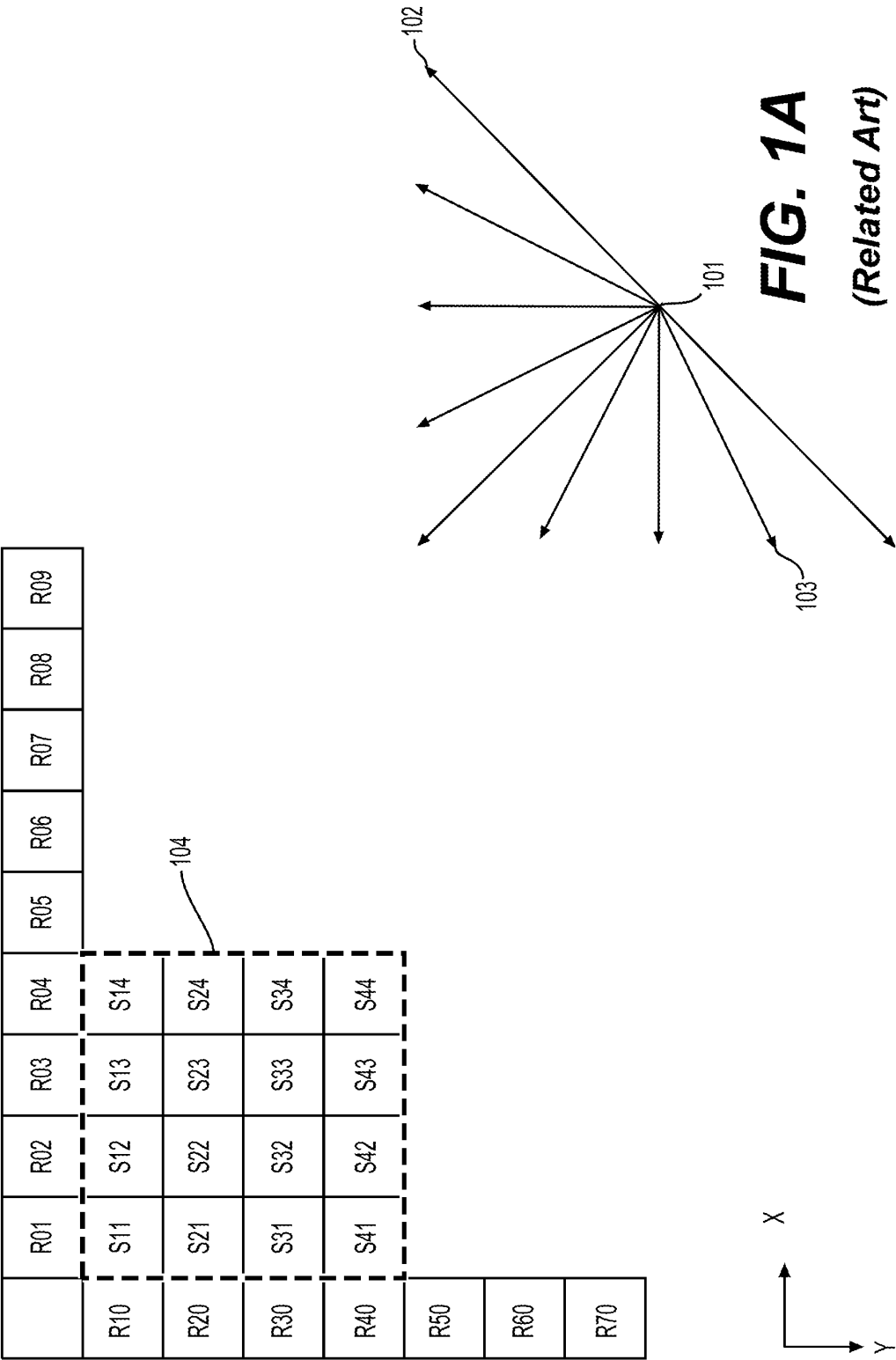




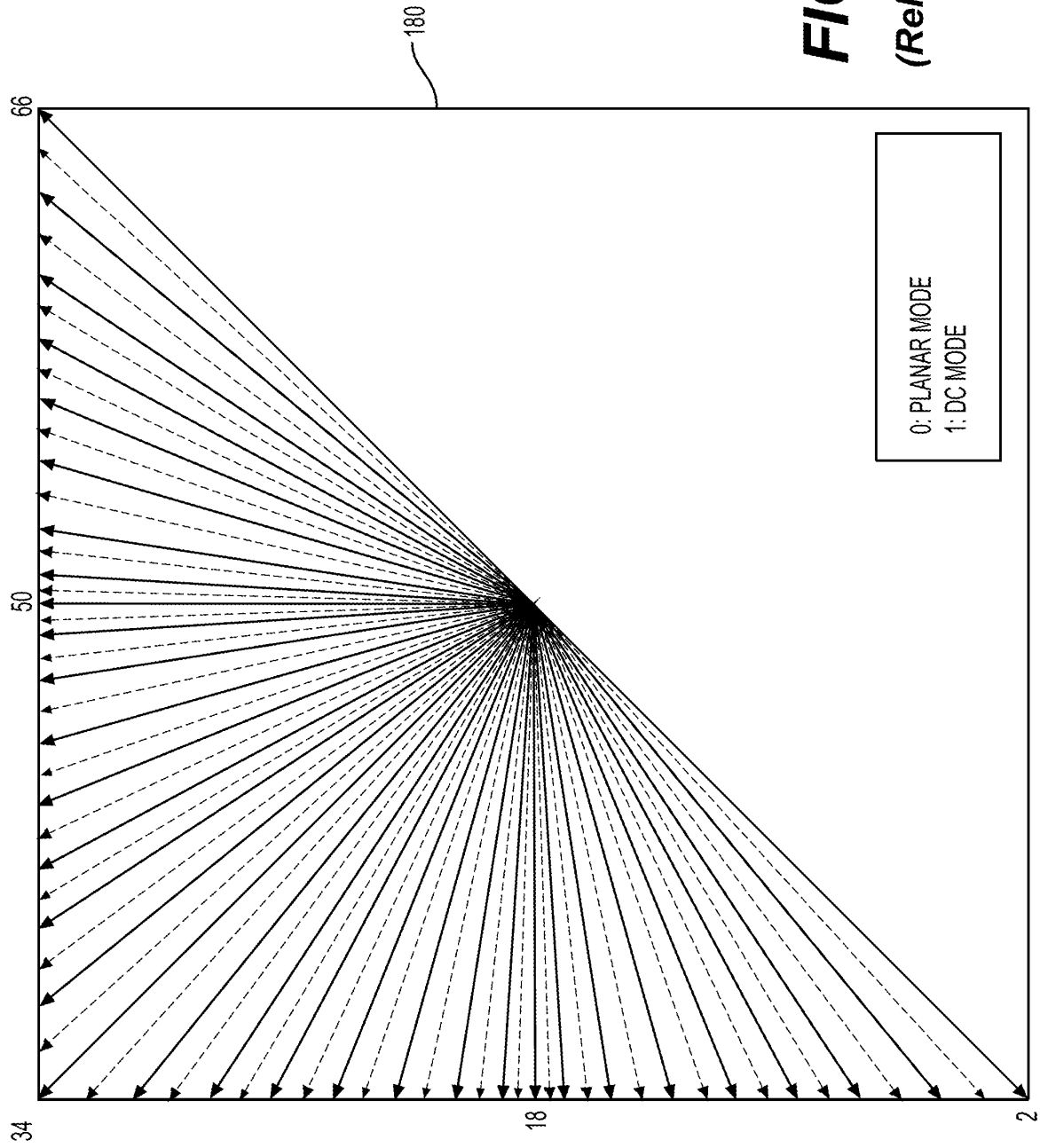


FIG. 1B
(Related Art)

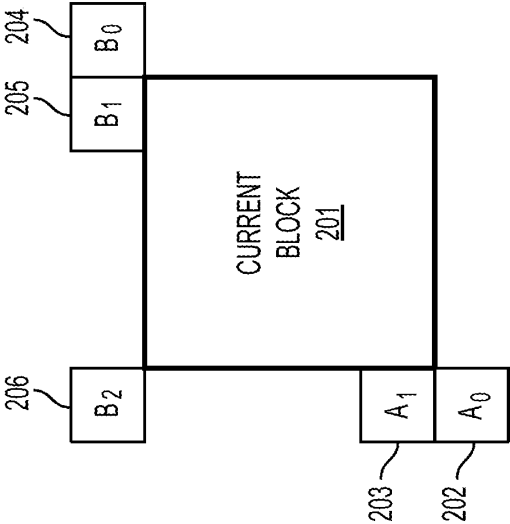


FIG. 2
(Related Art)

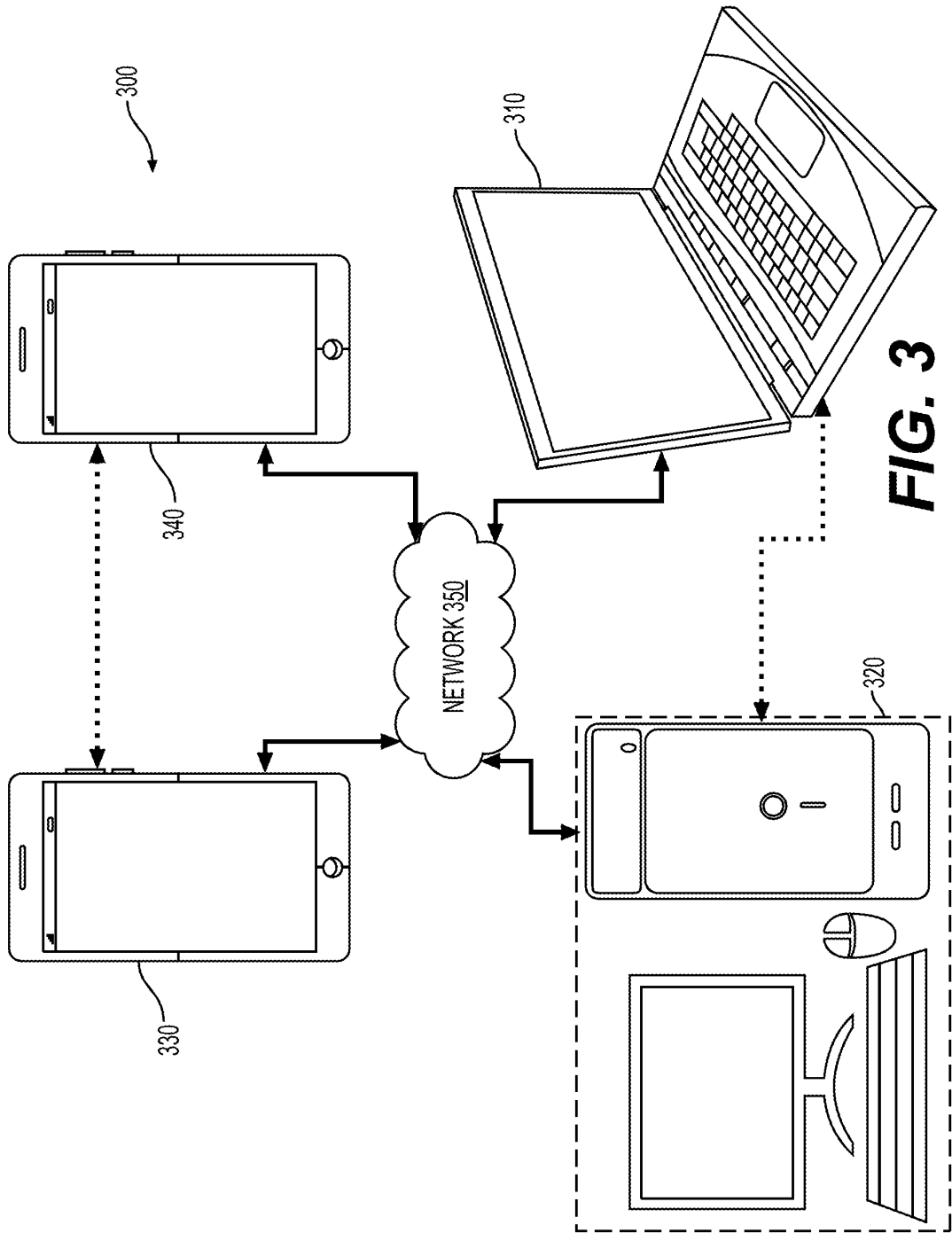


FIG. 3

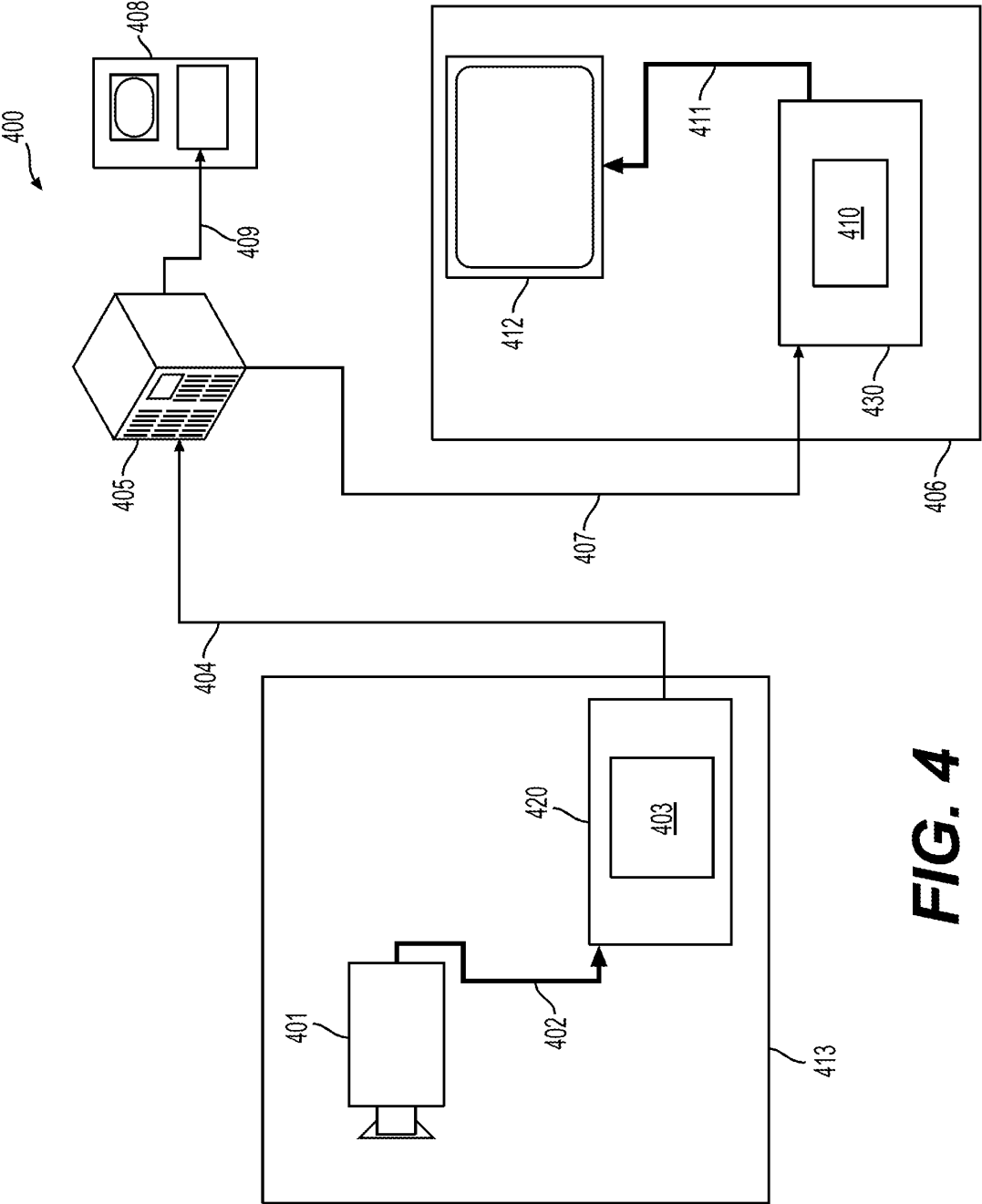


FIG. 4

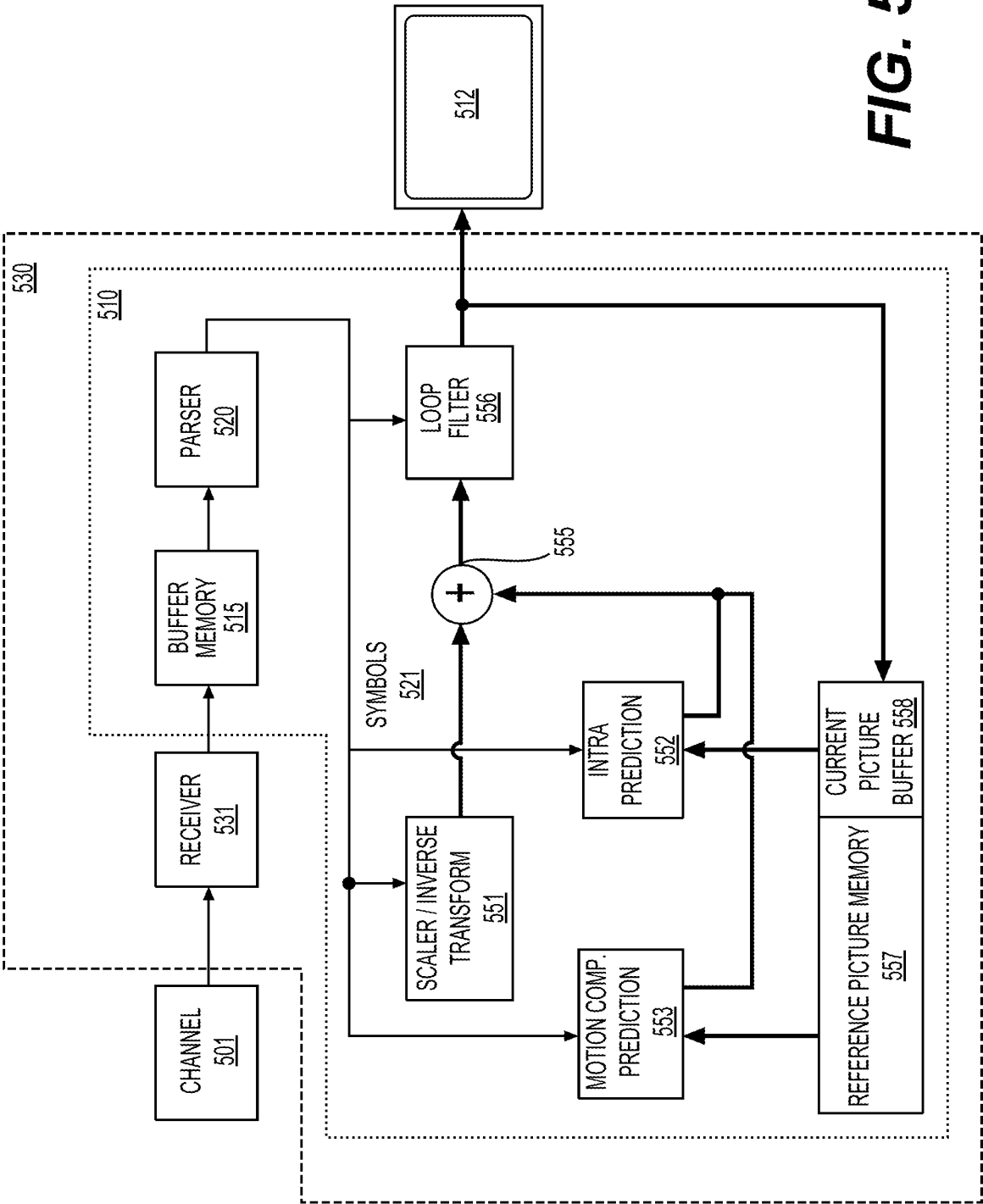


FIG. 5

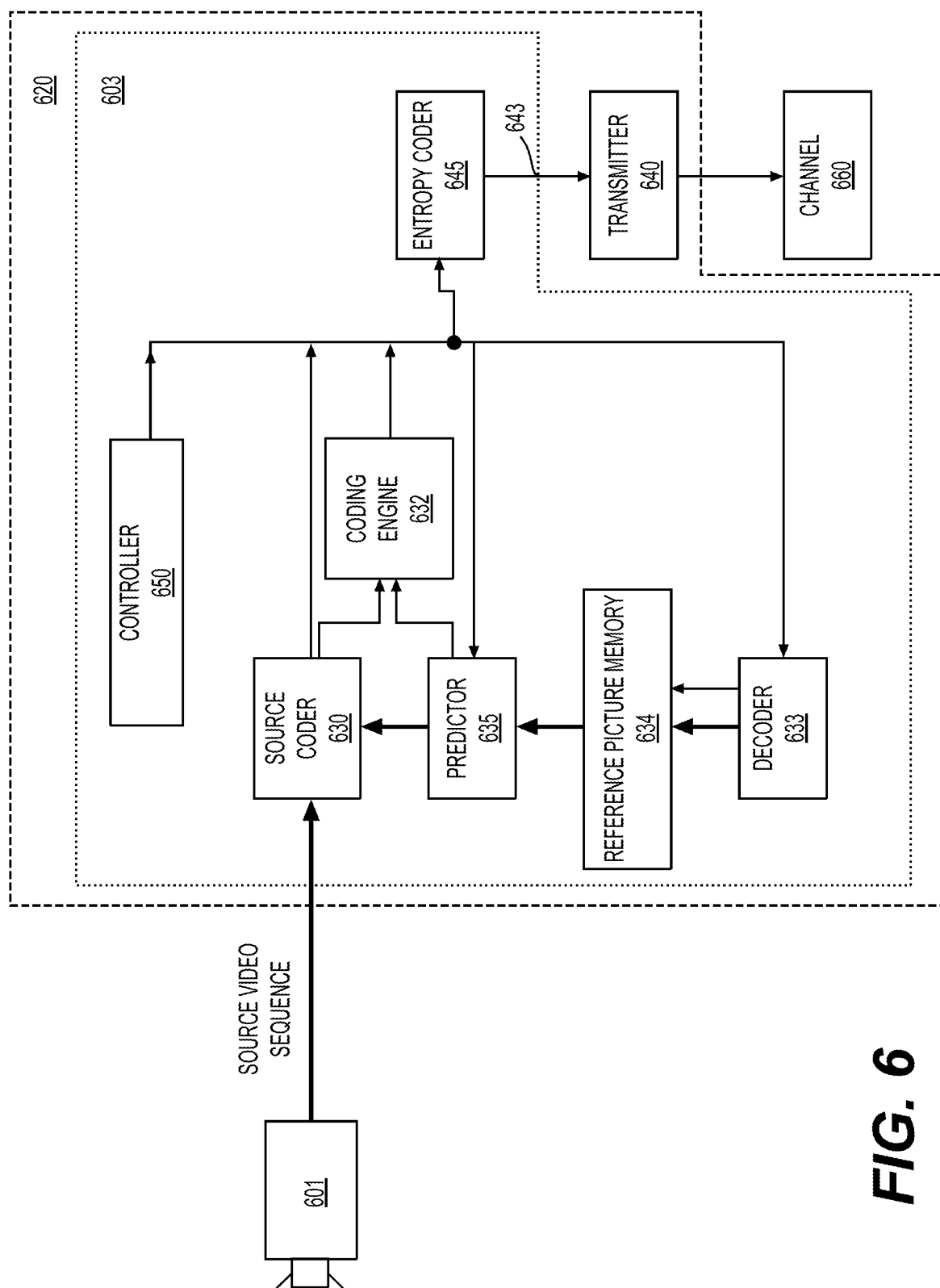


FIG. 6

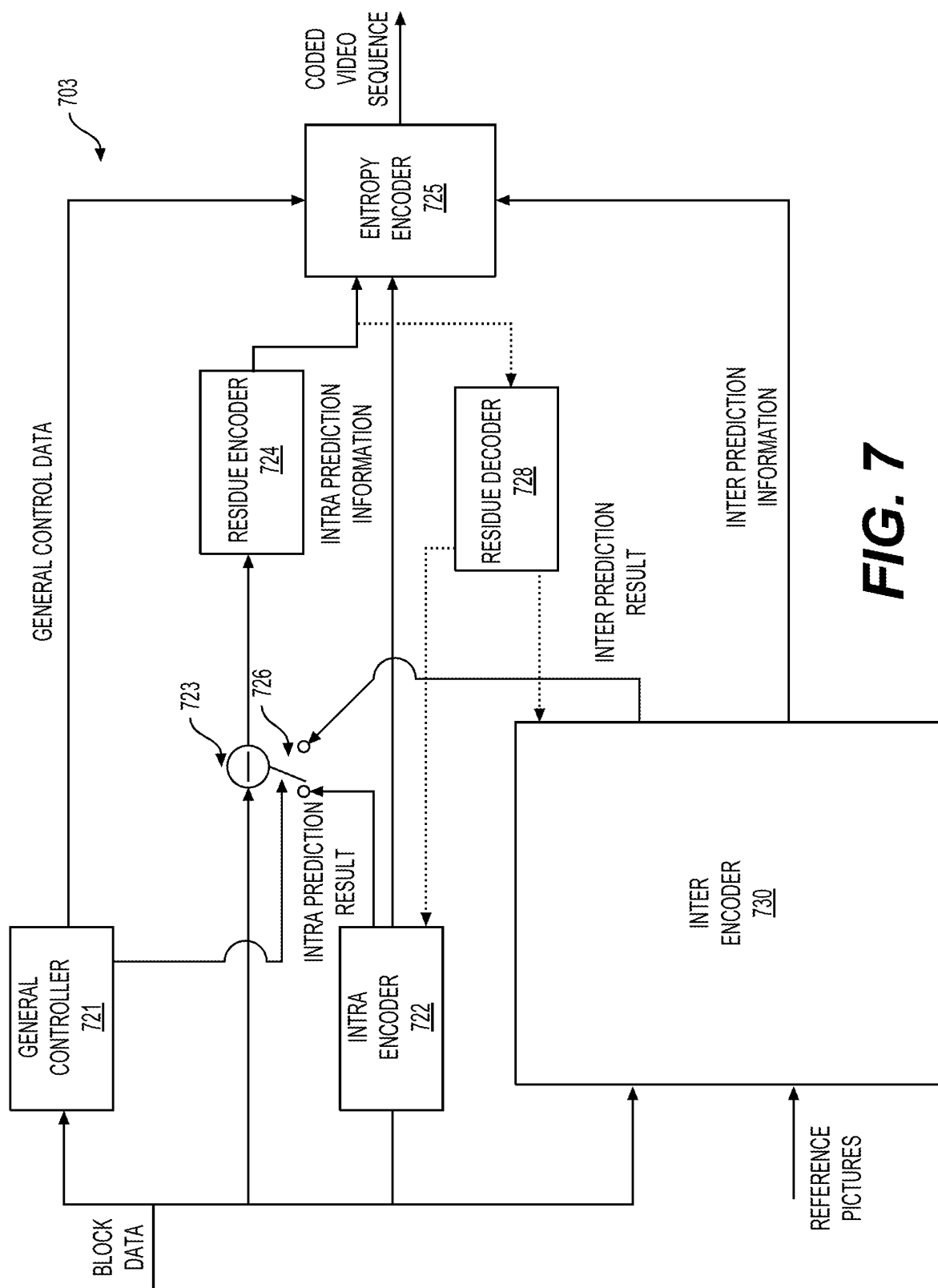


FIG. 7

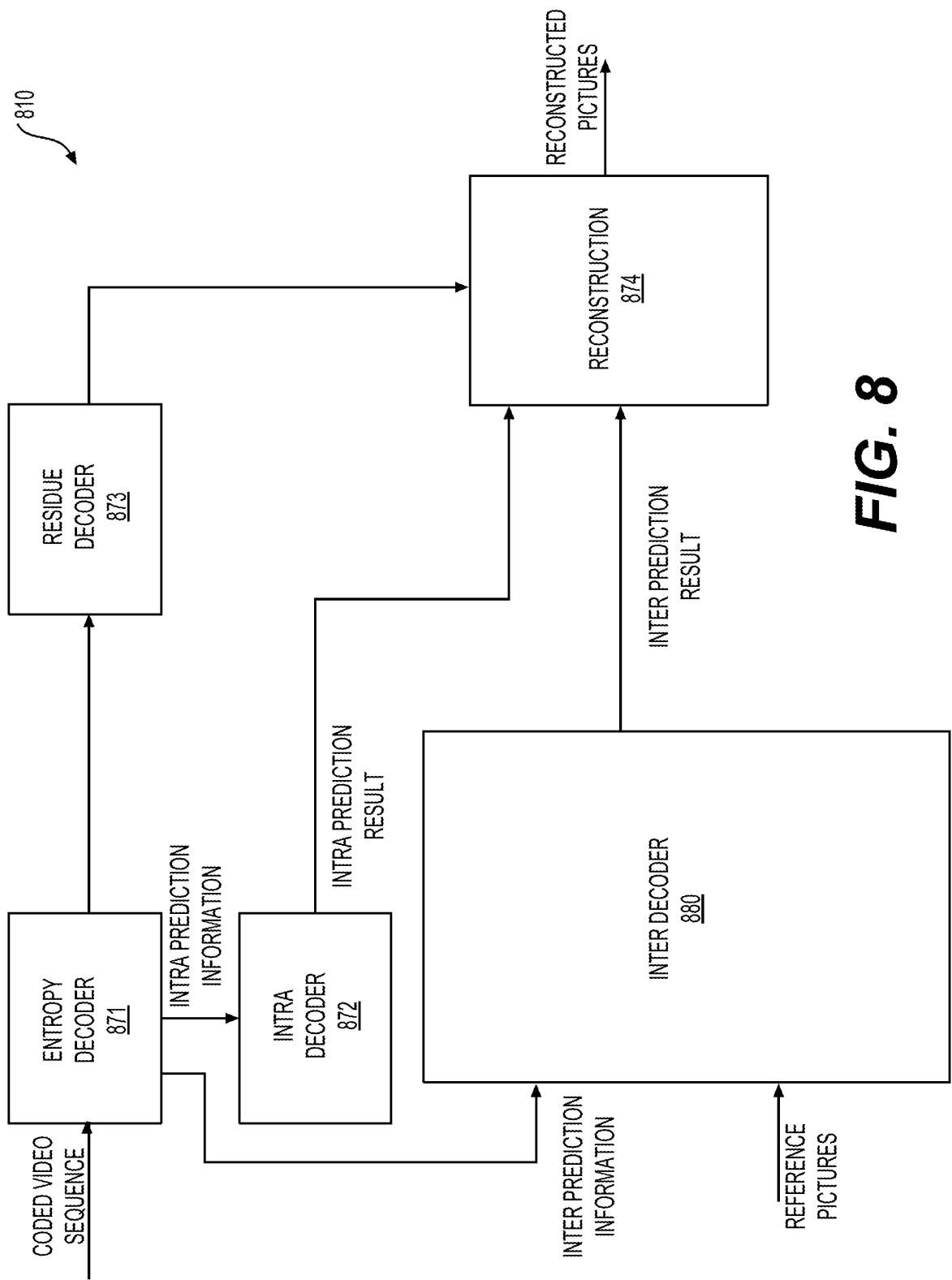


FIG. 8

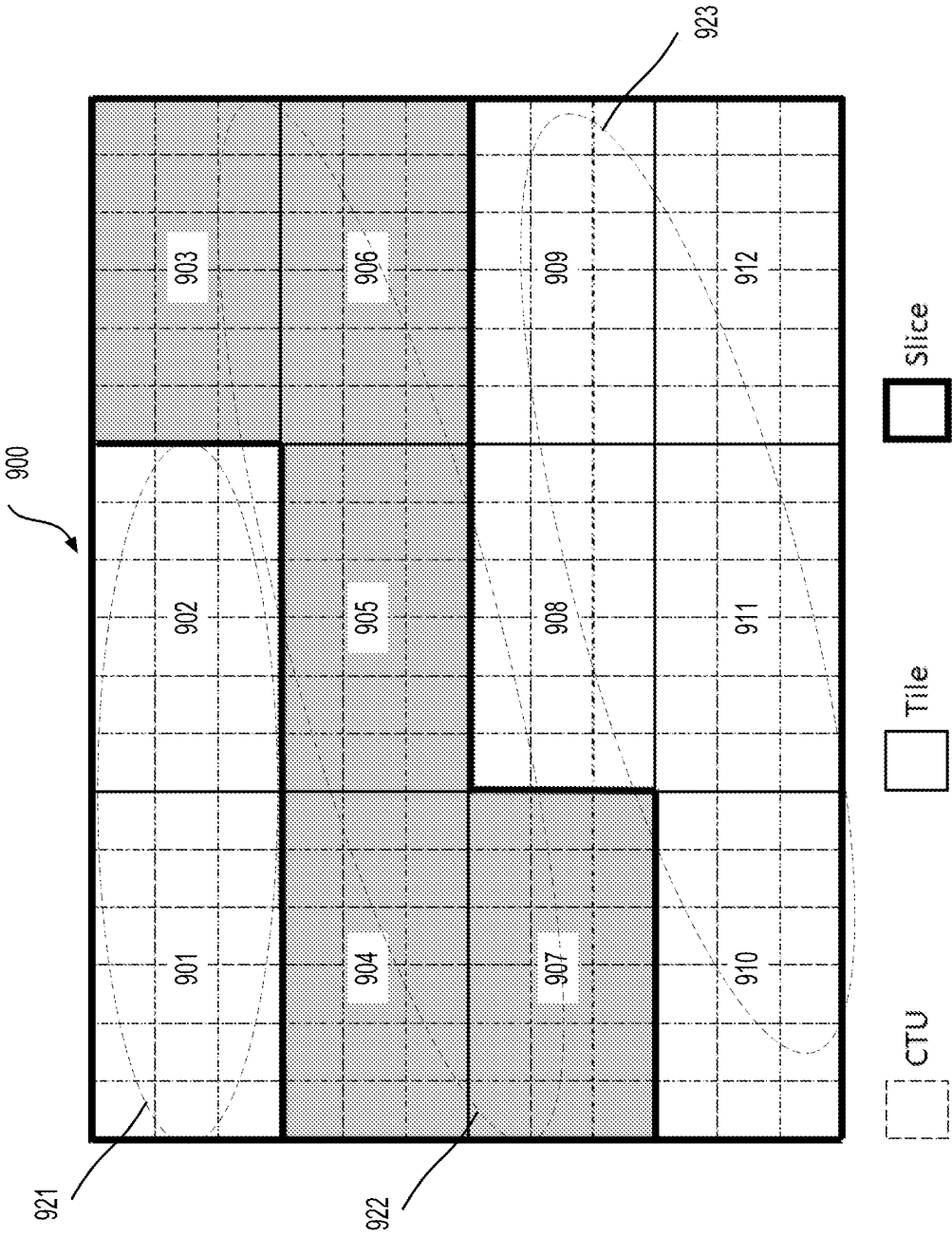
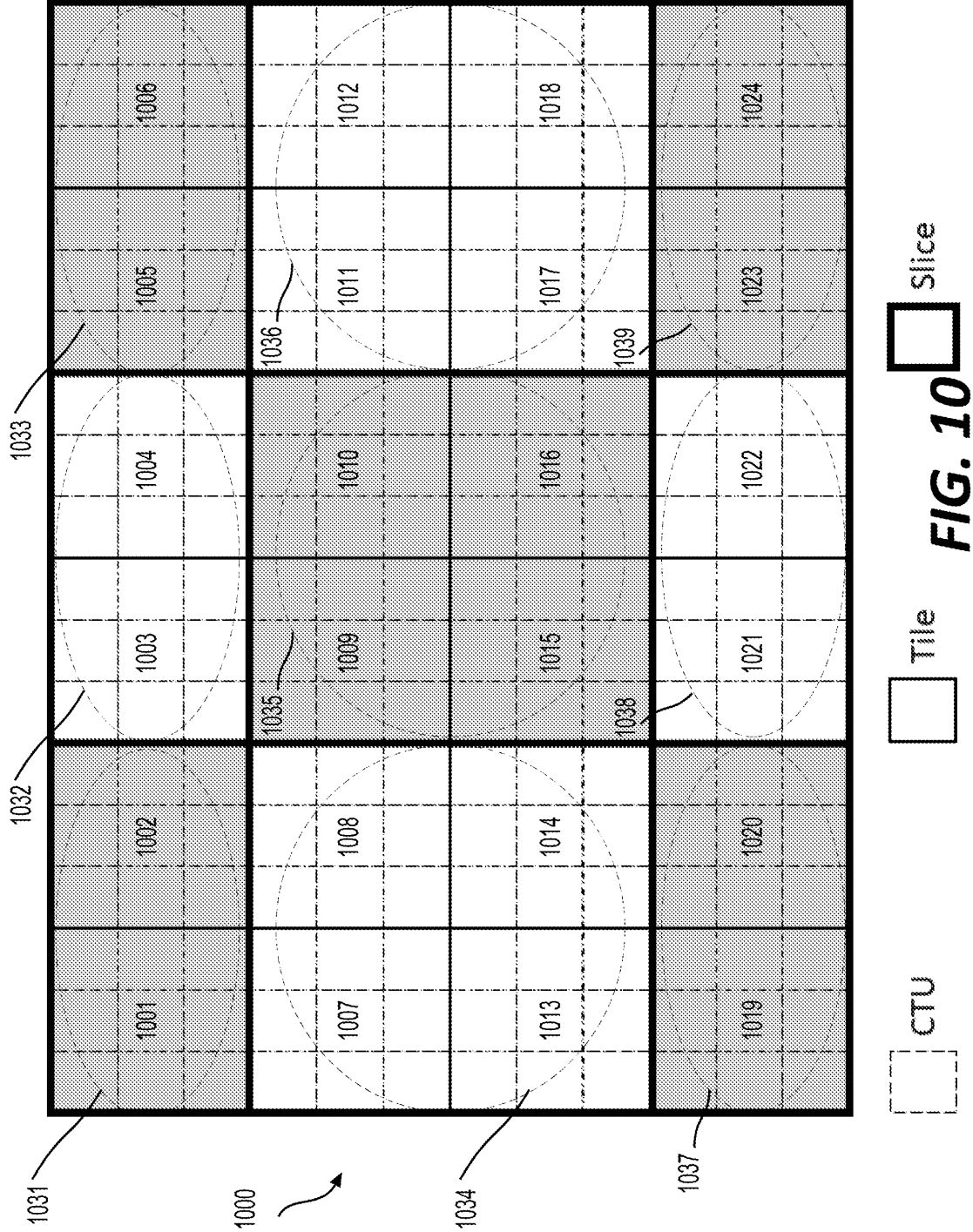


FIG. 9



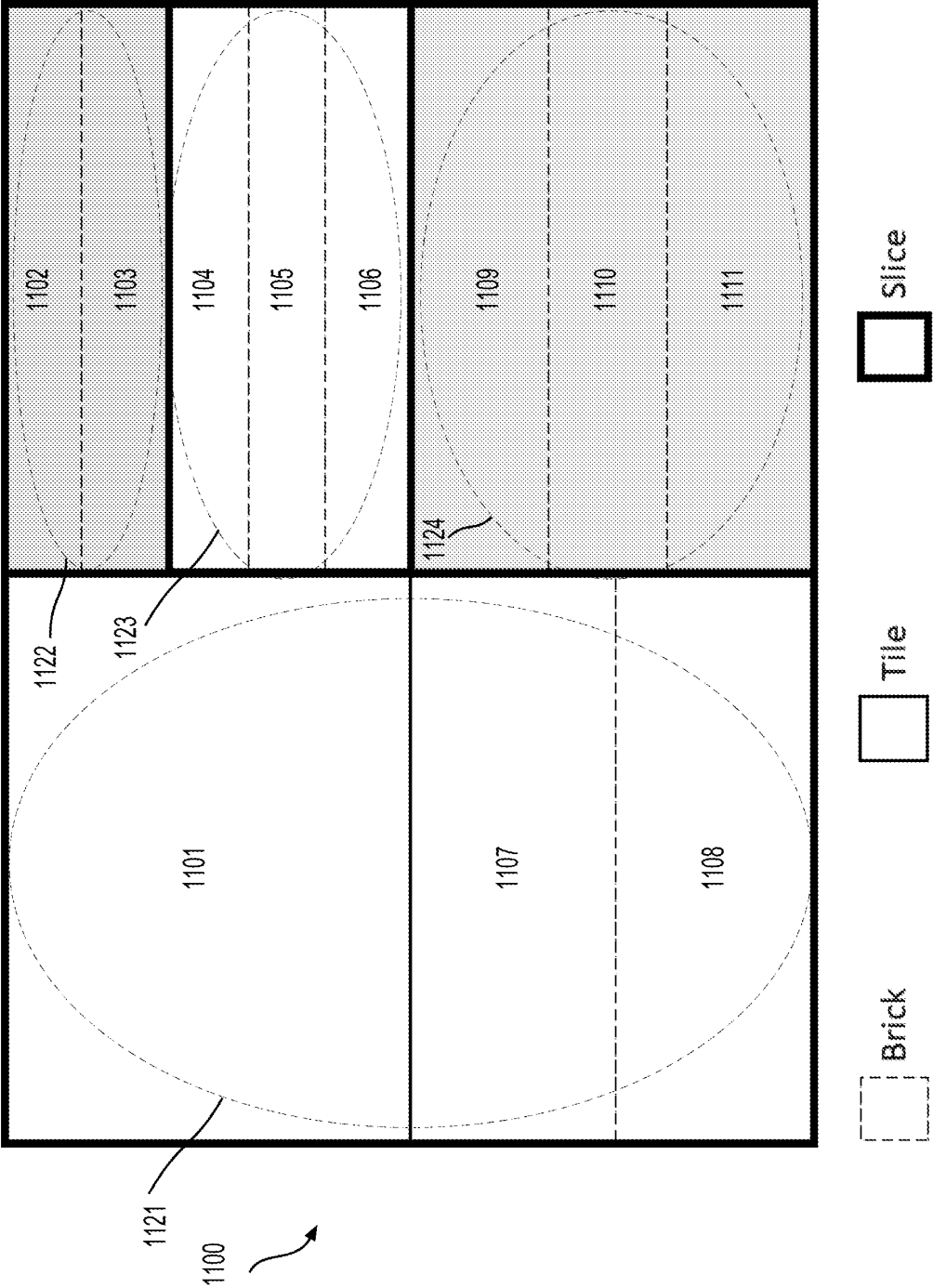


FIG. 11

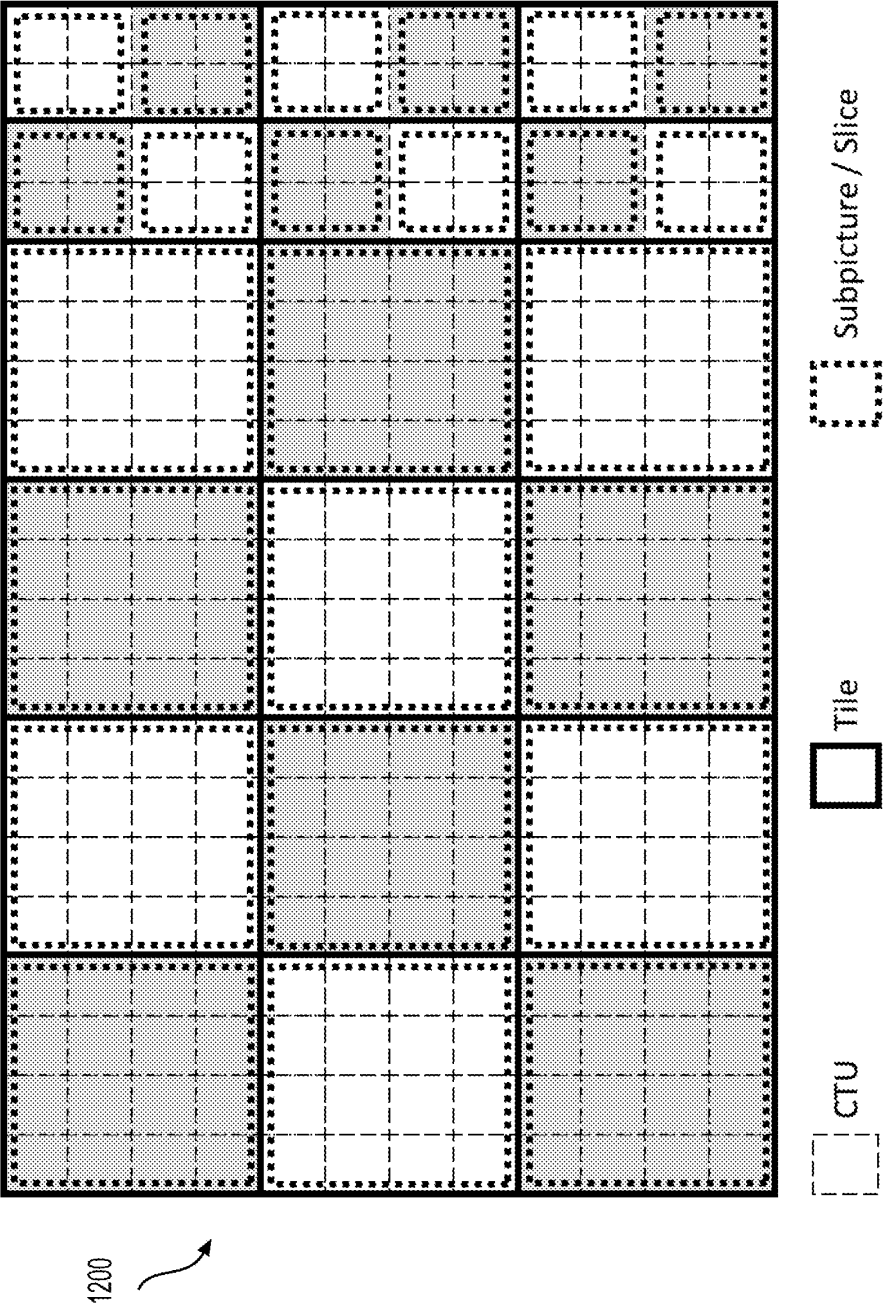


FIG. 12

1310	picture_header_structure() {	Descriptor
	ph_gdr_or_irap_pic_flag	u(1)
	ph_non_ref_pic_flag	u(1)
	if(ph_gdr_or_irap_pic_flag)	
	ph_gdr_pic_flag	u(1)
	ph_inter_slice_allowed_flag	u(1)
	if(ph_inter_slice_allowed_flag)	
	ph_intra_slice_allowed_flag	u(1)
	ph_pic_parameter_set_id	ue(v)
	ph_pic_order_ent_lsb	u(v)
	if(ph_gdr_pic_flag)	
	ph_recovery_poc_cnt	ue(v)
	for(i = 0; i < NumExtraPhBits; i++)	
	ph_extra_bit[i]	u(1)
	if(sps_poc_msb_cycle_flag) {	
	ph_poc_msb_cycle_present_flag	u(1)
	if(ph_poc_msb_cycle_present_flag)	
	ph_poc_msb_cycle_val	u(v)
	}	
	if(sps_alf_enabled_flag && pps_alf_info_in_ph_flag) {	
	ph_alf_enabled_flag	u(1)
	if(ph_alf_enabled_flag) {	
	ph_num_alf_aps_ids_luma	u(3)
	for(i = 0; i < ph_num_alf_aps_ids_luma; i++)	
	ph_alf_aps_id_luma[i]	u(3)
	if(sps_chroma_format_idc != 0) {	
	ph_alf_cb_enabled_flag	u(1)
	ph_alf_cr_enabled_flag	u(1)
	}	
	if(ph_alf_cb_enabled_flag ph_alf_cr_enabled_flag)	
	ph_alf_aps_id_chroma	u(3)
	if(sps_ccalf_enabled_flag) {	
	ph_cc_alf_cb_enabled_flag	u(1)
	if(ph_cc_alf_cb_enabled_flag)	
	ph_cc_alf_cb_aps_id	u(3)
	ph_cc_alf_cr_enabled_flag	u(1)
	if(ph_cc_alf_cr_enabled_flag)	
	ph_cc_alf_cr_aps_id	u(3)
	}	
	}	
	}	

FIG. 13A

}	
if(sps_lmcs_enabled_flag) {	
ph_lmcs_enabled_flag	u(1)
if(ph_lmcs_enabled_flag) {	
ph_lmcs_aps_id	u(2)
if(sps_chroma_format_idc != 0)	
ph_chroma_residual_scale_flag	u(1)
}	
}	
if(sps_explicit_scaling_list_enabled_flag) {	
ph_explicit_scaling_list_enabled_flag	u(1)
if(ph_explicit_scaling_list_enabled_flag)	
ph_scaling_list_aps_id	u(3)
}	
if(sps_virtual_boundaries_enabled_flag && !sps_virtual_boundaries_present_flag) {	
ph_virtual_boundaries_present_flag	u(1)
if(ph_virtual_boundaries_present_flag) {	
ph_num_ver_virtual_boundaries	ue(v)
for(i = 0; i < ph_num_ver_virtual_boundaries; i++)	
ph_virtual_boundary_pos_x_minus1[i]	ue(v)
ph_num_hor_virtual_boundaries	ue(v)
for(i = 0; i < ph_num_hor_virtual_boundaries; i++)	
ph_virtual_boundary_pos_y_minus1[i]	ue(v)
}	
}	
if(pps_output_flag_present_flag && !ph_non_ref_pic_flag)	
ph_pic_output_flag	u(1)
if(pps_rpl_info_in_ph_flag)	
ref_pic_lists()	
if(sps_partition_constraints_override_enabled_flag)	
ph_partition_constraints_override_flag	u(1)
if(ph_intra_slice_allowed_flag) {	
if(ph_partition_constraints_override_flag) {	
ph_log2_diff_min_qt_min_cb_intra_slice_luma	ue(v)
ph_max_mtt_hierarchy_depth_intra_slice_luma	ue(v)
if(ph_max_mtt_hierarchy_depth_intra_slice_luma != 0) {	
ph_log2_diff_max_bt_min_qt_intra_slice_luma	ue(v)
ph_log2_diff_max_tt_min_qt_intra_slice_luma	ue(v)
}	
if(sps_qtbt_dual_tree_intra_flag) {	
ph_log2_diff_min_qt_min_cb_intra_slice_chroma	ue(v)
ph_max_mtt_hierarchy_depth_intra_slice_chroma	ue(v)
if(ph_max_mtt_hierarchy_depth_intra_slice_chroma != 0) {	

FIG. 13B

1312	ph_log2_diff_max_bt_min_qt_intra_slice_chroma	ue(v)
	ph_log2_diff_max_tt_min_qt_intra_slice_chroma	ue(v)
	}	
	}	
1313	if(pps_cu_qp_delta_enabled_flag)	
	ph_cu_qp_delta_subdiv_intra_slice	ue(v)
	if(pps_cu_chroma_qp_offset_list_enabled_flag)	
	ph_cu_chroma_qp_offset_subdiv_intra_slice	ue(v)
	}	
	if(ph_inter_slice_allowed_flag) {	
	if(ph_partition_constraints_override_flag) {	
	ph_log2_diff_min_qt_min_cb_inter_slice	ue(v)
	ph_max_mtt_hierarchy_depth_inter_slice	ue(v)
	if(ph_max_mtt_hierarchy_depth_inter_slice != 0) {	
	ph_log2_diff_max_bt_min_qt_inter_slice	ue(v)
	ph_log2_diff_max_tt_min_qt_inter_slice	ue(v)
	}	
	}	
	if(pps_cu_qp_delta_enabled_flag)	
	ph_cu_qp_delta_subdiv_inter_slice	ue(v)
	if(pps_cu_chroma_qp_offset_list_enabled_flag)	
	ph_cu_chroma_qp_offset_subdiv_inter_slice	ue(v)
	if(sps_temporal_mvp_enabled_flag) {	
	ph_temporal_mvp_enabled_flag	u(1)
	if(ph_temporal_mvp_enabled_flag && pps_rpl_info_in_ph_flag) {	
	if(num_ref_entries[1][RplIdx[1]] > 0)	
	ph_collocated_from_l0_flag	u(1)
	if((ph_collocated_from_l0_flag && num_ref_entries[0][RplIdx[0]] > 1) (!ph_collocated_from_l0_flag && num_ref_entries[1][RplIdx[1]] > 1))	
	ph_collocated_ref_idx	ue(v)
	}	
	}	
	if(sps_mmvd_fullpel_only_enabled_flag)	
	ph_mmvd_fullpel_only_flag	u(1)
	presenceFlag = 0	
	if(!pps_rpl_info_in_ph_flag) /* This condition is intentionally not merged into the next, to avoid possible interpretation of RplIdx[i] being unspecified. */	
	presenceFlag = 1	
	else if(num_ref_entries[1][RplIdx[1]] > 0)	
	presenceFlag = 1	
	if(presenceFlag) {	

FIG. 13C

ph_mvd_l1_zero_flag	u(1)
if(sps_bdof_control_present_in_ph_flag)	
ph_bdof_disabled_flag	u(1)
if(sps_dmvr_control_present_in_ph_flag)	
ph_dmvr_disabled_flag	u(1)
}	
if(sps_prof_control_present_in_ph_flag)	
ph_prof_disabled_flag	u(1)
if((pps_weighted_pred_flag pps_weighted_bipred_flag) && pps_wp_info_in_ph_flag)	
pred_weight_table()	
}	
if(pps_qp_delta_info_in_ph_flag)	
ph_qp_delta	se(v)
if(sps_joint_cbr_enabled_flag)	
ph_joint_cbr_sign_flag	u(1)
if(sps_sao_enabled_flag && pps_sao_info_in_ph_flag) {	
ph_sao_luma_enabled_flag	u(1)
if(sps_chroma_format_idc != 0)	
ph_sao_chroma_enabled_flag	u(1)
}	
if(pps_dbf_info_in_ph_flag) {	
ph_deblocking_params_present_flag	u(1)
if(ph_deblocking_params_present_flag) {	
if(!pps_deblocking_filter_disabled_flag)	
ph_deblocking_filter_disabled_flag	u(1)
if(!ph_deblocking_filter_disabled_flag) {	
ph_luma_beta_offset_div2	se(v)
ph_luma_tc_offset_div2	se(v)
if(pps_chroma_tool_offsets_present_flag) {	
ph_cb_beta_offset_div2	se(v)
ph_cb_tc_offset_div2	se(v)
ph_cr_beta_offset_div2	se(v)
ph_cr_tc_offset_div2	se(v)
}	
}	
}	
}	
if(pps_picture_header_extension_present_flag) {	
ph_extension_length	uc(v)
for(i = 0; i < ph_extension_length; i++)	
ph_extension_data_byte[i]	u(8)
}	

FIG. 13D

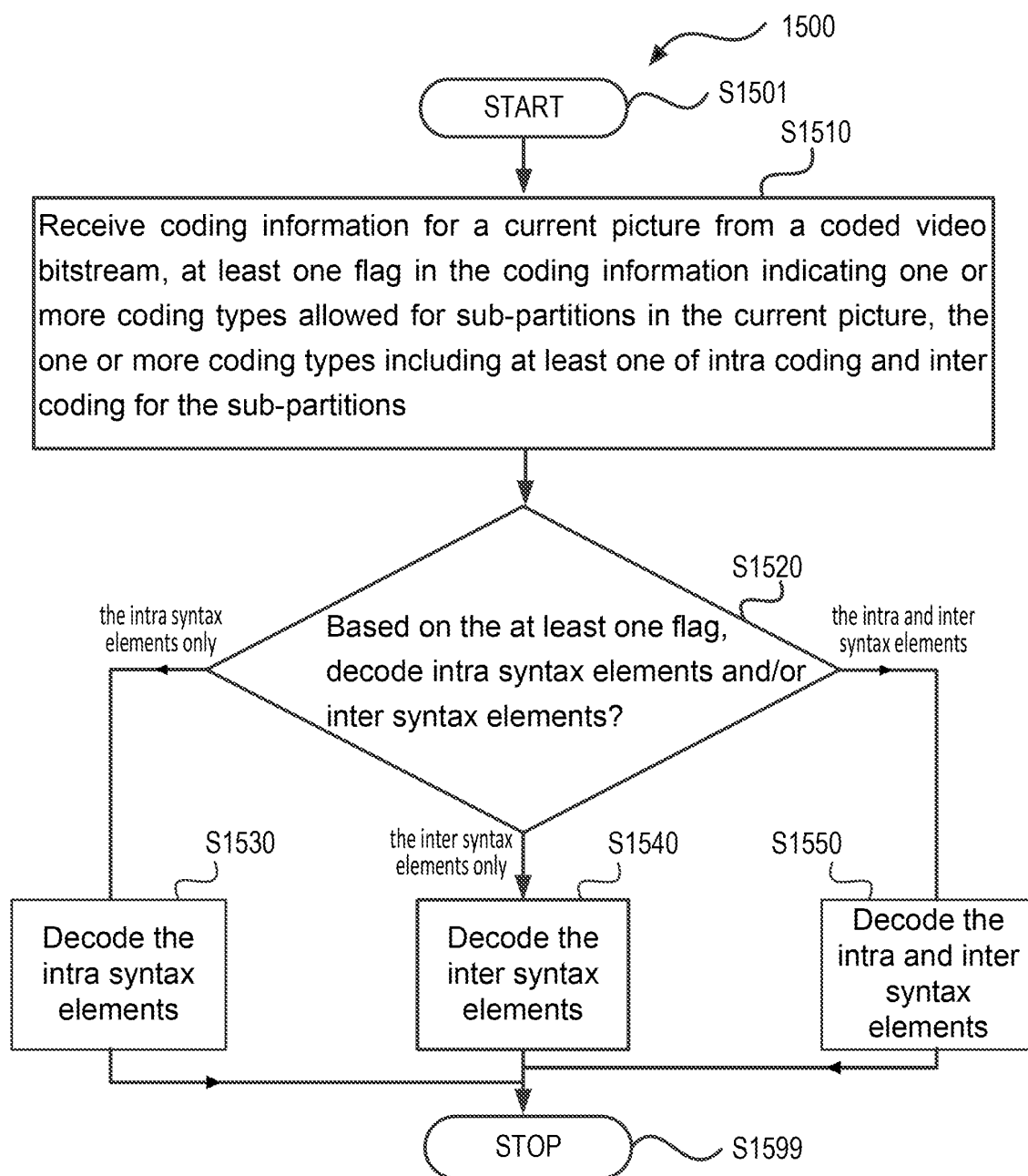
TABLE 2: SYNTAX TABLE RELATED TO AN INTER ONLY FLAG

1412

pic_inter_only_flag	u(1)
if(pic_inter_only_flag){	
if(qtbt_dual_tree_intra_flag){	
pic_log2_diff_min_qt_min_cb_chroma	ue(v)
pic_max_mtt_hierarchy_depth_chroma	ue(v)
if(pic_max_mtt_hierarchy_depth_chroma != 0) {	
pic_log2_diff_max_bt_min_qt_chroma	ue(v)
pic_log2_diff_max_tt_min_qt_chroma	ue(v)
}	
}	
}	

1413

FIG. 14B

**FIG. 15**

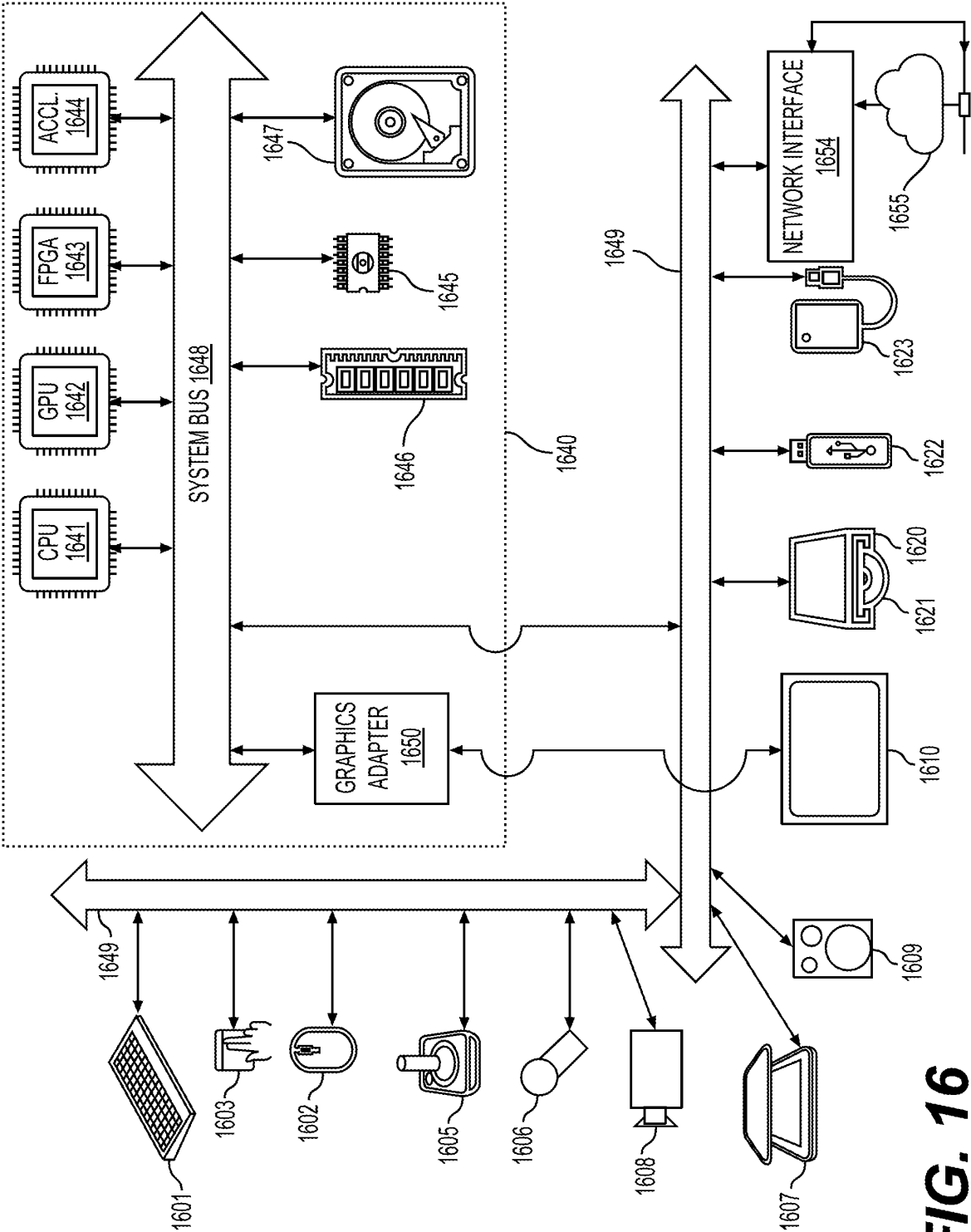


FIG. 16