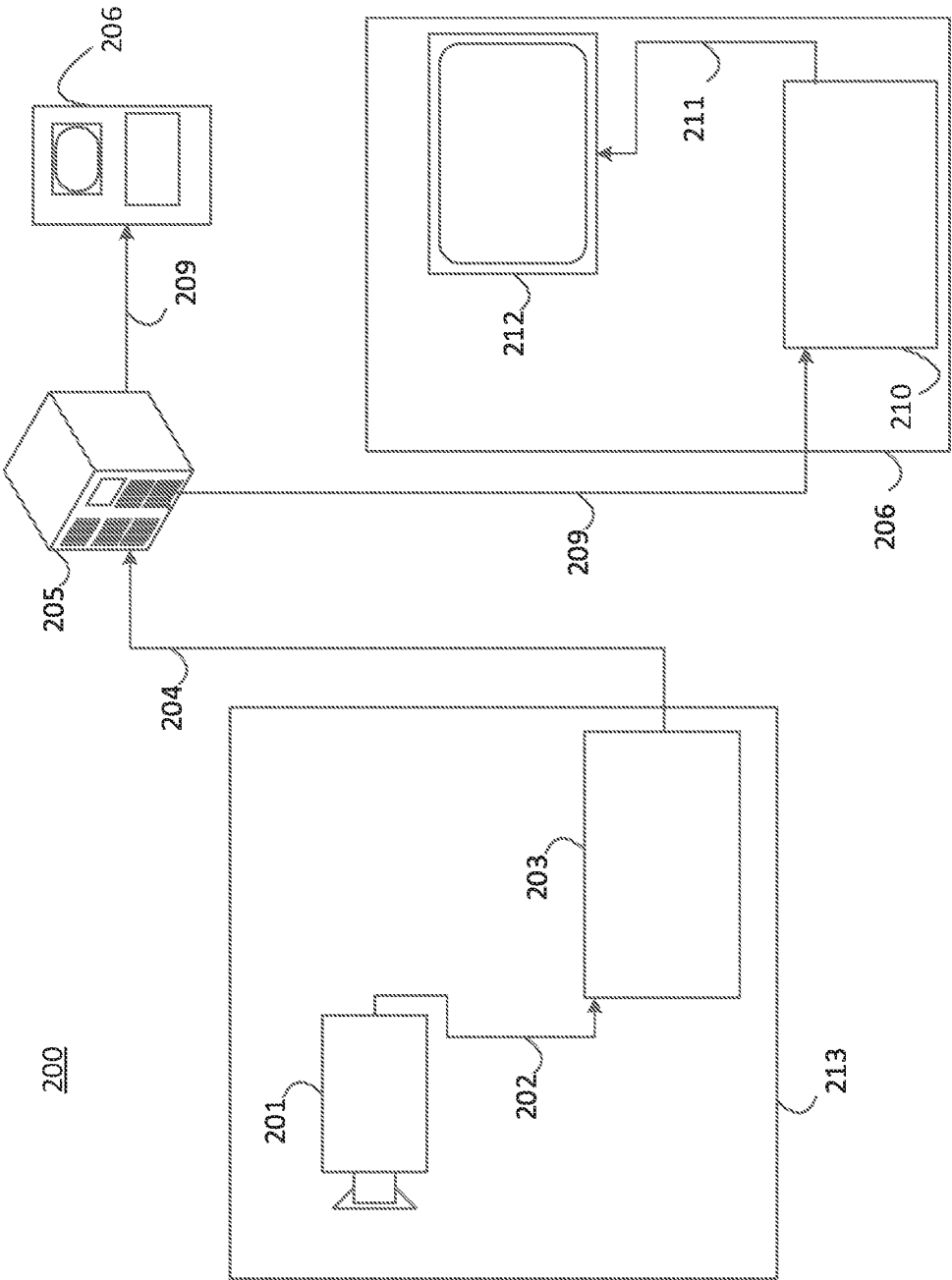


FIG. 2



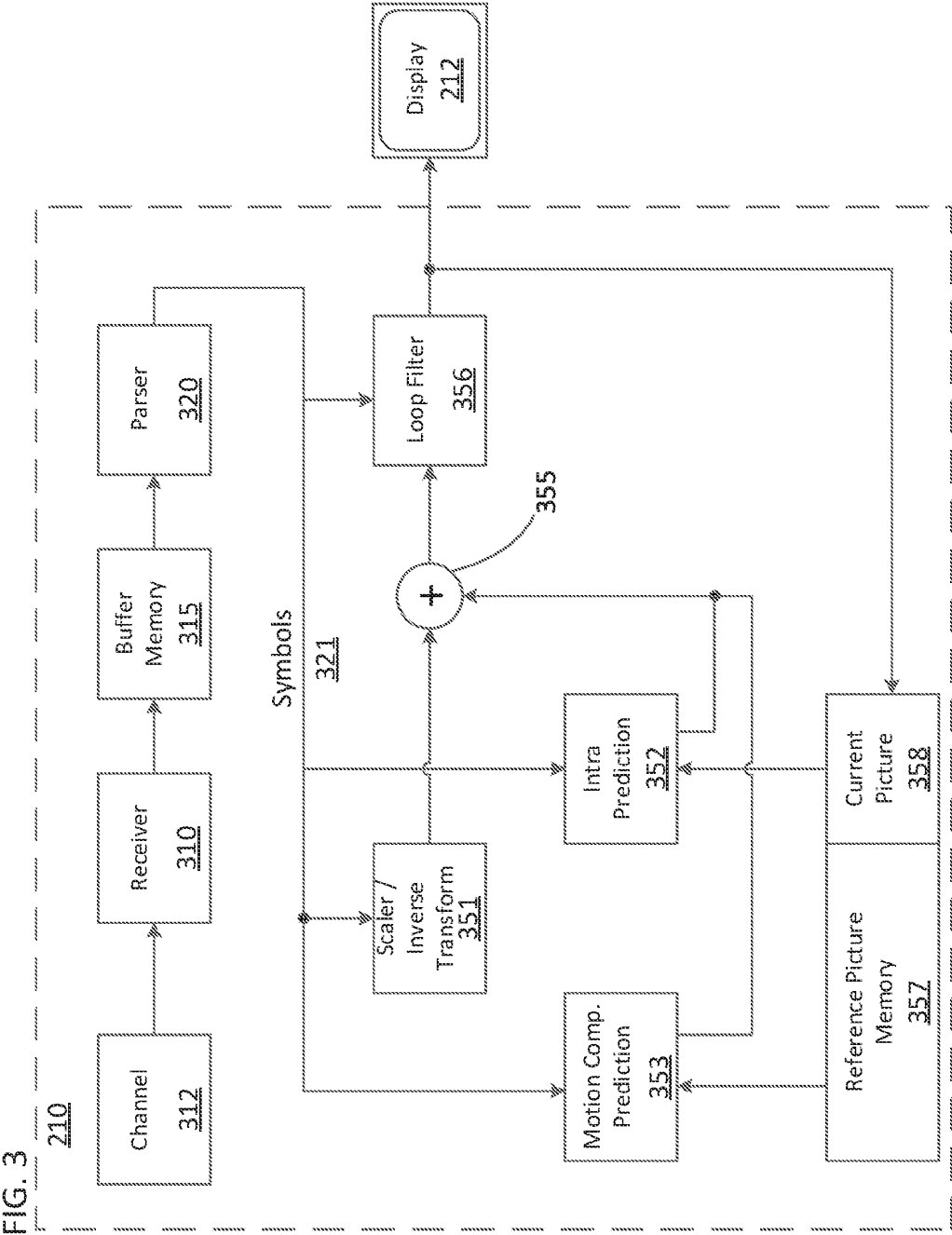


FIG. 4 203

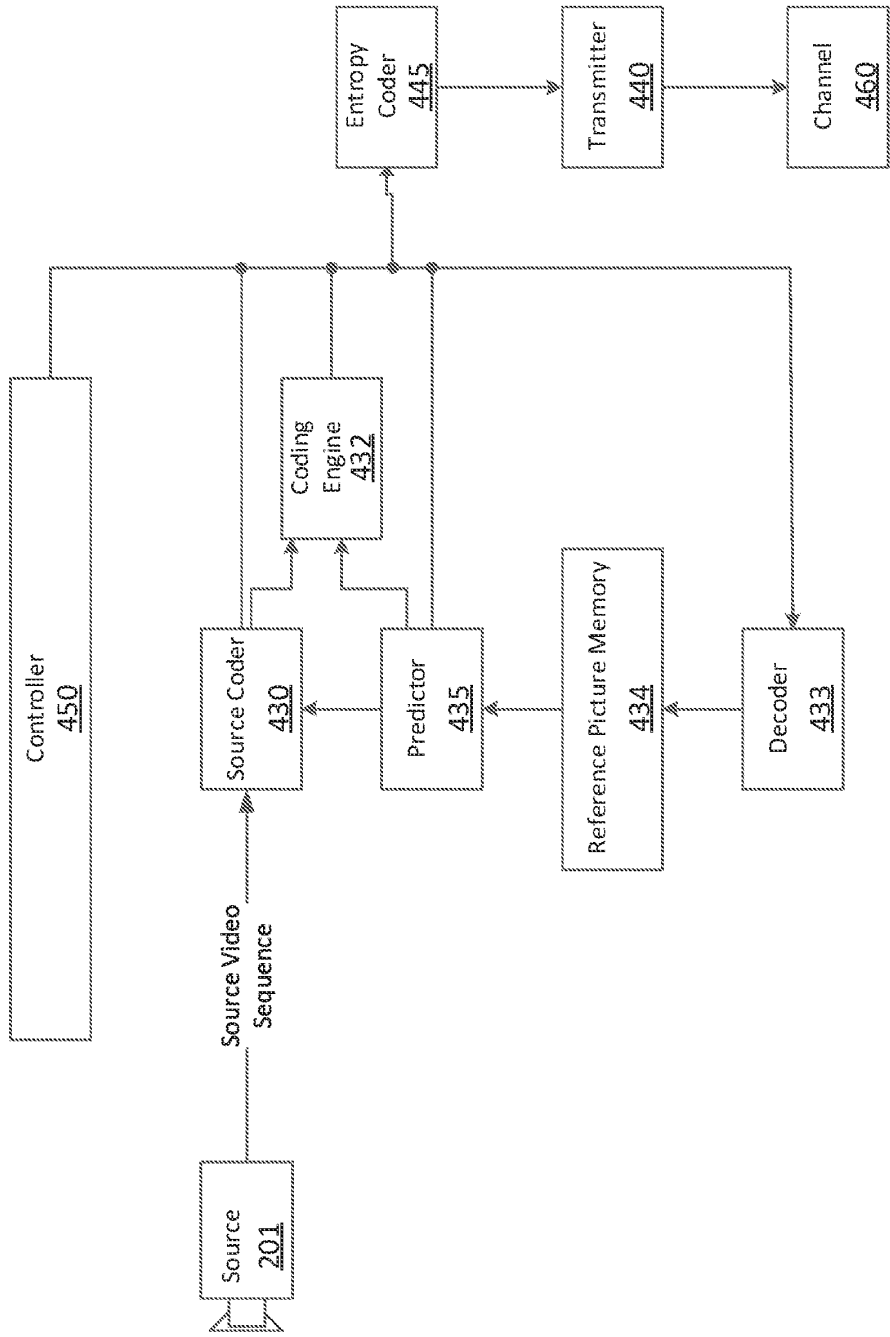


FIG. 5A

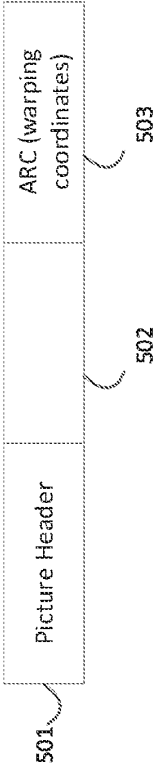


FIG. 5B

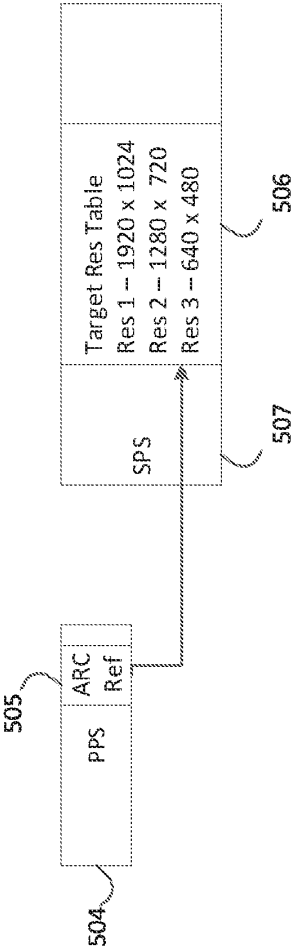


FIG. 6A

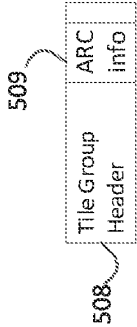


FIG. 6B

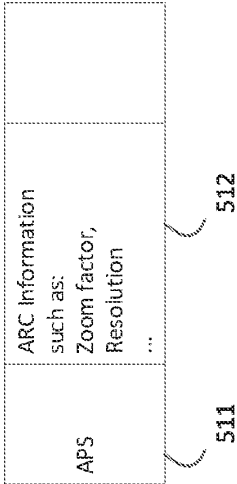


FIG. 6C

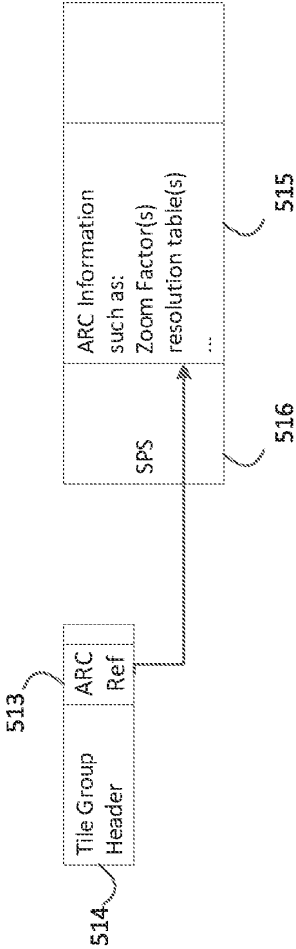


FIG. 7A

600	tile_group_header() {	
	...	
603	if(adaptive_pic_resolution_change_flag) {	
602	dec_pic_size_idx	u(1)
	}	
	...	
	}	

FIG. 7B

610	seq_parameter_set_rbsp() {	Descriptor
	...	
611	adaptive_pic_resolution_change_flag	u(1)
612	if(adaptive_pic_resolution_change_flag) {	
613	output_pic_width_in_luma_samples	ue(v)
613	output_pic_height_in_luma_samples	ue(v)
	reference_pic_size_present_flag	u(1)
614	if(reference_pic_size_present_flag)	
	{	
615	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)
617	dec_pic_height_in_luma_samples[i]	ue(v)
	}	
	}	
	...	
	}	

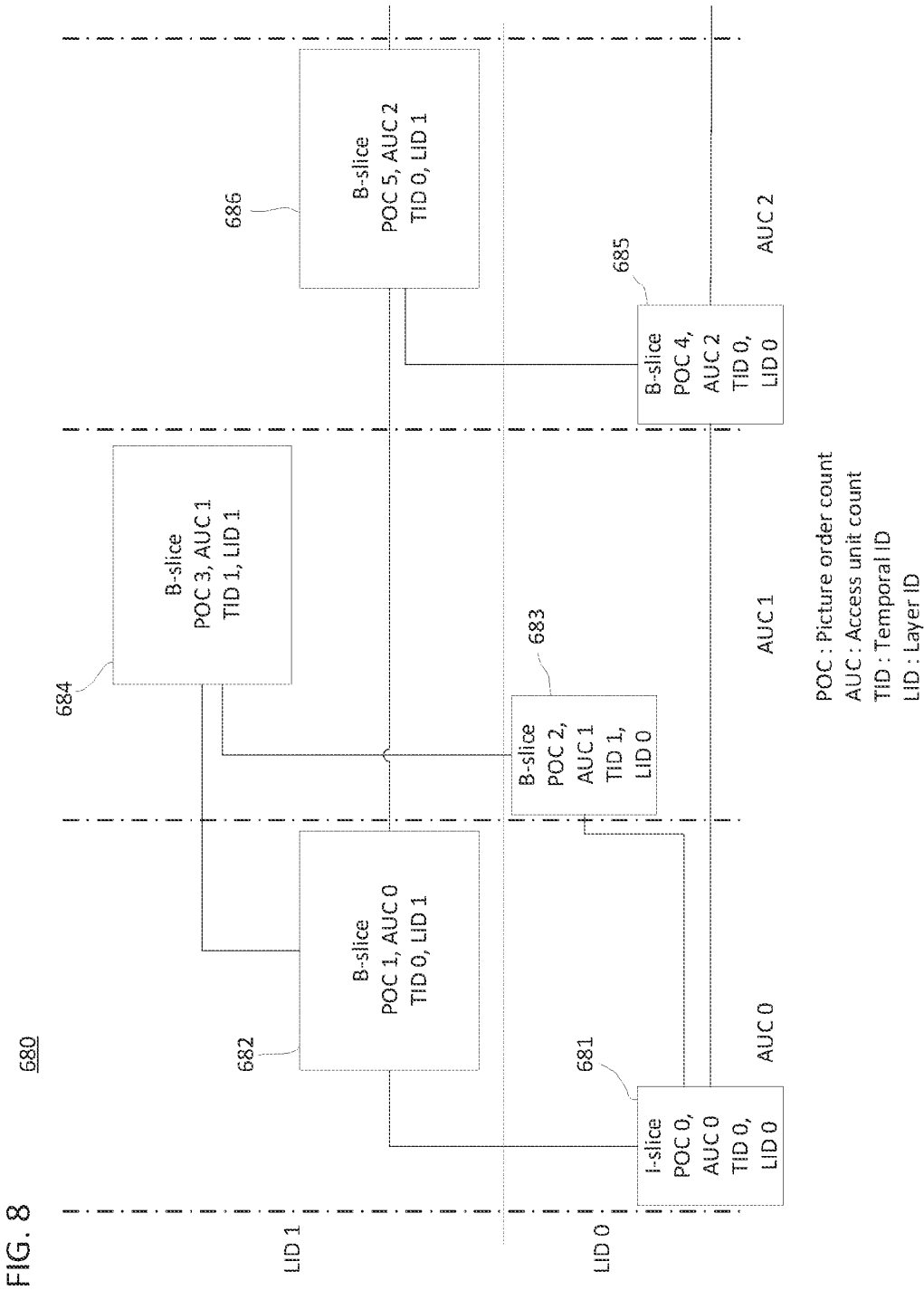


FIG. 9A

630	video_parameter_set_rbsp() { vps_video_parameter_set_id vps_max_layers_minus1 for(i = 0; i <= vps_max_layers_minus1; i++) { vps_included_layer_id[i] vps_reserved_zero_bit } vps_constraint_info_present_flag vps_constant_poc_cycle_per_au if(vps_constant_poc_cycle_per_au) vps_poc_cycle_au ... }	Descriptor u(4) u(8) u(7) u(1) u(1) u(1) u(8)
634		
632		

FIG. 9B

640	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(NaUnitType == GRA_NUT)	
	recovery_poc_cnt	se(v)
	slice_pic_order_cnt_lsb	u(v)
	...	
	if(!poc_constant_poc_cycle_per_au)	
642	slice_poc_cycle_au	u(8)

FIG. 10

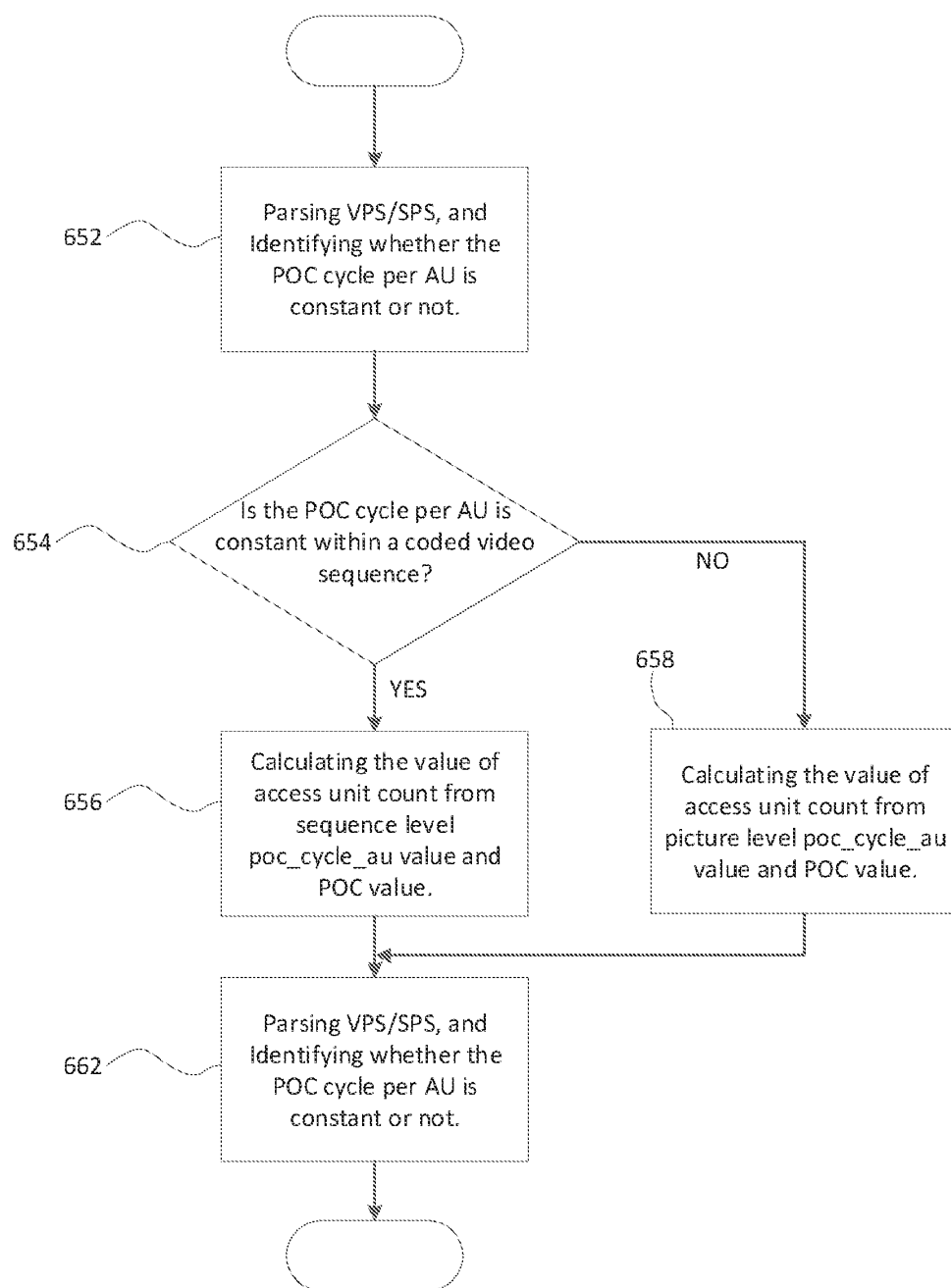


FIG. 11

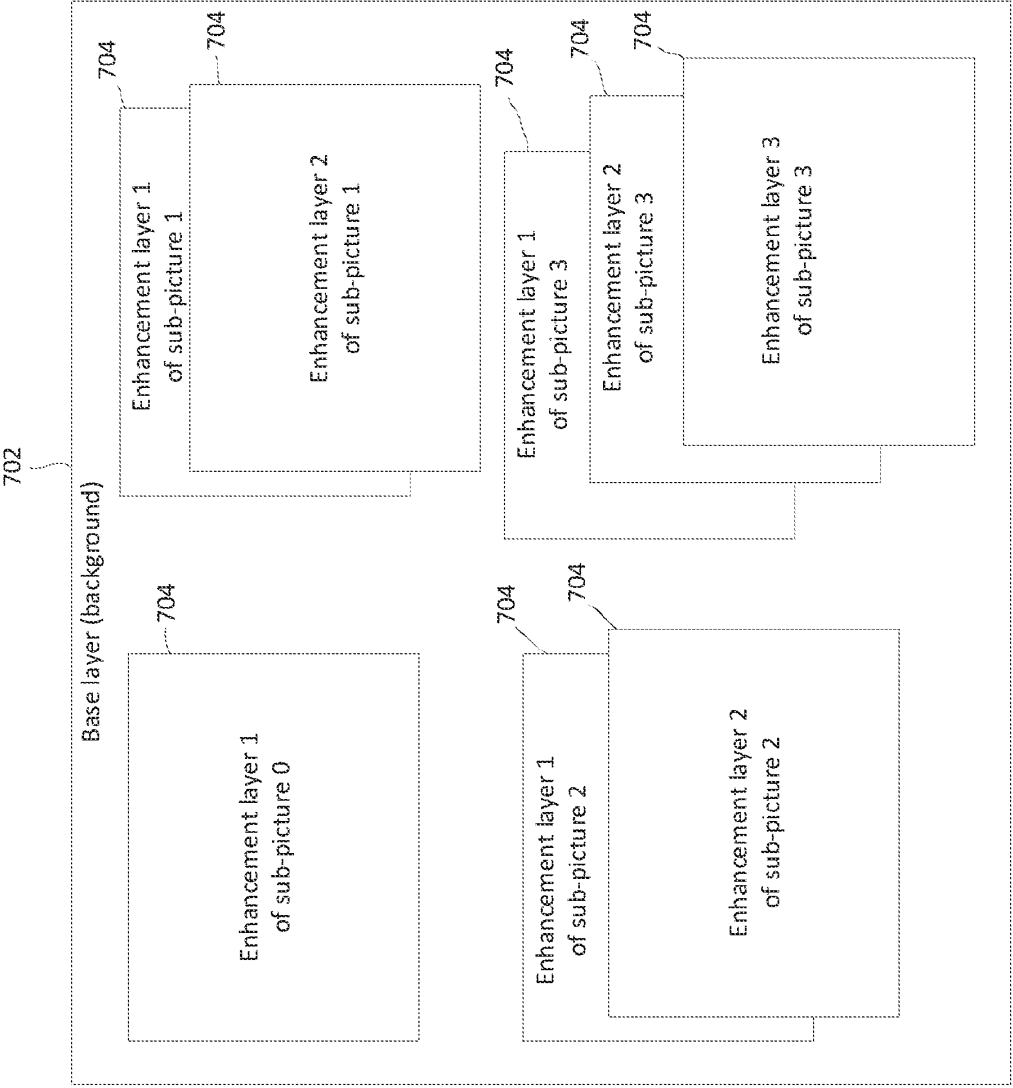


FIG. 12

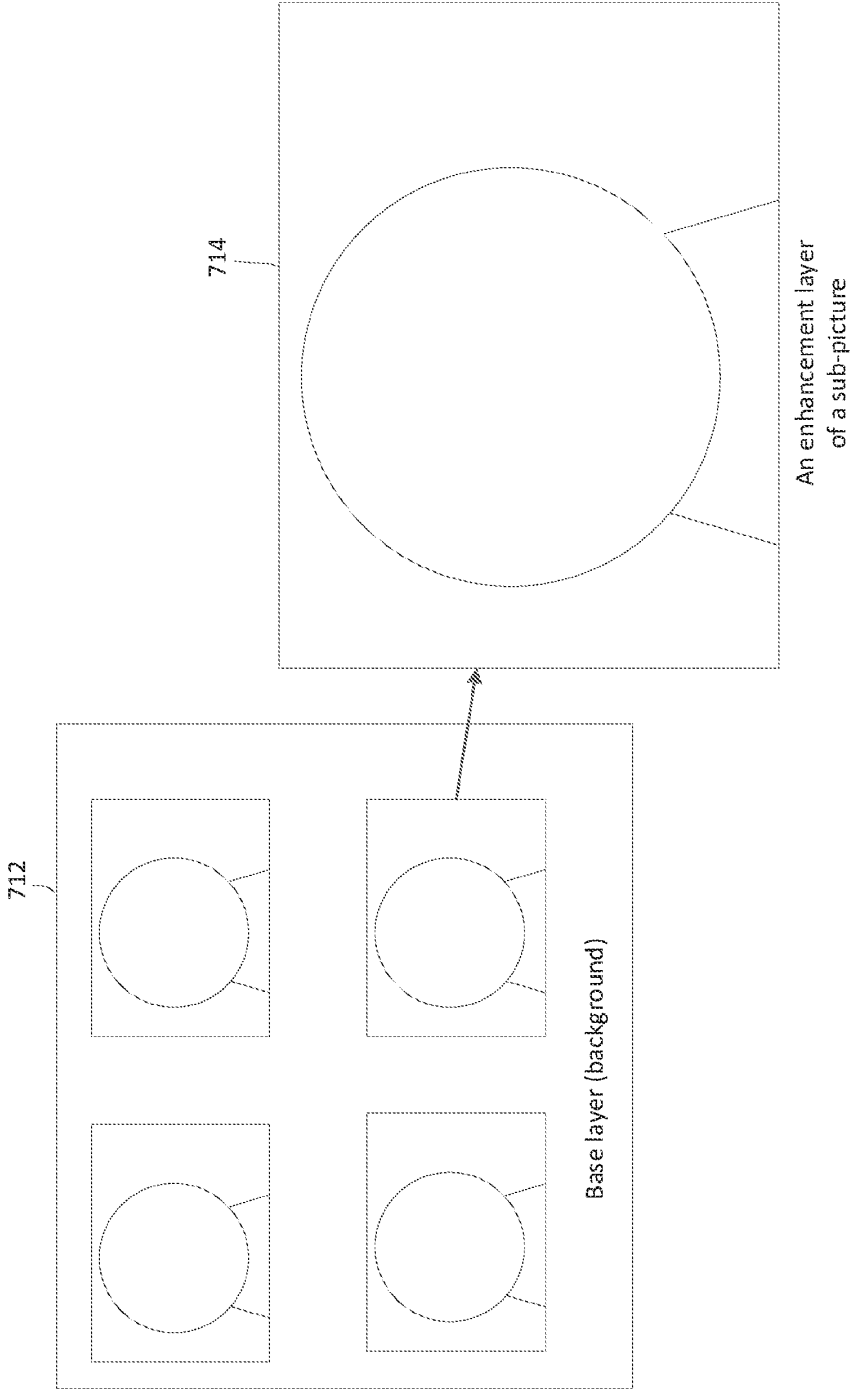
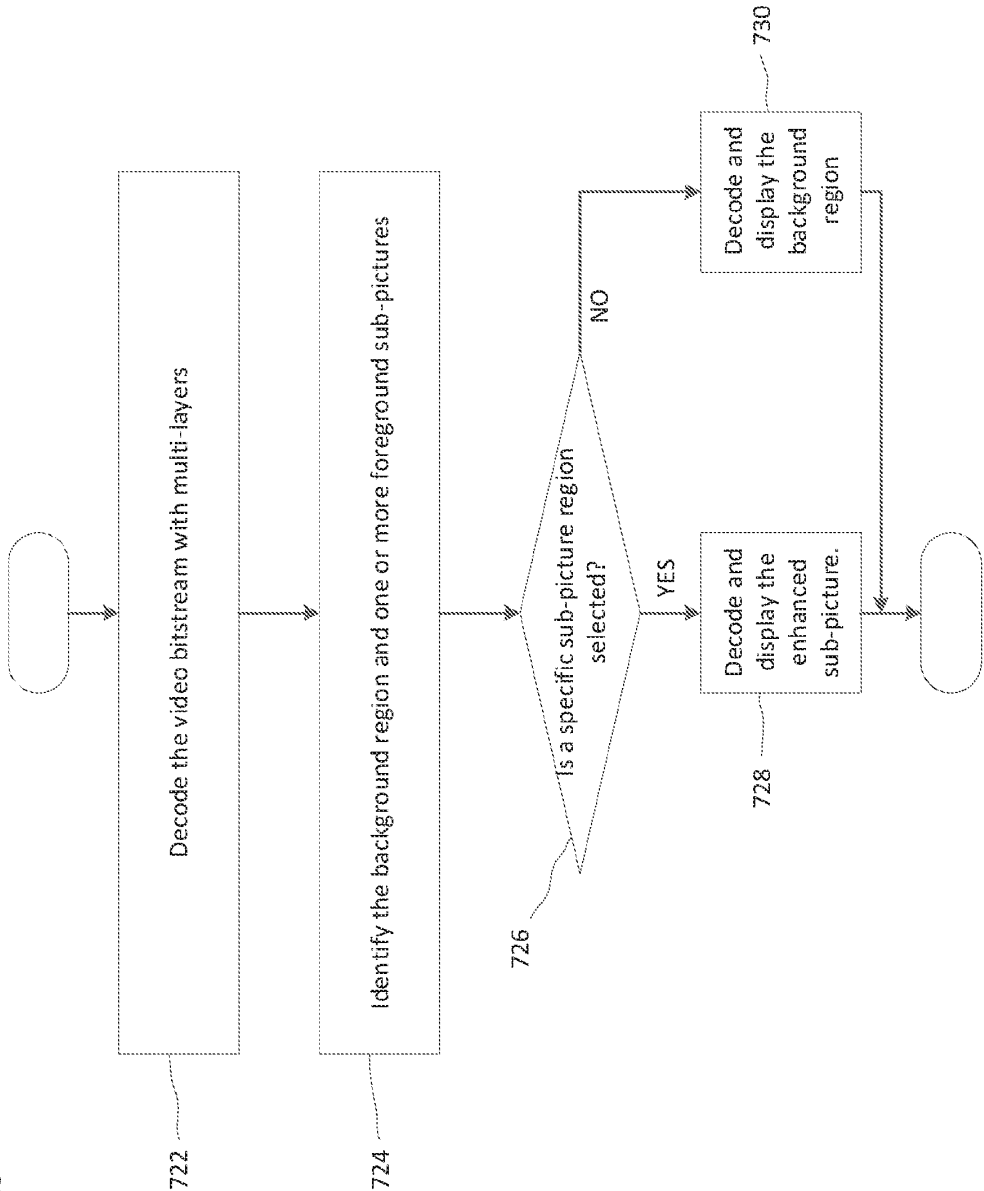


FIG. 13



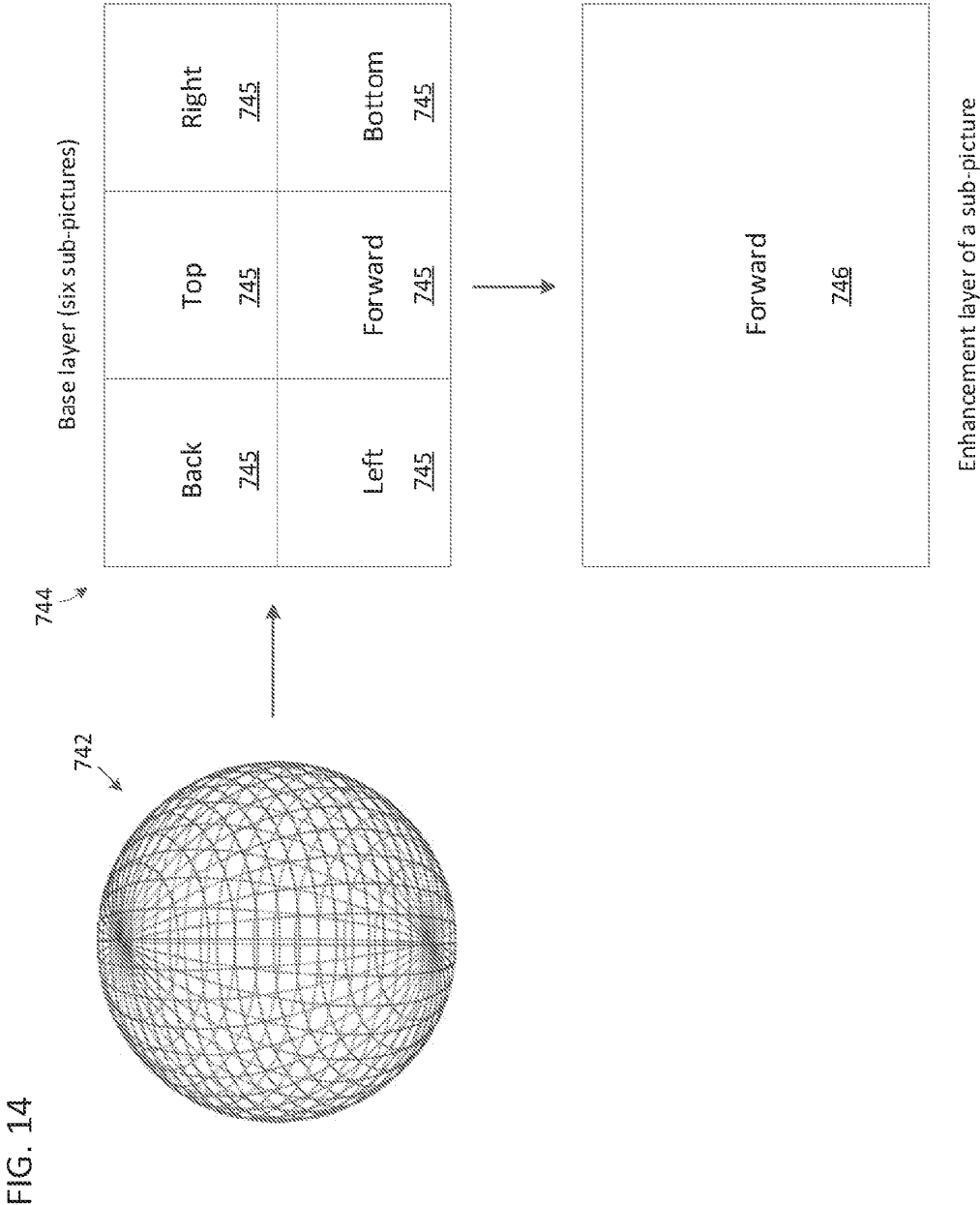


FIG. 15A

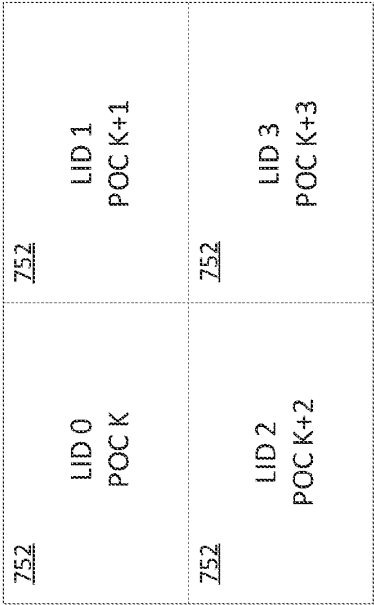


FIG. 15B

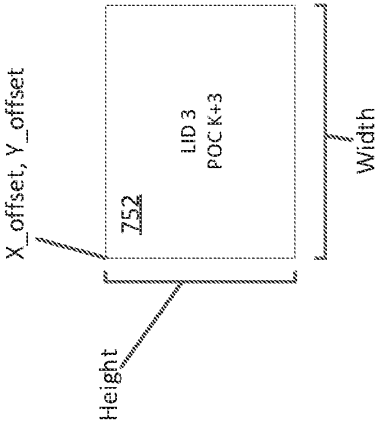


FIG. 16

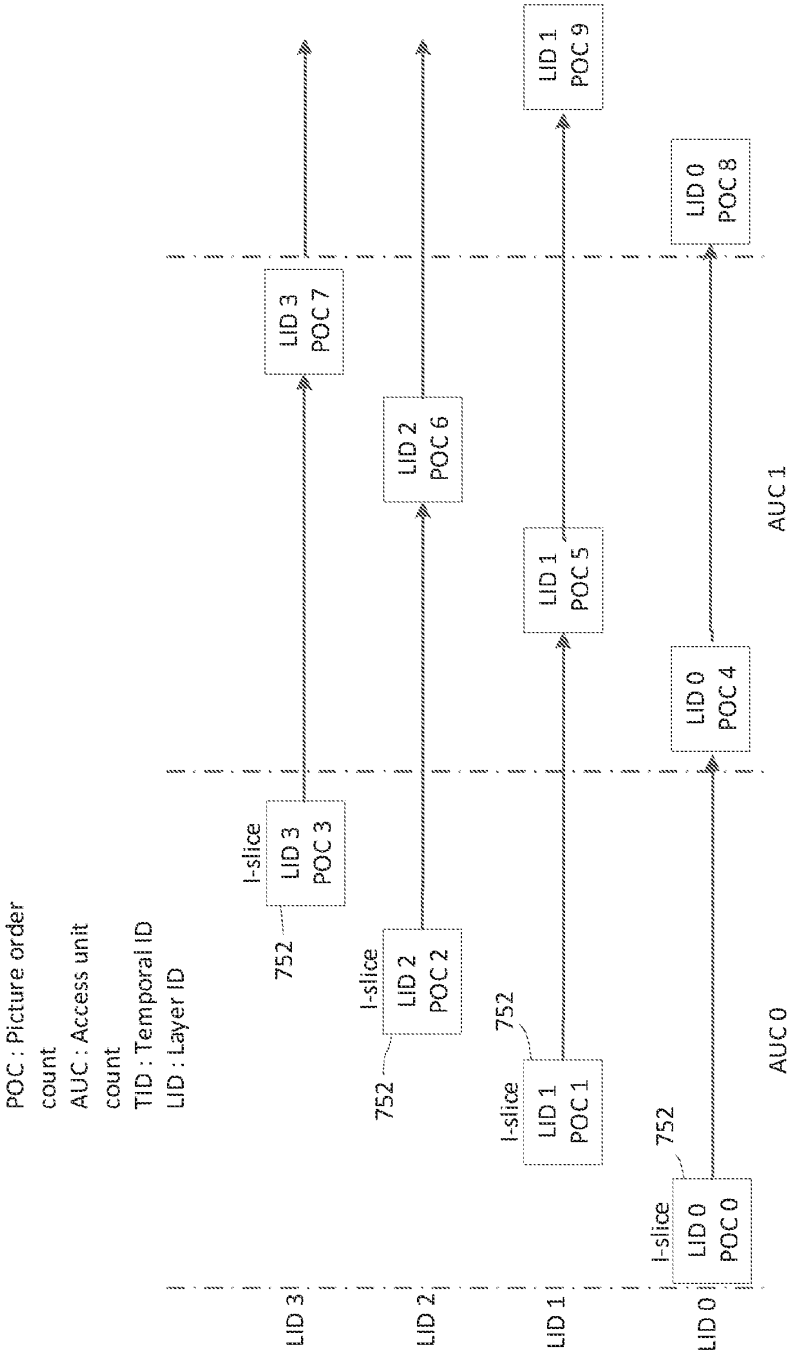
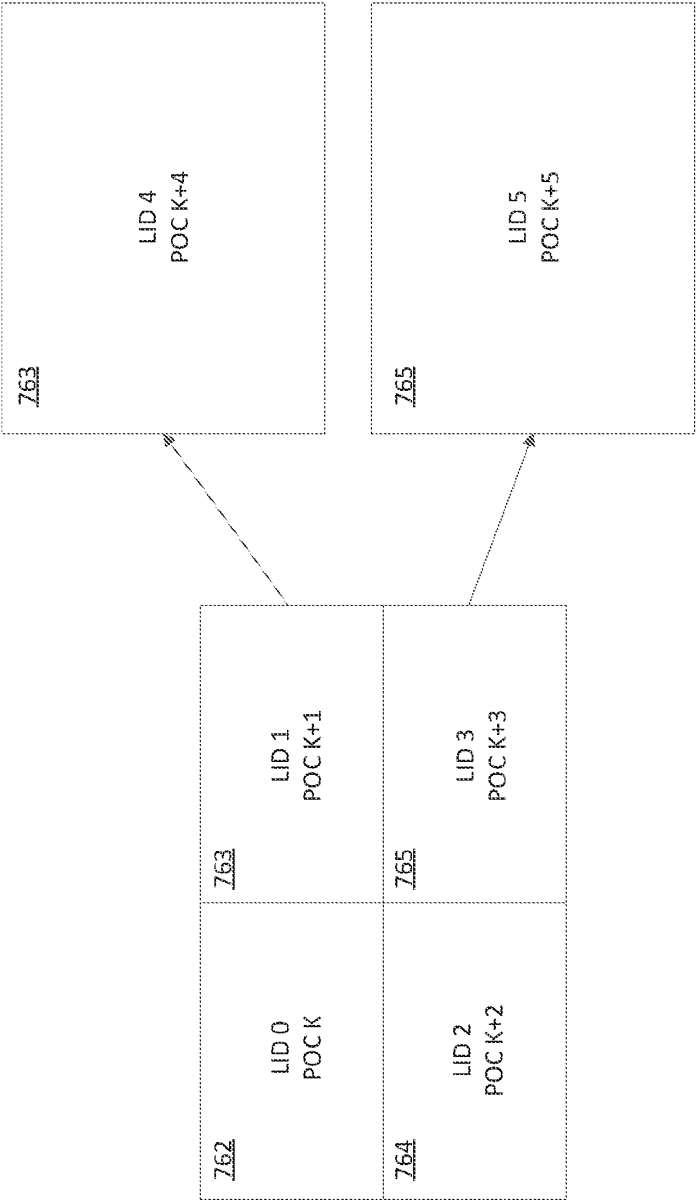


FIG. 17



81
G.
E.

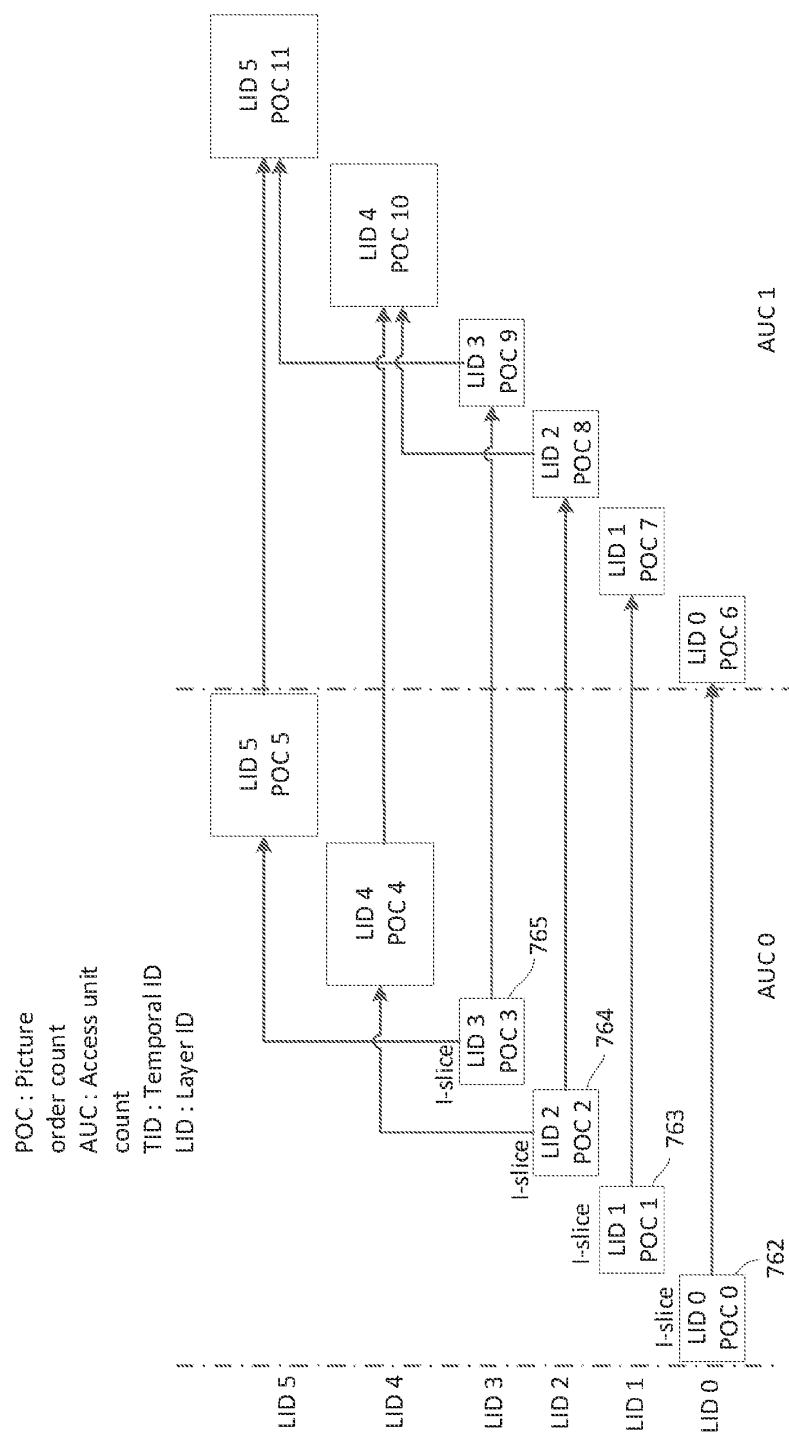


FIG. 19A

770	video_parameter_set_rbsp() { vps_video_parameter_set_id vps_max_layers_minus1 for(i = 0; i <= vps_max_layers_minus1; i++) { vps_included_layer_id[i] vps_reserved_zero_bit } ... vps_sub_picture_dividing_flag if(vps_sub_picture_dividing_flag) { vps_full_pic_width_in_luma_samples vps_full_pic_height_in_luma_samples } ... }	Descriptor u(4) u(8) u(7) u(1) u(1) ue(v) ue(v)
772		
774		
776		

FIG. 19B

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

FIG. 20

	sub_region_partitioning_info(payloadSize) {	Descriptor
791	num_sub_region	ue(v)
792	num_layers	ue(v)
	for (i = 0; i <= num_layers; i++)	
	layer_id[i]	ue(v)
	for(i = 1; i < num_layers; i++)	
	for(j = 0; j < i; j++)	
793	direct_dependency_flag[i][j]	u(1)
	for (i = 0; i < num_sub_region; i++) {	
794	num_layers_for_region[i]	ue(v)
	for(j = 0; j < num_layers_for_region[i]; j++)	
795	sub_region_layer_id[i][j]	ue(v)
796	sub_region_offset_x[i]	ue(v)
797	sub_region_offset_y[i]	ue(v)
798	sub_region_width[i]	ue(v)
799	sub_region_height[i]	ue(v)
	}	

	}	

FIG. 21

	video parameter set rbsp() {	Descriptor
	...	
802	vps_max_layers_minus1	u(6)
804	num_output_layer_sets	ue(v)
806	num_profile_tier_level	ue(v)
	for(i = 0; i < num_profile_tier_level; i++)	
808	profile_tier_level[vps_max_sub_layers_minus1]	
	for(i = 0; i < num_output_layer_sets; i++)	
	for(j = 0; j < NumLayersInList[i]; j++) {	
810	output_layer_flag[i][j]	u(1)
812	profile_tier_level_idx[i][j]	u(v)
	}	
	...	
	}	

FIG. 22

		Descriptor
	video_parameter_set_rbsp() {	
	...	
802	vps_max_layers_minus1	u(6)
	if(vps_max_layers_minus1 > 0) {	
804	num_output_layer_sets	ue(v)
806	num_profile_tier_level	ue(v)
	}	
	for(i = 0; i < num_profile_tier_level; i++)	
808	profile_tier_level(vps_max_sub_layers_minus1)	
	for(i = 0; i < num_output_layer_sets; i++) {	
822	vps_output_layers_model[i]	u(2)
824	vps_ptl_signal_flag[i]	u(1)
	for(j = 0; j < NumLayersInIdList[i], j++) {	
	if(vps_output_layers_model[i] == 2)	
810	output_layer_flag[i][j]	u(1)
	if(vps_ptl_signal_flag[i])	
812	profile_tier_level_idx[i][j]	u(v)
	}	
	}	
	...	
	}	

FIG. 23

	video_parameter_set_rbsp() {	Descriptor
	...	
802	vps_max_layers_minus1	u(6)
	if(vps_max_layers_minus1 > 0) {	
804	num_output_layer_sets	ue(v)
806	num_profile_tier_level	ue(v)
	}	
	max_subpics_minus1	u(8)
	for(i = 0; i < max_subpics_minus1; i++) {	
821	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++) {	
822	vps_output_layers_mode[i]	u(2)
824	vps_ptl_signal_flag[i]	u(1)
	for(j = 0; j < NumLayersInIdList[i], j++) {	
	num_output_subpic_layer[j][i]	ue(v)
	for(k = 0; k < num_output_subpic_layer[j][i]; k++)	
826	sub_pic_id_layer[j][i][k]	u(8)
	if(vps_output_layers_mode[j][i] == 2)	
810	output_layer_flag[i][j]	u(1)
	if(vps_ptl_signal_flag[i])	
812	profile_tier_level_idx[i][j]	u(v)
	}	
	}	
	...	
	}	

27/30

FIG. 24

	video_parameter_set_rbsp() {	Descriptor
842	vps_video_parameter_set_id	u(4)
802	vps_max_layers_minus1	u(6)
846	vps_max_sublayers_minus1	u(3)
	if(vps_max_layers_minus1 > 0 && vps_max_sublayers_minus1 > 0)	
848	vps_all_layers_same_num_sublayers_flag	u(1)
	if(vps_max_layers_minus1 > 0)	
850	vps_all_independent_layers_flag	u(1)
	for(i = 0; i <= vps_max_layers_minus1; i++) {	
852	vps_layer_id[i]	u(6)
	if(i > 0 && !vps_all_independent_layers_flag) {	
854	vps_independent_layer_flag[i]	u(1)
	if(!vps_independent_layer_flag[i]) {	
	for(j = 0; j < i; j++)	
856	vps_direct_ref_layer_flag[i][j]	u(1)
858	max_tid_ref_present_flag[i]	u(1)
	if(max_tid_ref_present_flag[i])	
860	max_tid_if_ref_pics_plus1[i]	u(3)
	}	
	}	
	}	
	}	
	if(vps_max_layers_minus1 > 0) {	
	if(vps_all_independent_layers_flag)	
862	each_layer_is_an_ols_flag	u(1)
	if(!each_layer_is_an_ols_flag) {	
	if(!vps_all_independent_layers_flag)	
864	ols_mode_idc	u(2)
	if(ols_mode_idc == 2) {	
866	num_output_layer_sets_minus1	u(8)
	for(i = 1; i <= num_output_layer_sets_minus1; i++)	
	for(j = 0; j <= vps_max_layers_minus1; j++)	
868	ols_output_layer_flag[i][j]	u(1)
	}	
	}	
	}	
	}	
	}	
	}	

FIG. 25

	video_parameter_set_rbsp() {	Descriptor
842	vps_video_parameter_set_id	u(4)
802	vps_max_layers_minus1	u(6)
846	vps_max_sublayers_minus1	u(3)
	if(vps_max_layers_minus1 > 0 && vps_max_sublayers_minus1 > 0)	
848	vps_all_layers_same_num_sublayers_flag	u(1)
	if(vps_max_layers_minus1 > 0)	
850	vps_all_independent_layers_flag	u(1)
	for(i = 0; i <= vps_max_layers_minus1; i++) {	
852	vps_layer_id[i]	u(6)
	if(i > 0 && !vps_all_independent_layers_flag) {	
854	vps_independent_layer_flag[i]	u(1)
	if(!vps_independent_layer_flag[i]) {	
	for(j = 0; j < i; j++)	
856	vps_direct_ref_layer_flag[i][j]	u(1)
858	max_tid_ref_present_flag[i]	u(1)
	if(max_tid_ref_present_flag[i])	
860	max_tid_if_ref_pics_plus1[i]	u(3)
	}	
	}	
	}	
	if(vps_max_layers_minus1 > 0) {	
	if(vps_all_independent_layers_flag)	
862	each_layer_is_an_ols_flag	u(1)
	if(!each_layer_is_an_ols_flag) {	
	if(!vps_all_independent_layers_flag)	
864	ols_mode_idc	u(2)
	if(ols_mode_idc == 2 && vps_max_layers_minus1 > 1) {	
866	num_output_layer_sets_minus1	u(8)
	for(i = 1; i <= num_output_layer_sets_minus1; i++)	
	for(j = 0; j <= vps_max_layers_minus1; j++)	
868	ols_output_layer_flag[i][j]	u(1)
	}	
	}	
	}	
	}	
	}	
	}	

FIG. 26

