

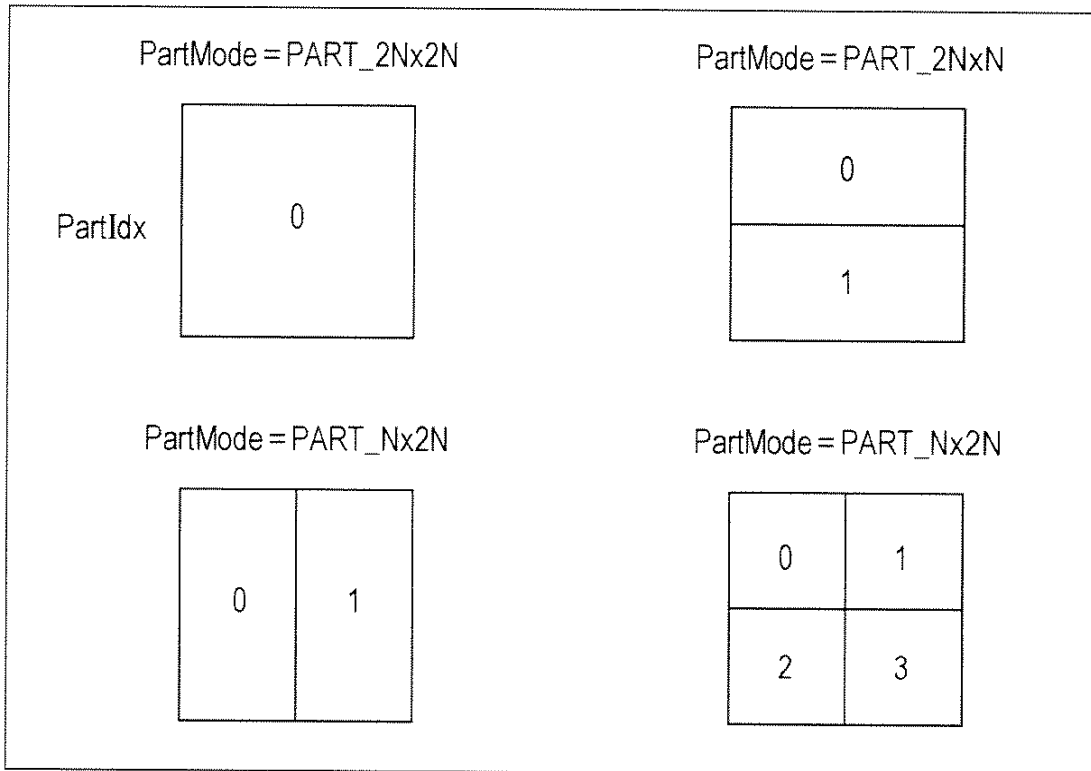
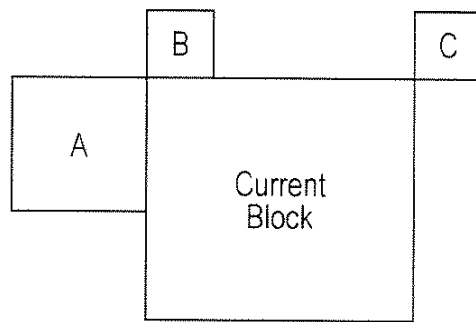
FIG. 1*FIG. 2*

FIG. 3

refIdxLX	refIdxLA	refIdxLB	refIdxLC
refIdxLA	x	-1	-1
refIdxLB	-1	x	-1
refIdxLC	x	-1	-1
refIdxLA	x	x	-1
refIdxLA	x	-1	x
refIdxLB	-1	x	x
0	-1	-1	-1
min(refIdxLB,refIdxLC)	-1	x	Y
min(refIdxLA,refIdxLC)	x	-1	y
min(refIdxLA,refIdxLB)	x	-1	y
min(min(refIdxLA,refIdxLB),refIdxLC)	x	y	z

FIG. 4

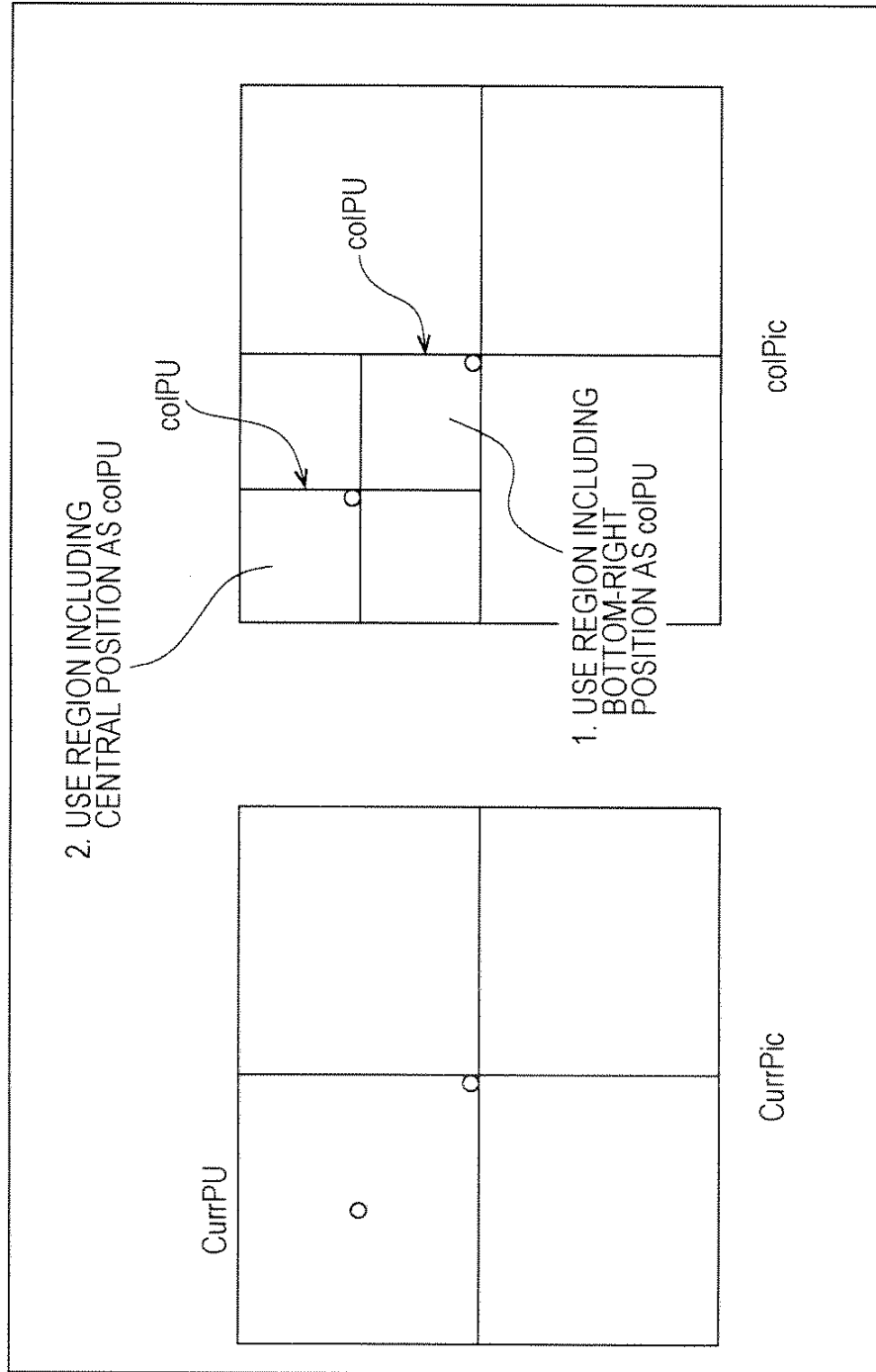


FIG. 5

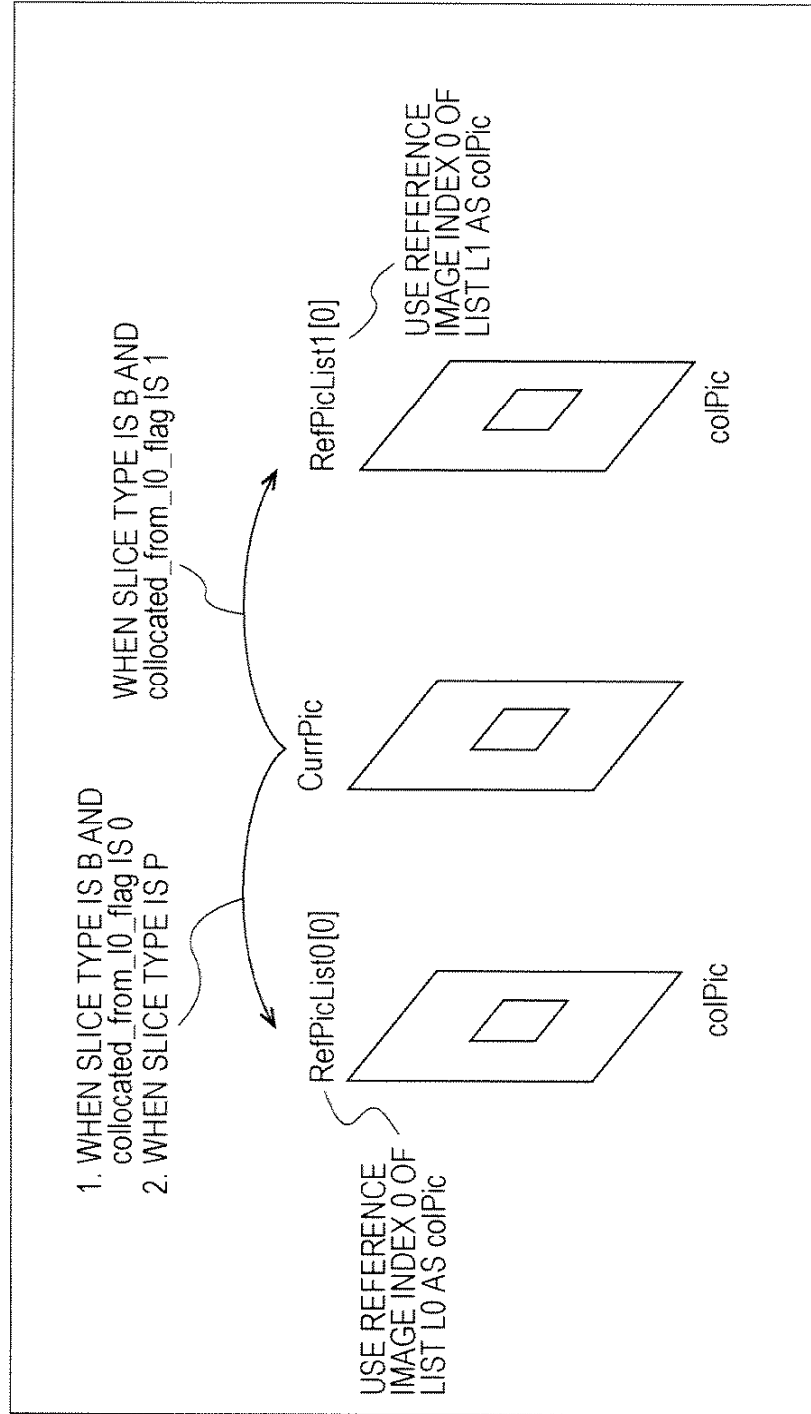


FIG. 6

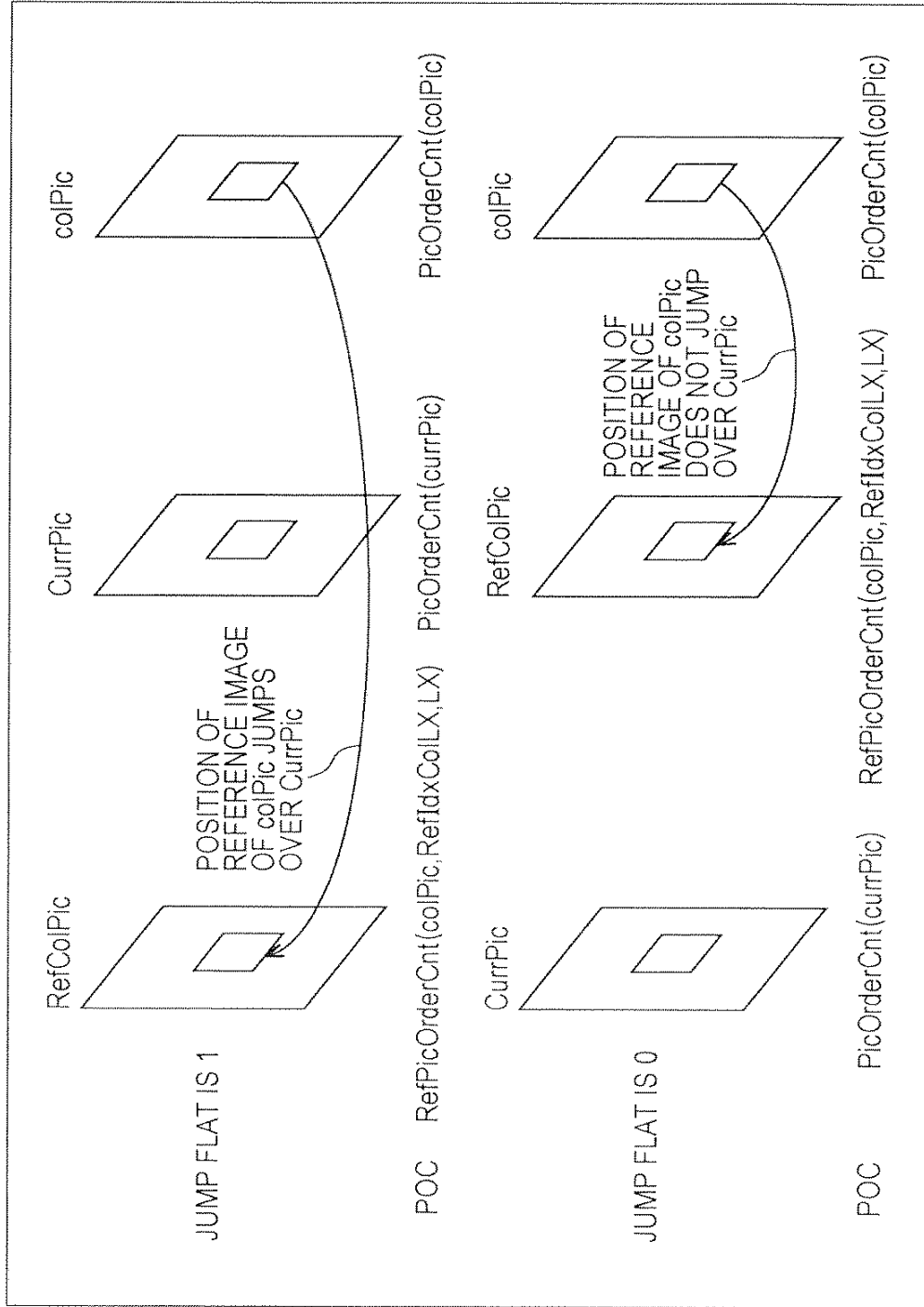


FIG. 7

A = TEMPORAL DISTANCE BETWEEN TARGET PICTURE AND PICTURE THAT TARGET PICTURE REFERS TO
 B = TEMPORAL DISTANCE BETWEEN PICTURE USED IN TEMPORAL CORRELATION AND PICTURE THAT TEMPORAL CORRELATION REGION REFERS TO

$mvCol$ = MOTION VECTOR OF TEMPORAL CORRELATION REGION
 pmv = PREDICTIVE VECTOR OF TARGET REGION

WHEN A AND B ARE IDENTICAL $pmv = mvCol$
 WHEN A AND B ARE NOT IDENTICAL $pmv = mvCol * A/B$

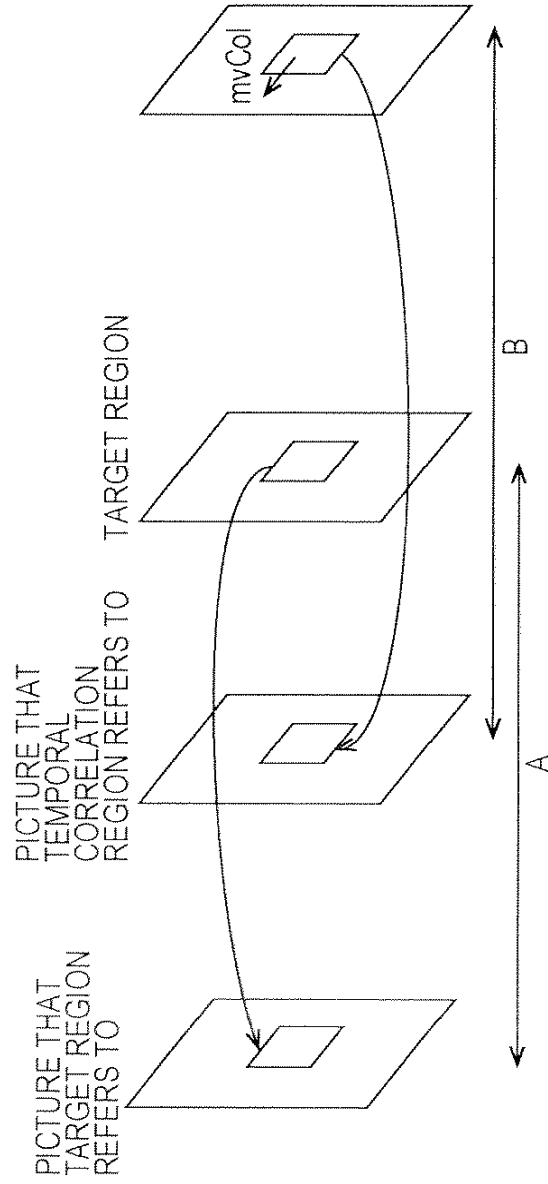


FIG. 8

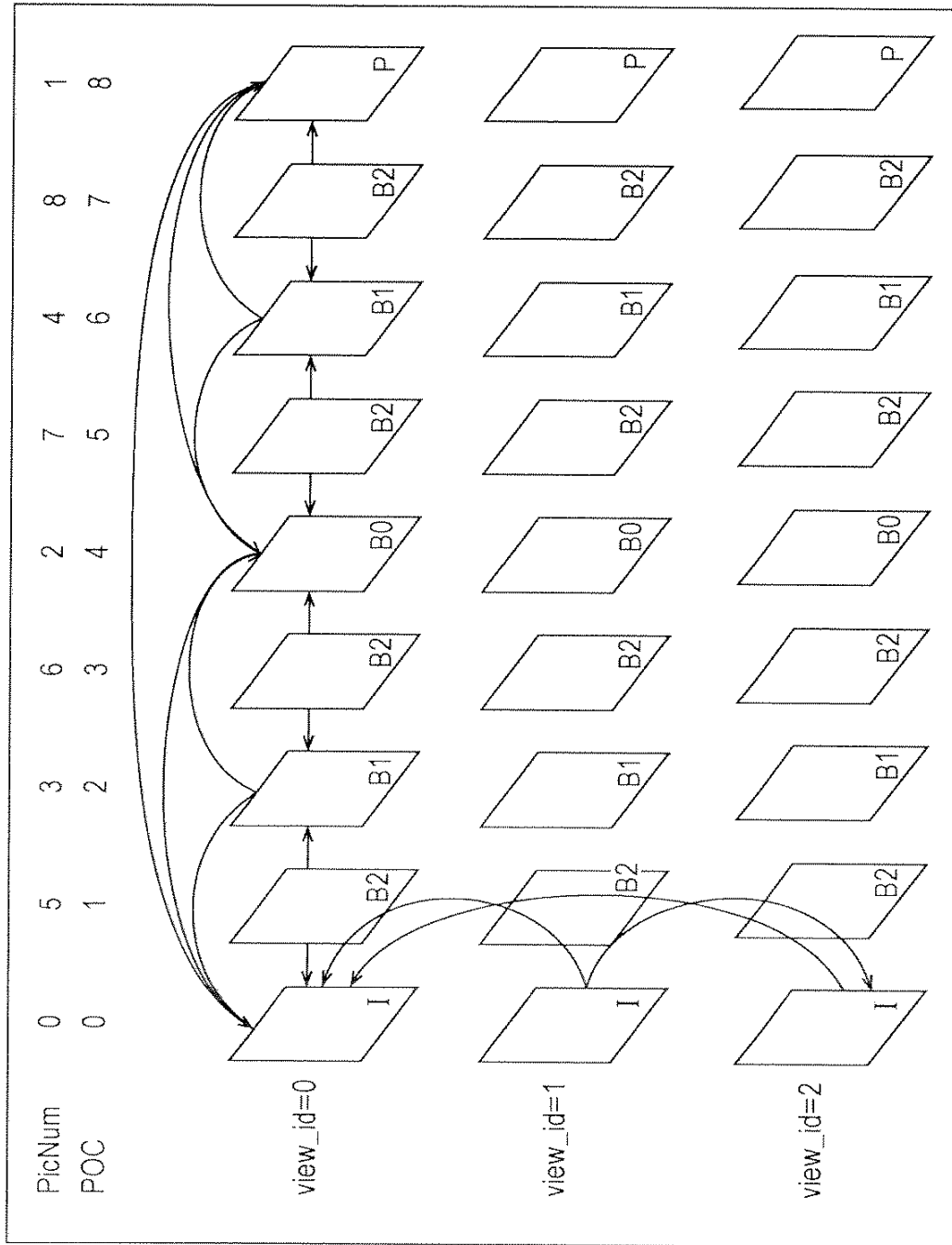


FIG. 9

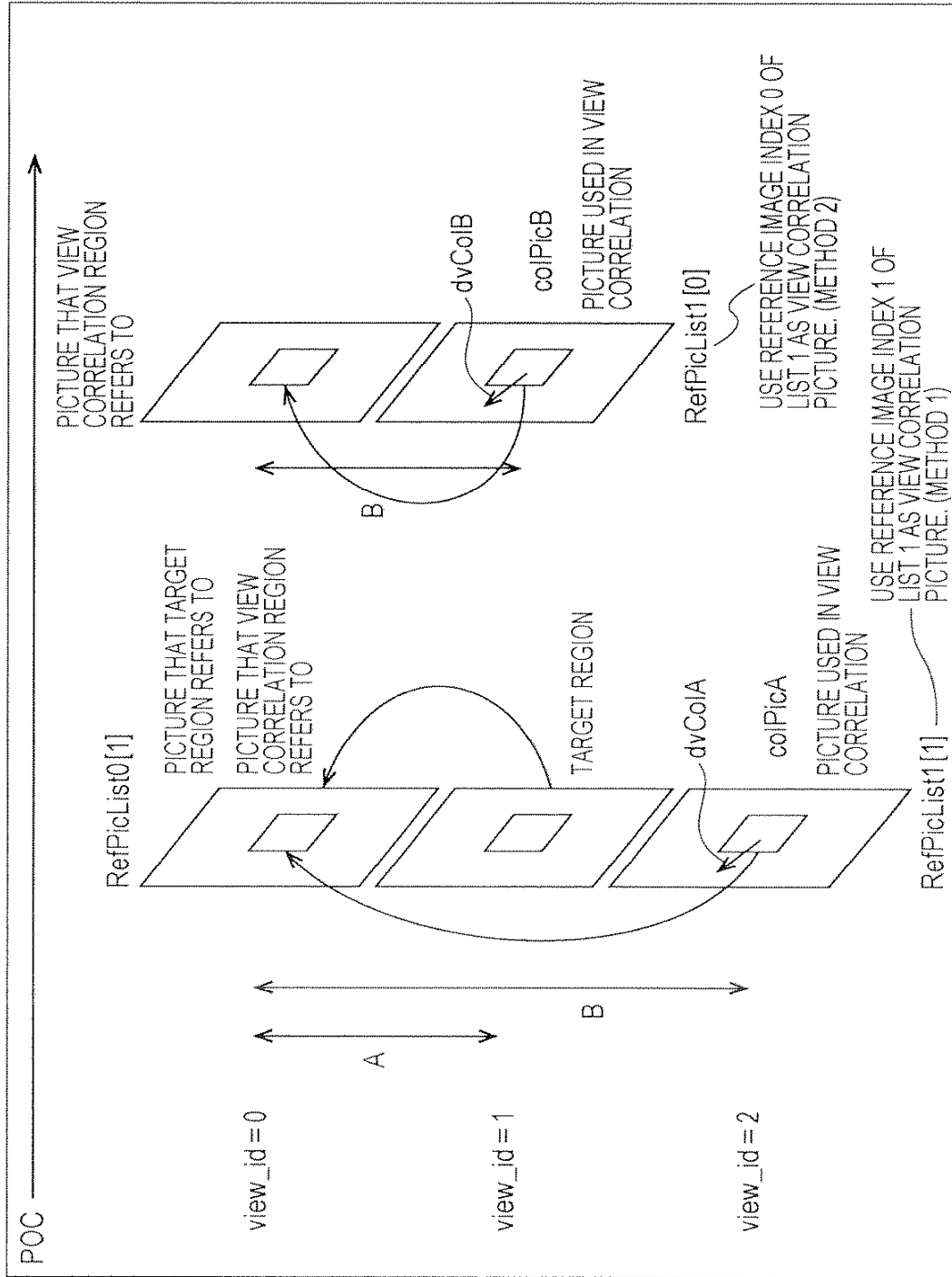


FIG. 10

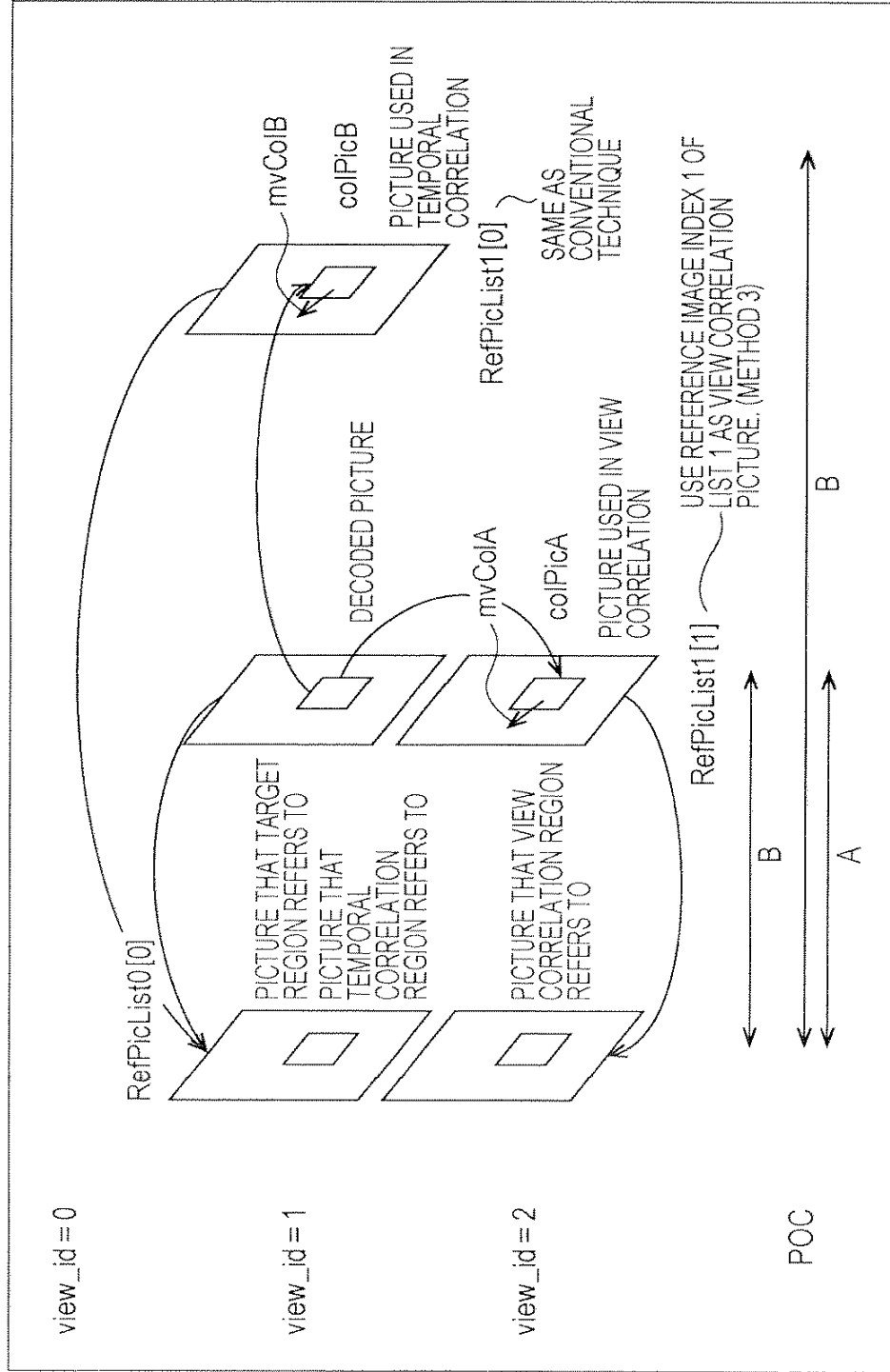


FIG. 11

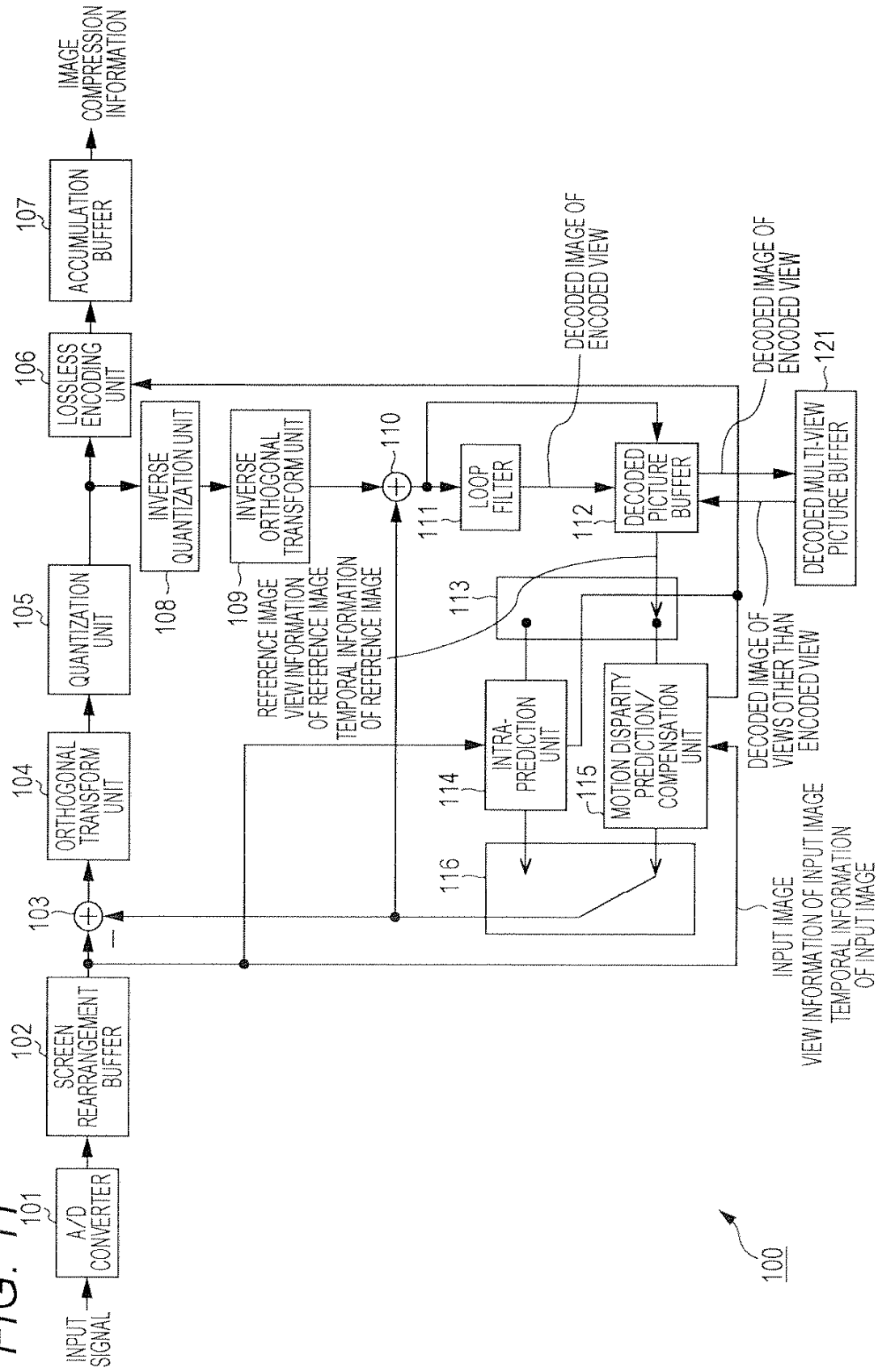


FIG. 13

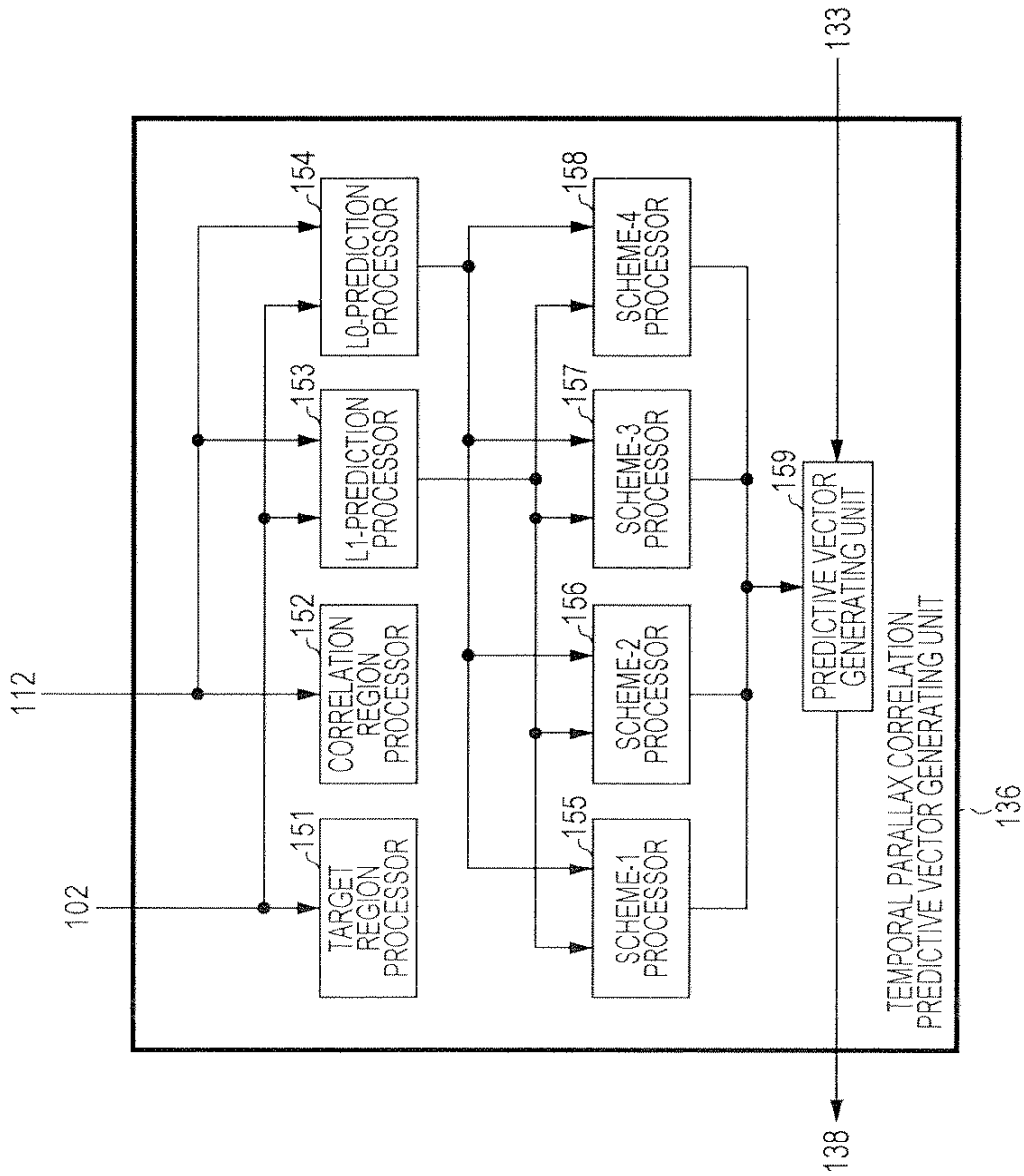


FIG. 14

TARGET REGION		REFERENCE IMAGE OF TARGET REGION		CORRELATION REGION		REFERENCE IMAGE OF CORRELATION REGION		
VIEW ID	POC	VIEW ID	POC	VIEW ID	POC	VIEW ID	POC	
A	E	C	E	B	E	D	E	SCHEME 1
A	D	B	D	A	E	C	E	SCHEME 2
A	C	A	D	B	C	B	E	SCHEME 3
A	B	A	C	A	D	A	E	SCHEME 4

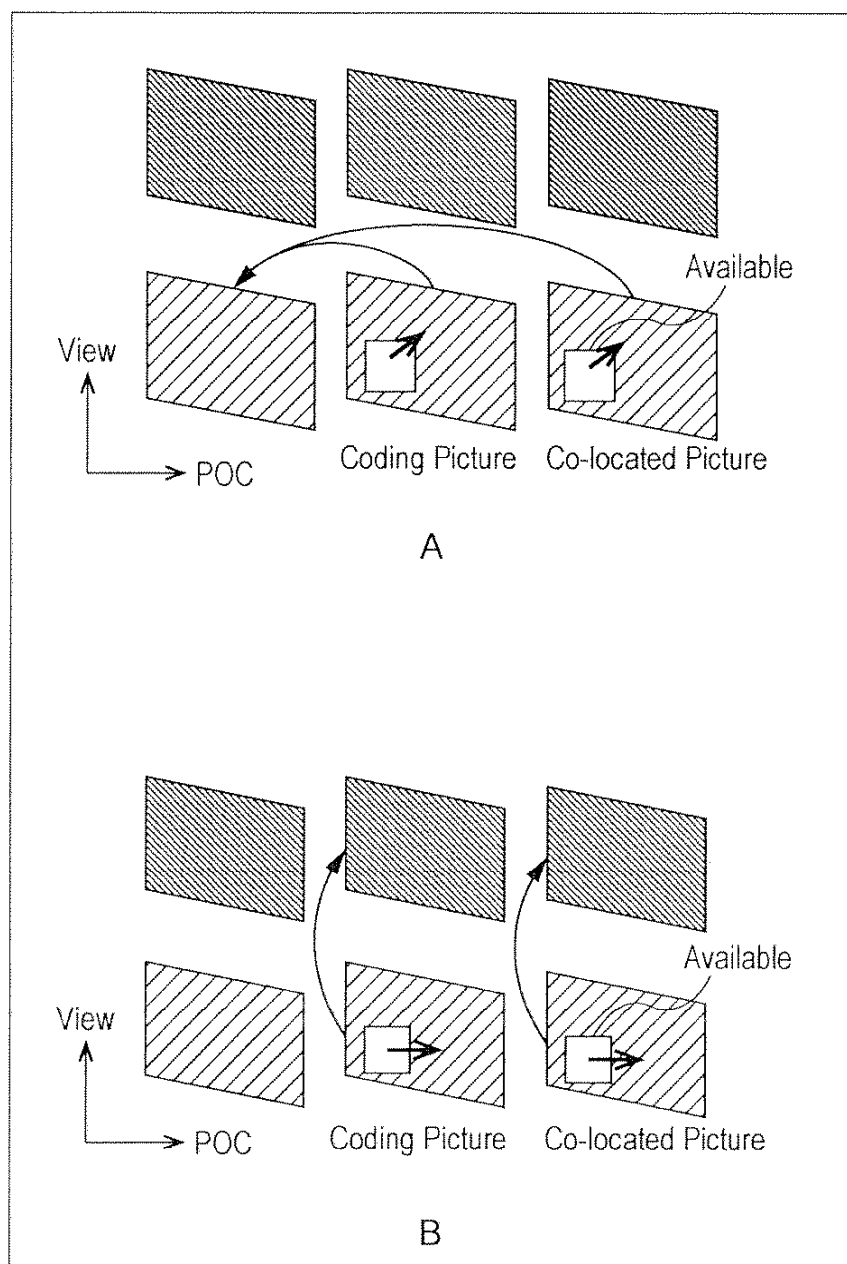
FIG. 15

· Availability decision using POC

1. $(\text{CurrPOC} \neq \text{CurrRefPOC}) \ \&\& \ (\text{ColPOC} \neq \text{ColRefPOC})$
 $\Rightarrow$ Both coding vector and co-located vector are motion vector.
2. $(\text{CurrPOC} == \text{CurrRefPOC}) \ \&\& \ (\text{ColPOC} == \text{ColRefPOC})$
 $\Rightarrow$ Both coding vector and co-located vector are Inter-view vector.

CurrPOC: POC of current picture
 ColPOC: POC of co-located picture
 CurrRefPOC: POC of picture referred from current picture
 ColRefPOC: POC of picture referred from co-located picture

Availability of co-located vector	Coding vector	Co-located vector
Available	Motion vector	Motion vector
Not-available	Motion vector	Inter-view vector
Not-available	Inter-view vector	Motion vector
Available	Inter-view vector	Inter-view vector

FIG. 16

16/93
FIG. 17

seq_parameter_set_rbsp() {	Descriptor	
profile_idc	u(8)	
reserved_zero_8bits /* equal to0 */	u(8)	
level_idc	u(8)	
seq_parameter_set_id	ue(v)	
pic_width_in_luma_samples	u(16)	
pic_height_in_luma_samples	u(16)	
bit_depth_luma_minus8	ue(v)	
bit_depth_chroma_minus8	ue(v)	
log2_max_frame_num_minus4	ue(v)	
pic_order_cnt_type	ue(v)	
if(pic_order_cnt_type == 0)		
log2_max_pic_order_cnt_lsb_minus4	ue(v)	
else if(pic_order_cnt_type == 1) {		
delta_pic_order_always_zero_flag	u(1)	
offset_for_non_ref_pic	se(v)	
num_ref_frames_in_pic_order_cnt_cycle	ue(v)	
for(i = 0; i < num_ref_frames_in_pic_order_cnt_cycle; i++)		
offset_for_ref_frame[i]	se(v)	
}		
max_num_ref_frames	ue(v)	
gaps_in_frame_num_value_allowed_flag	u(1)	
log2_min_coding_block_size_minus3	ue(v)	
log2_diff_max_min_coding_block_size	ue(v)	
log2_min_transform_block_size_minus2	ue(v)	
log2_diff_max_min_transform_block_size	ue(v)	
max_transform_hierarchy_depth_inter	ue(v)	
max_transform_hierarchy_depth_intra	ue(v)	
adaptive_loop_filter_enabled_flag	u(1)	
cu_qp_delta_enabled_flag	u(1)	
num_views		TOTAL NUMBER OF VIEWS
for(i=0; i< num_views ;i++){		
view_id [i]		ID FOR IDENTIFYING VIEWS
num_ref_views_l0[i]		NUMBER OF PARALLAX PREDICTIONS IN LIST L0
for(j=0;j<num_ref_views_l0[i];j++)		
ref_view_id_l0[i][j]		ID OF VIEW REFERRED TO IN PARALLAX PREDICTION IN LIST L0
num_ref_views_l1[i]		NUMBER OF PARALLAX PREDICTIONS IN LIST L1
for(j=0;j<num_ref_views_l1[i];j++)		
ref_view_id_l1[i][j]		ID OF VIEW REFERRED TO IN PARALLAX PREDICTION IN LIST L1
}		
rbsp_trailing_bits ()		
}		

FIG. 18

slice_header() {	Descriptor
first_tb_in_slice	ue(v)
entropy_slice_flag	u(1)
if(!entropy_slice_flag) {	
slice_type	ue(v)
pic_parameter_set_id	ue(v)
frame_num	u(v)
view_id	u(v)
if(!idrPicFlag)	
idr_pic_id	ue(v)
if(pic_order_cnt_type == 0)	
pic_order_cnt_lsb /*	u(v)
if(slice_type == P slice_type == B) {	
num_ref_idx_active_override_flag	u(1)
if(num_ref_idx_active_override_flag) {	
num_ref_idx_l0_active_minus1	ue(v)
if(slice_type == B)	
num_ref_idx_l1_active_minus1	ue(v)
}	
}	
ref_pic_list_modification()	
ref_pic_list_combination()	
if(nal_ref_idc != 0)	
dec_ref_pic_marking()	
if(entropy_coding_mode_flag && slice_type != I)	
cabac_init_idc	ue(v)
slice_qp_delta	se(v)
if(adaptive_loop_filter_enabled_flag)	
alf_param()	
if(deblocking_filter_control_present_flag) {	
disable_deblocking_filter_idc	
if(disable_deblocking_filter_idc != 1) {	
slice_alpha_c0_offset_div2	
slice_beta_offset_div2	
}	
}	
if(slice_type == B)	
collocated_from_l0_flag	u(1)
} else	
if(entropy_coding_mode_flag && slice_type != I)	
cabac_init_idc	ue(v)
}	

ID FOR IDENTIFYING
VIEWS

18/93
FIG. 19

prediction_unit(x0,y0,log2PUWidth,log2PUHeight, PartIdx, InferredMergeFlag) {	Descriptor
if(skip_flag[x0][y0]) {	
if(NumMergeCand > 1)	
merge_idx[x0][y0]	ue(v) ae(v)
} else if(PredMode == MODE_INTRA) {	
prev_intra_luma_pred_flag[x0][y0]	u(1) ae(v)
if(!prev_intra_luma_pred_flag[x0][y0]	
if(NumMPMCand > 1)	
mpm_idx[x0][y0]	u(1) ae(v)
else	
rem_intra_luma_pred_mode[x0][y0]	ue(v) ae(v)
intra_chroma_pred_mode[x0][y0]	ue(v) ae(v)
} else /* MODE_INTER*/	
if(!InferredMergeFlag)	
merge_flag[x0][y0]	u(1) ae(v)
if(merge_flag[x0][y0] && NumMergeCand > 1) {	
merge_idx[x0][y0]	ue(v) ae(v)
} else {	
if(slice_type == B)	
inter_pred_flag[x0][y0]	ue(v) ae(v)
if(inter_pred_flag[x0][y0] == Pred_LC) {	
if(num_ref_idx_lc_active_minus1 > 0)	
ref_idx_lc[x0][y0]	ue(v) ae(v)
mvd_lc[x0][y0][0]	se(v) ae(v)
mvd_lc[x0][y0][1]	se(v) ae(v)
if(NumMVPCand(LcToLx) > 1)	
mvp_idx_lc[x0][y0]	ue(v) ae(v)
}	
else /* Pred_LO or Pred_BI */	
if(num_ref_idx_lc_active_minus1 > 0)	
ref_idx_l0[x0][y0]	ue(v) ae(v)
mvd_l0[x0][y0][0]	se(v) ae(v)
mvd_l0[x0][y0][1]	se(v) ae(v)
if(NumMVPCand(L0) > 1)	
mvp_idx_l0[x0][y0]	ue(v) ae(v)
}	
if(inter_pred_flag[x0][y0] == Pred_BI) {	
if(num_ref_idx_l1_active_minus1 > 0)	
ref_idx_l1[x0][y0]	ue(v) ae(v)
mvd_l1[x0][y0][0]	se(v) ae(v)
mvd_l1[x0][y0][1]	se(v) ae(v)
if(NumMVPCand(L1) > 1)	
mvp_idx_l1[x0][y0]	ue(v) ae(v)
}	
}	
}	
}	

EXPAND TYPE OF
SYNTAX OR CHANGE
PROCESSING CONTENT

EXPAND TYPE OF
SYNTAX OR CHANGE
PROCESSING CONTENT

EXPAND TYPE OF
SYNTAX OR CHANGE
PROCESSING CONTENT

EXPAND TYPE OF
SYNTAX OR CHANGE
PROCESSING CONTENT

EXPAND TYPE OF
SYNTAX OR CHANGE
PROCESSING CONTENT

FIG. 20

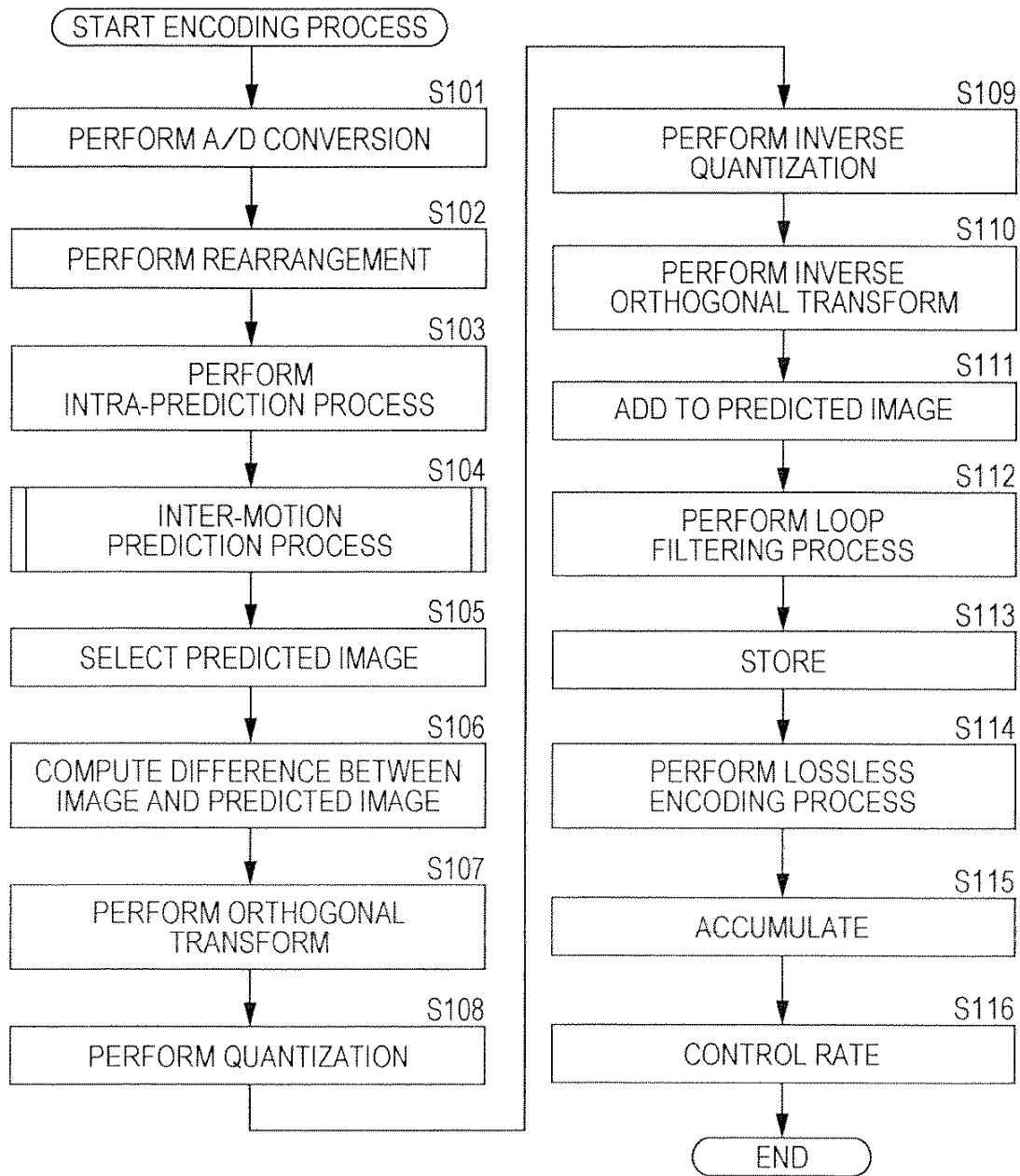


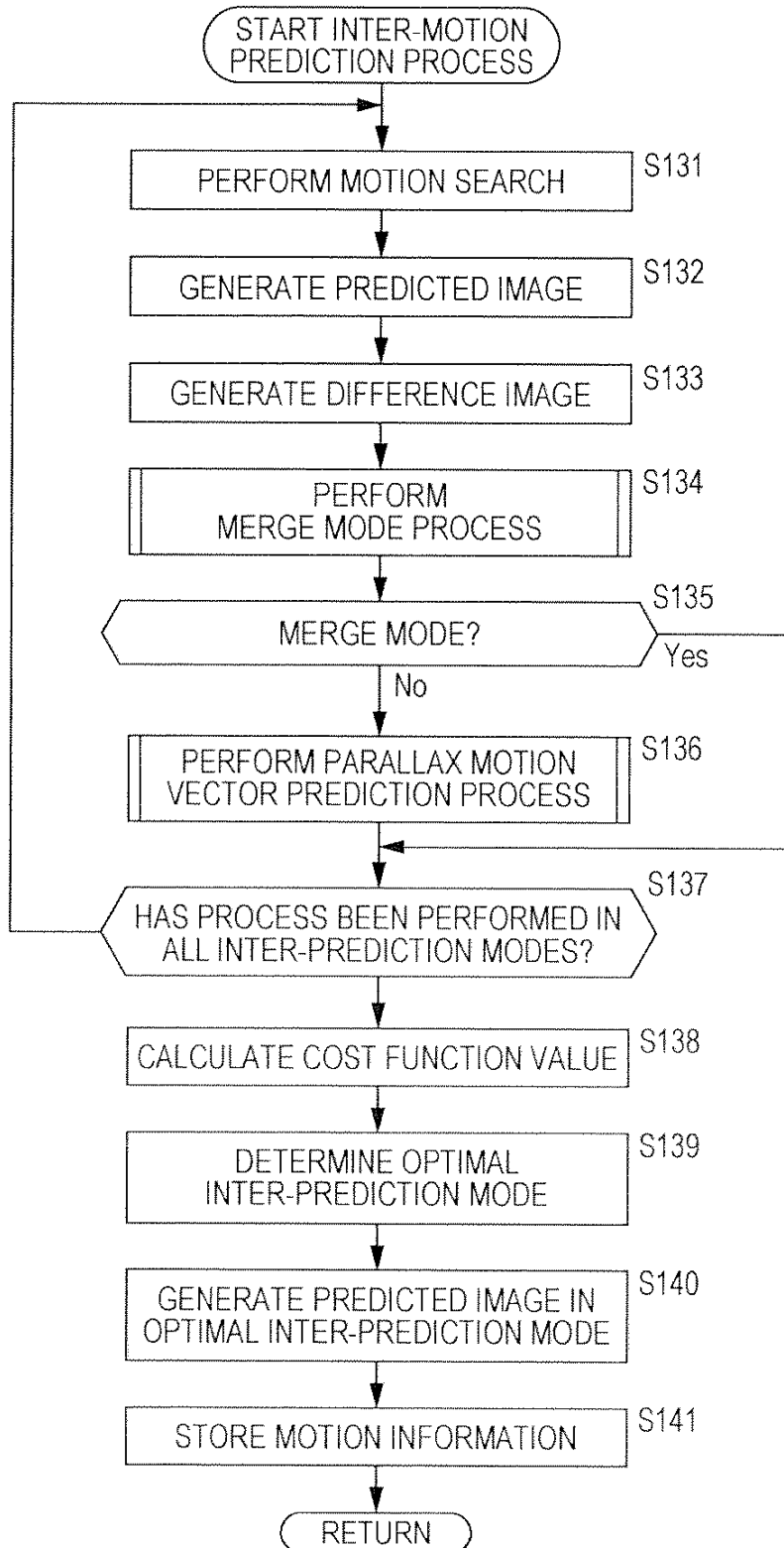
FIG. 21

FIG. 22

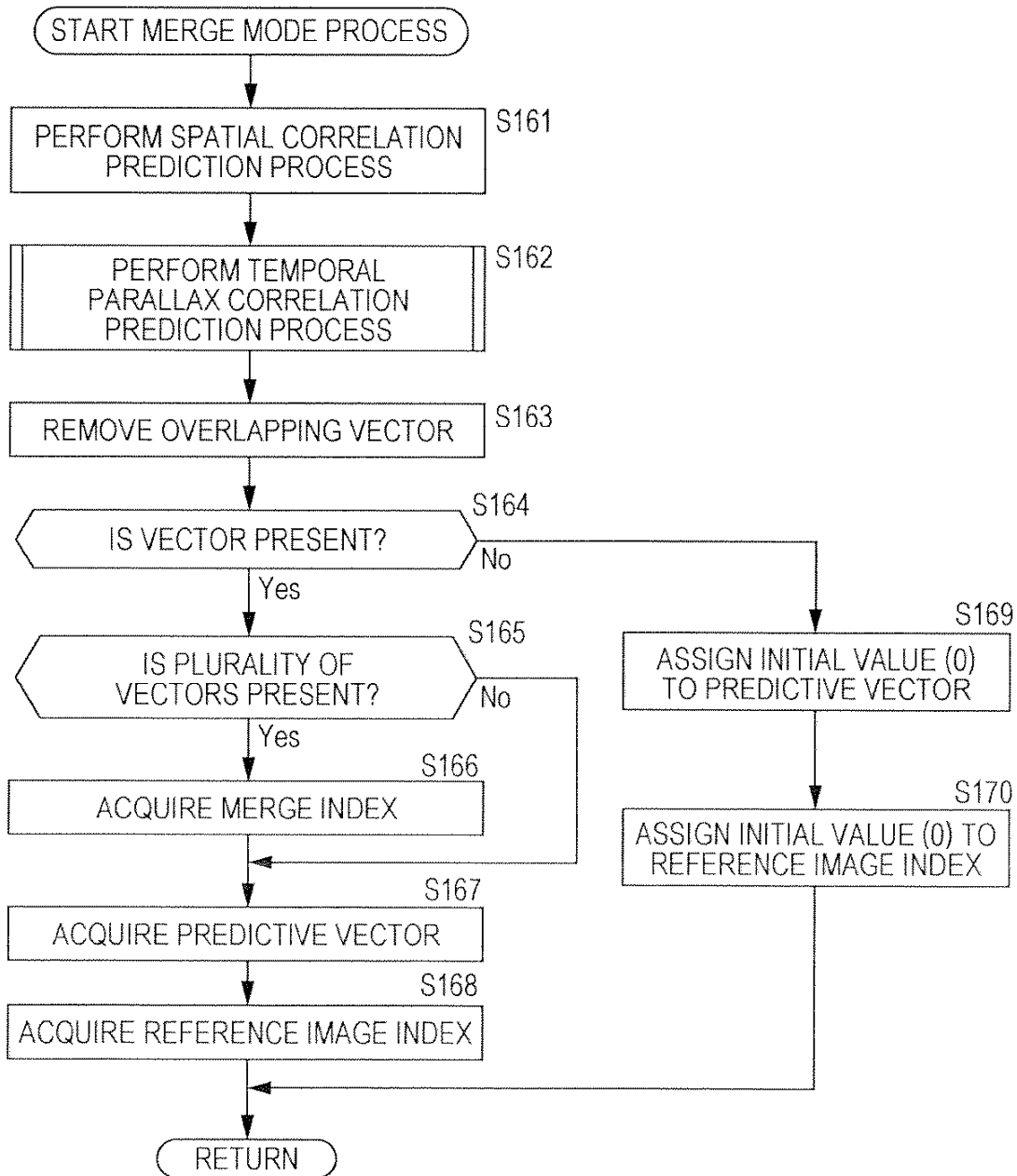


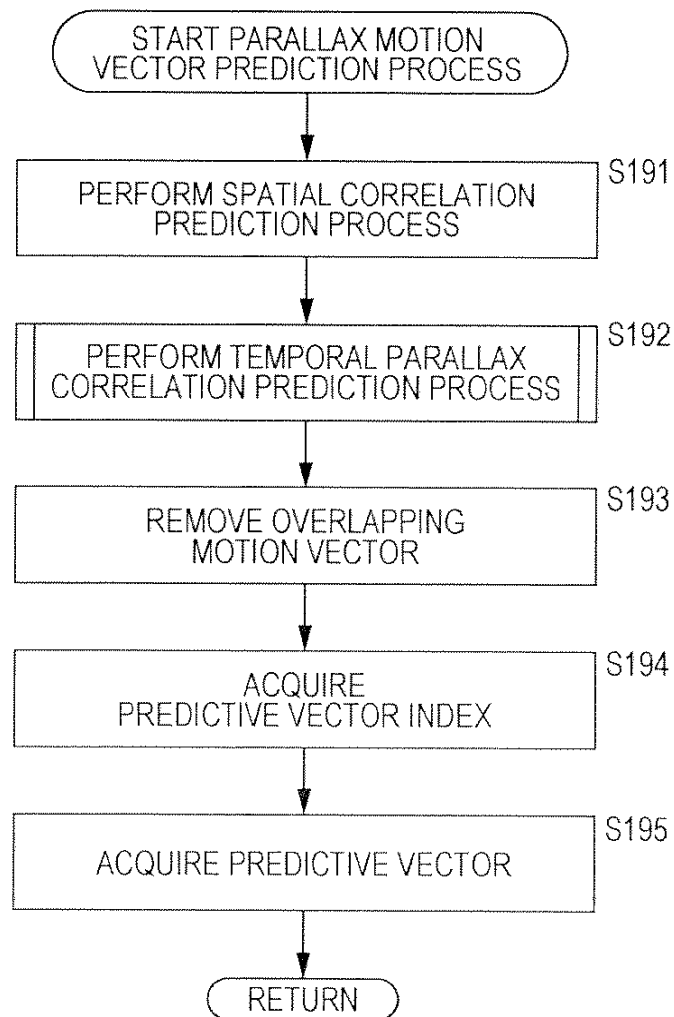
FIG. 23

FIG. 24

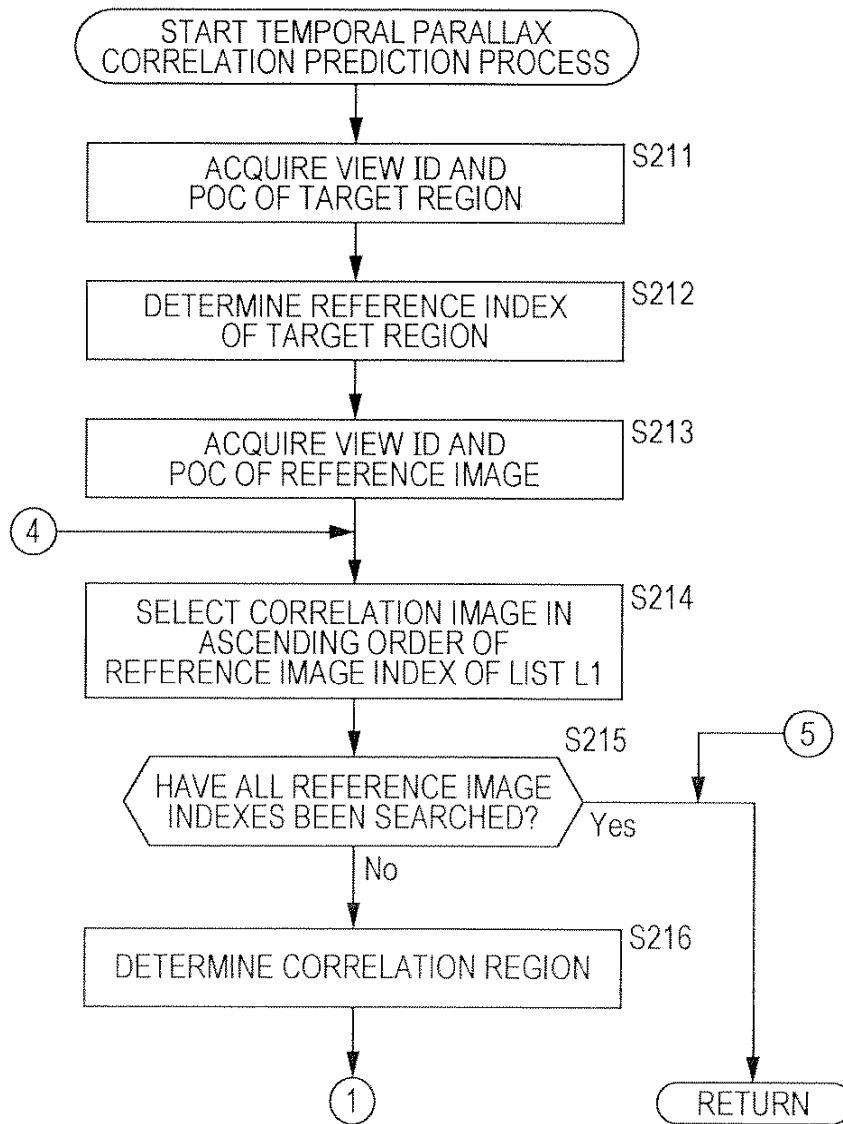


FIG. 25

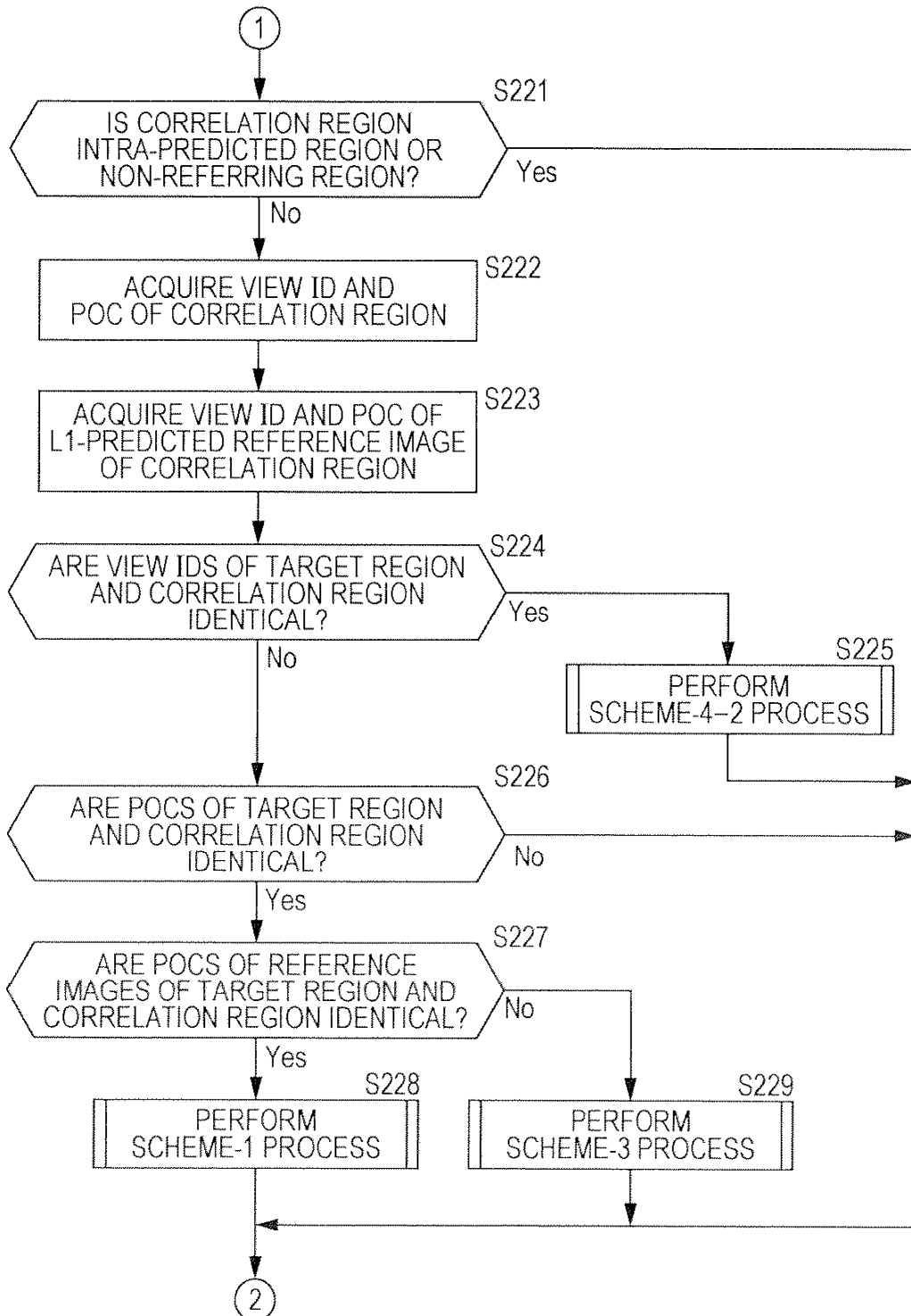


FIG. 26

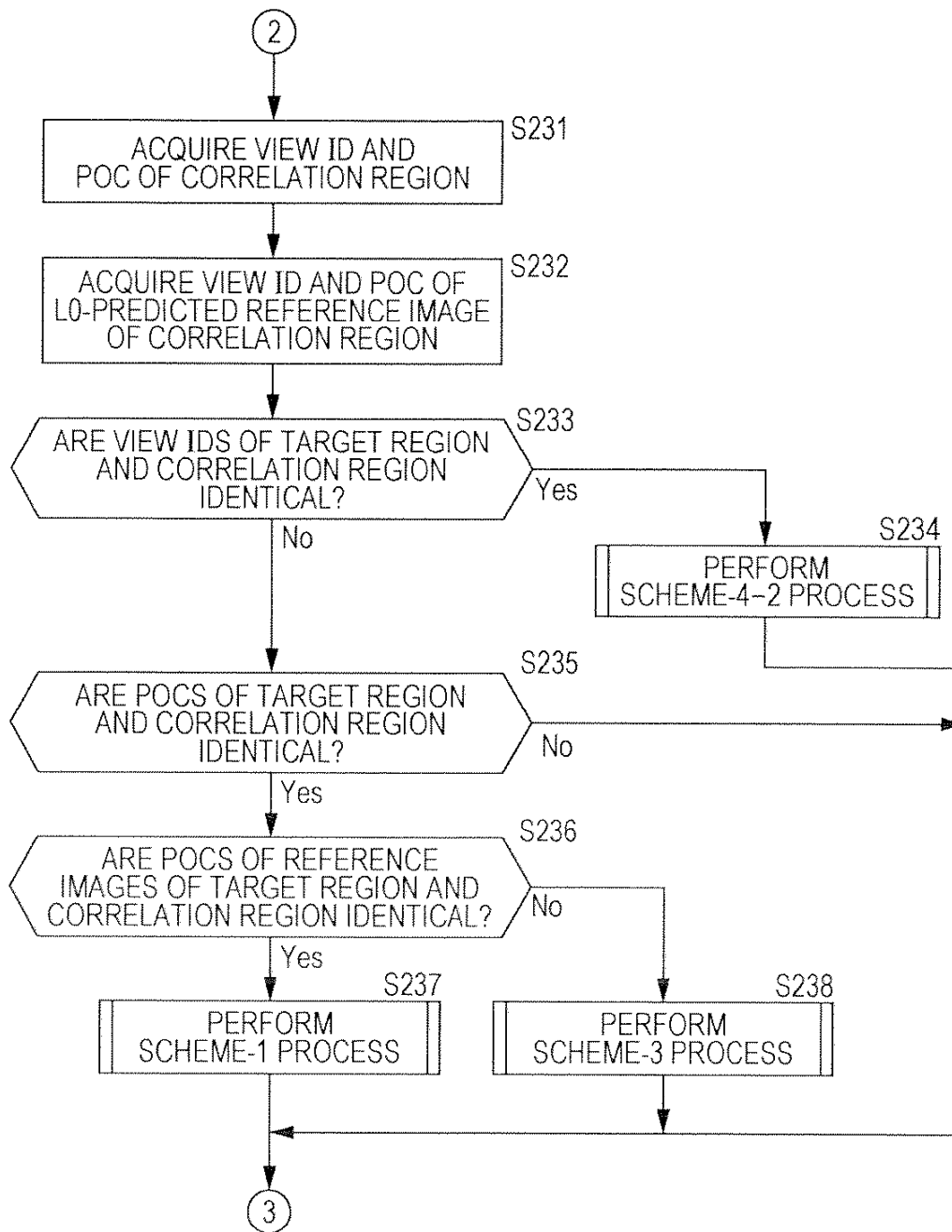


FIG. 27

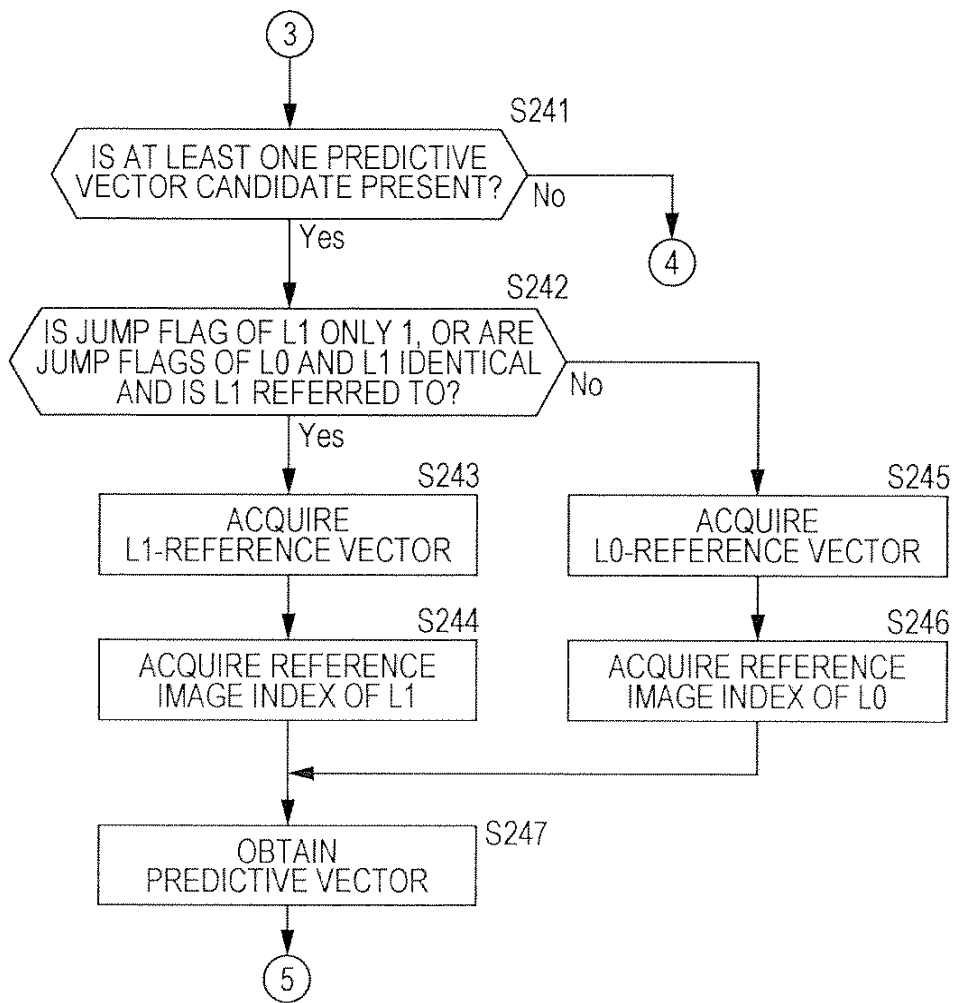


FIG. 28

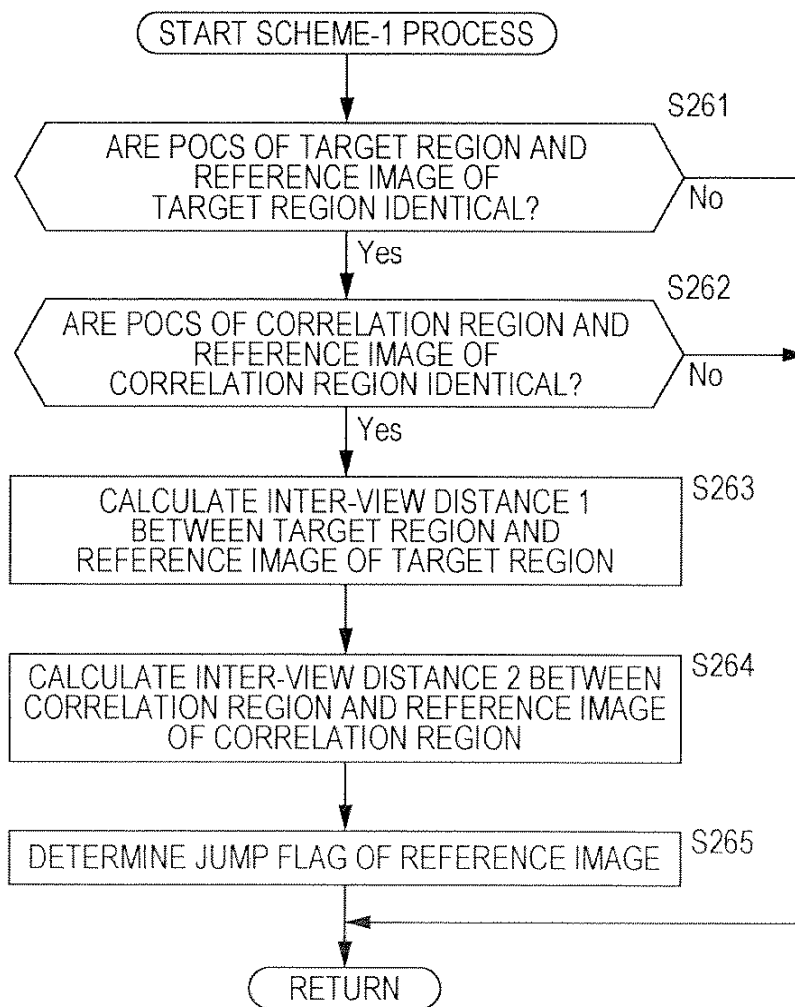


FIG. 29

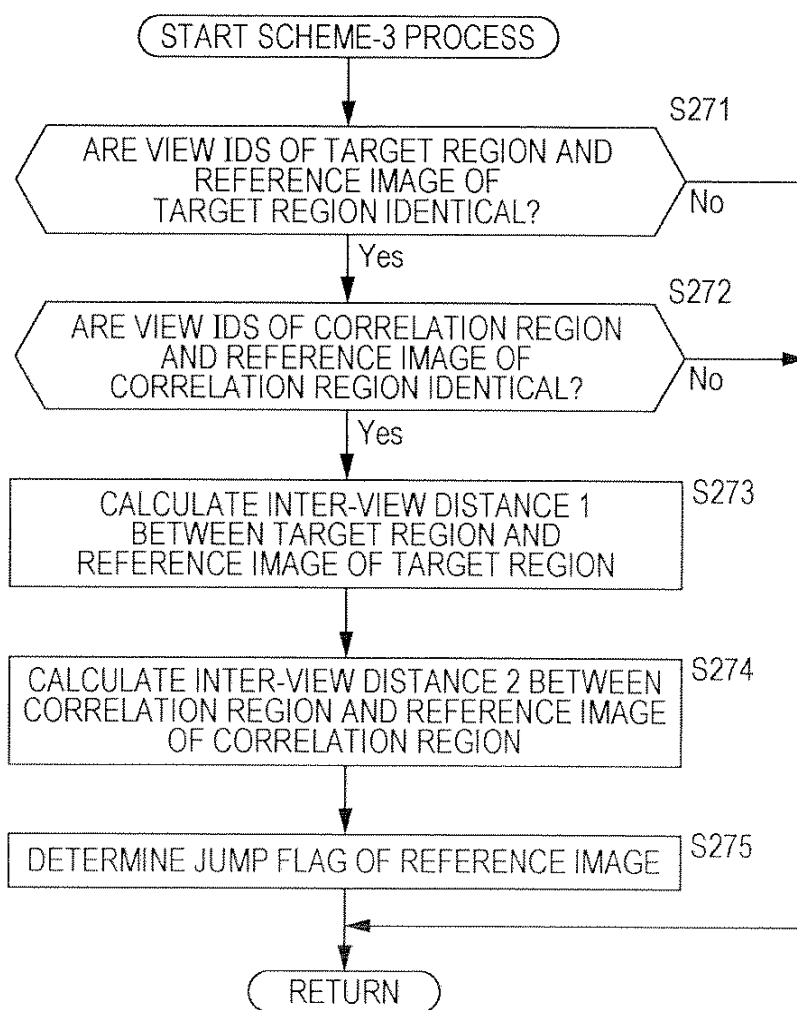


FIG. 30

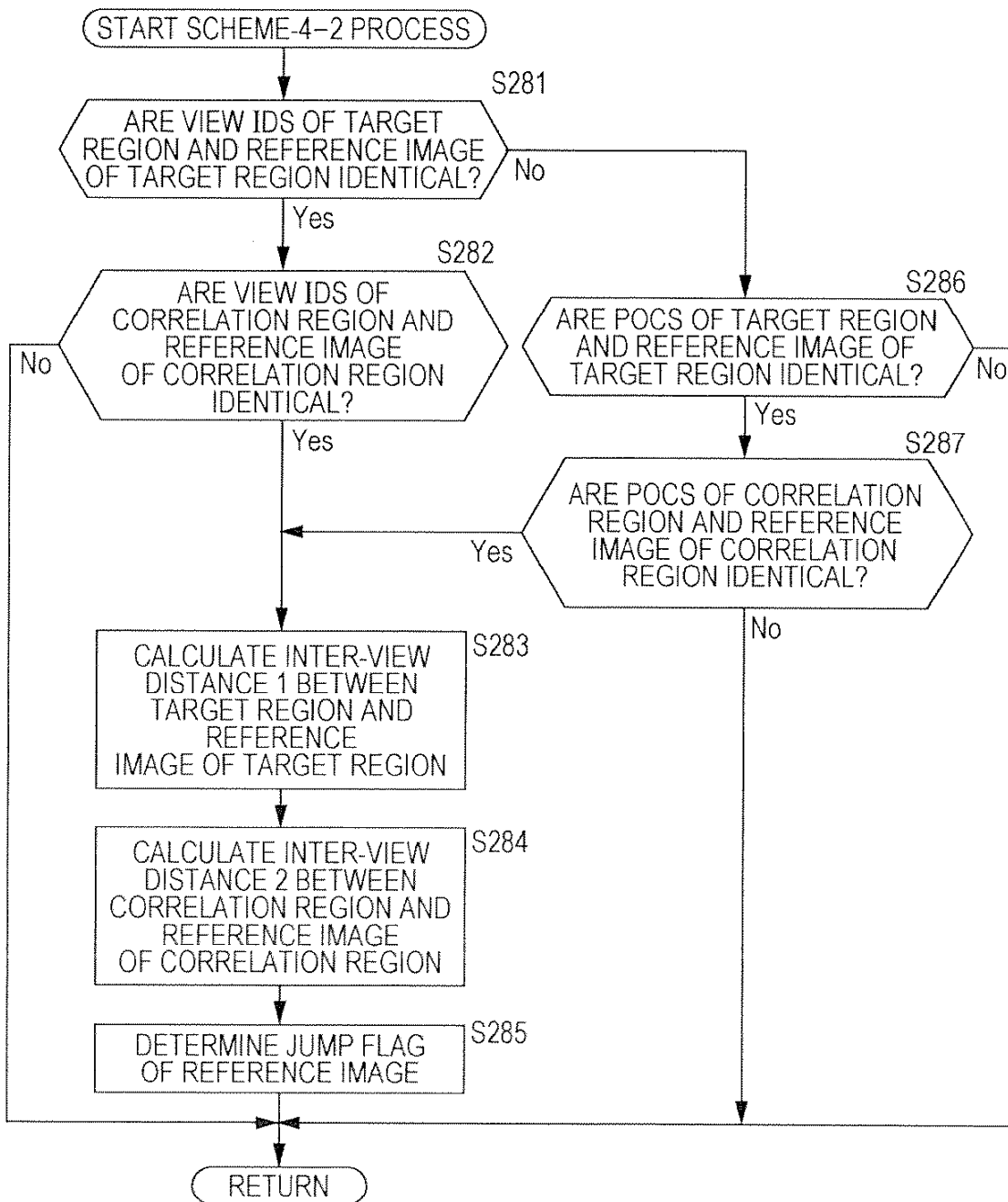


FIG. 31

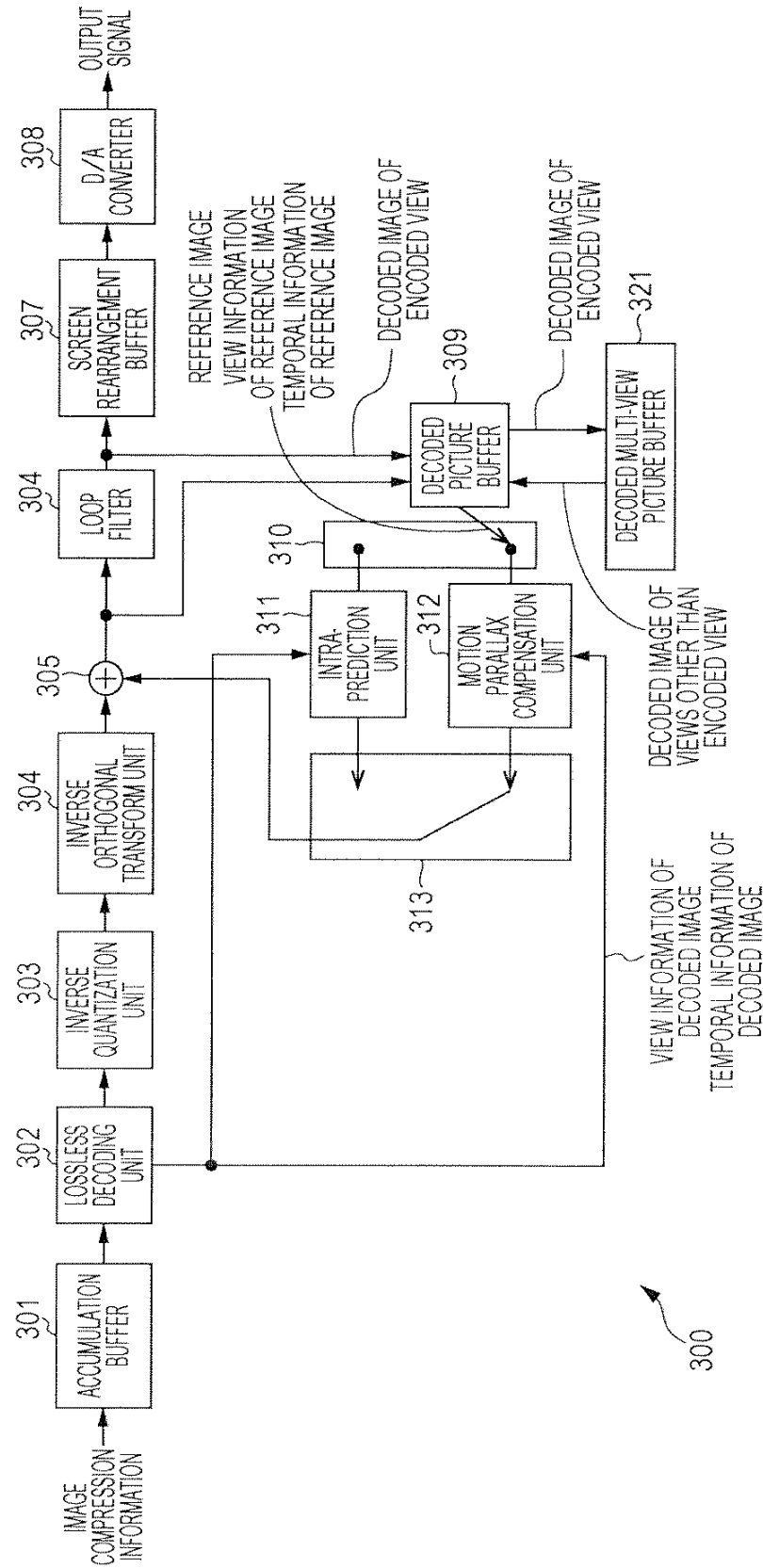


FIG. 32

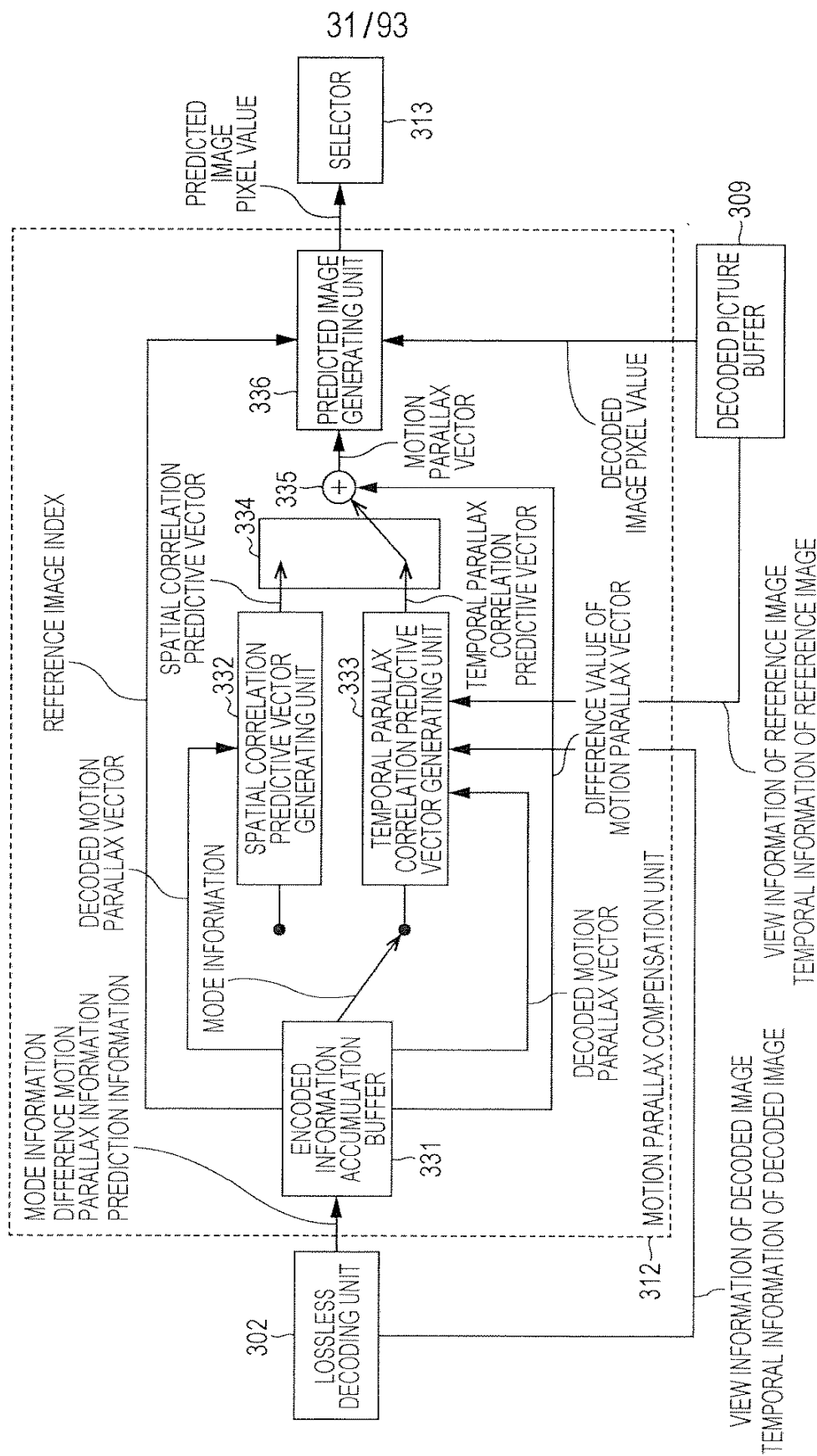


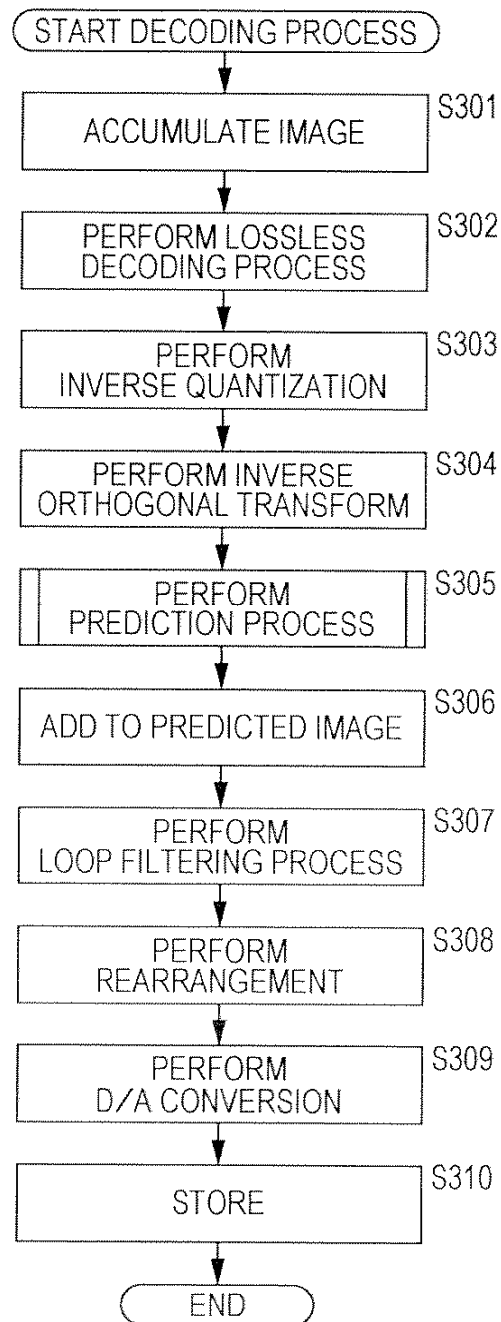
FIG. 33

FIG. 34

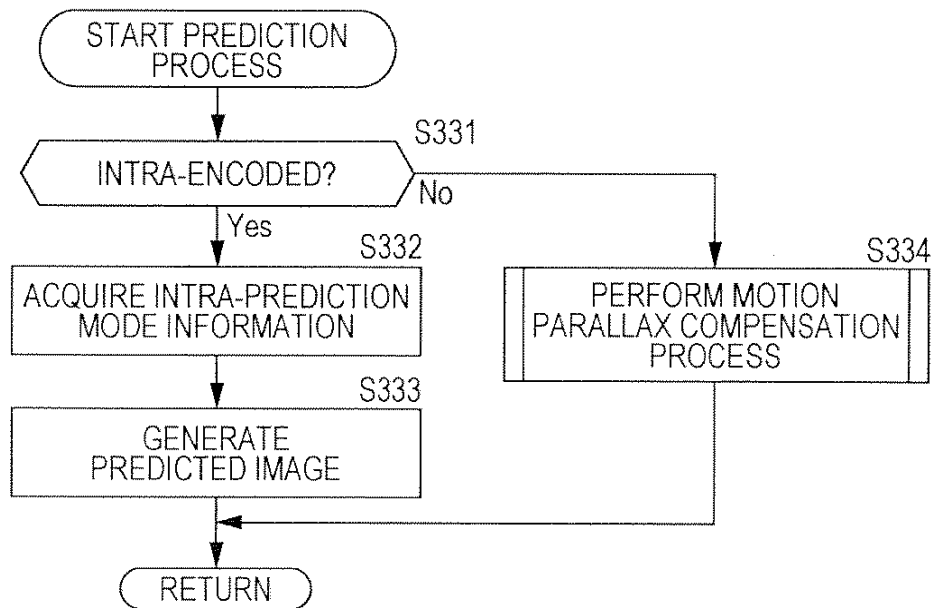


FIG. 35

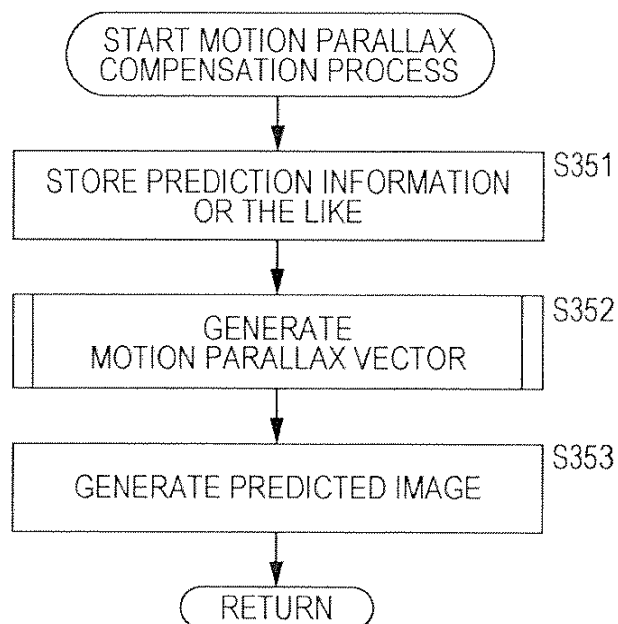


FIG. 36

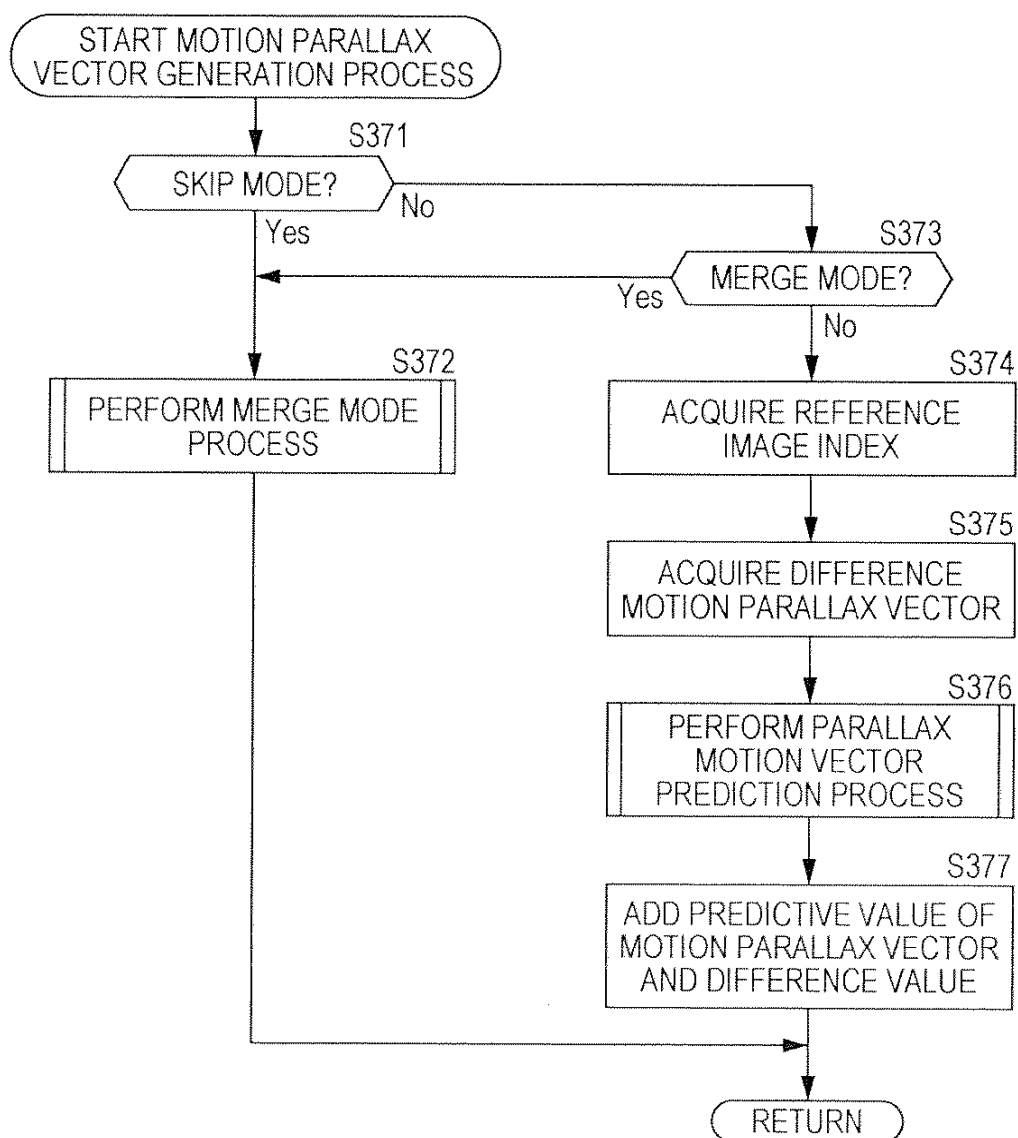


FIG. 37

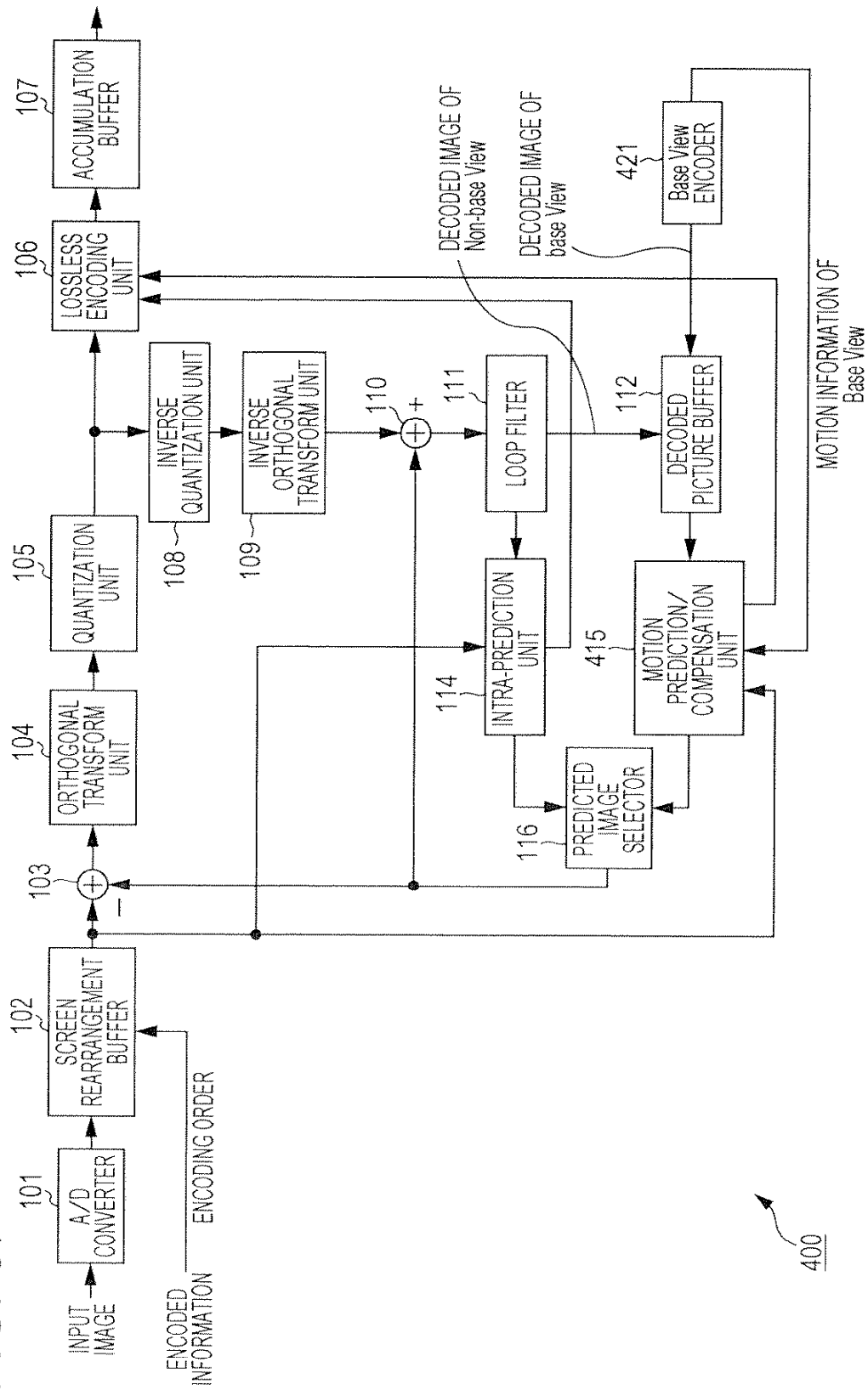


FIG. 39

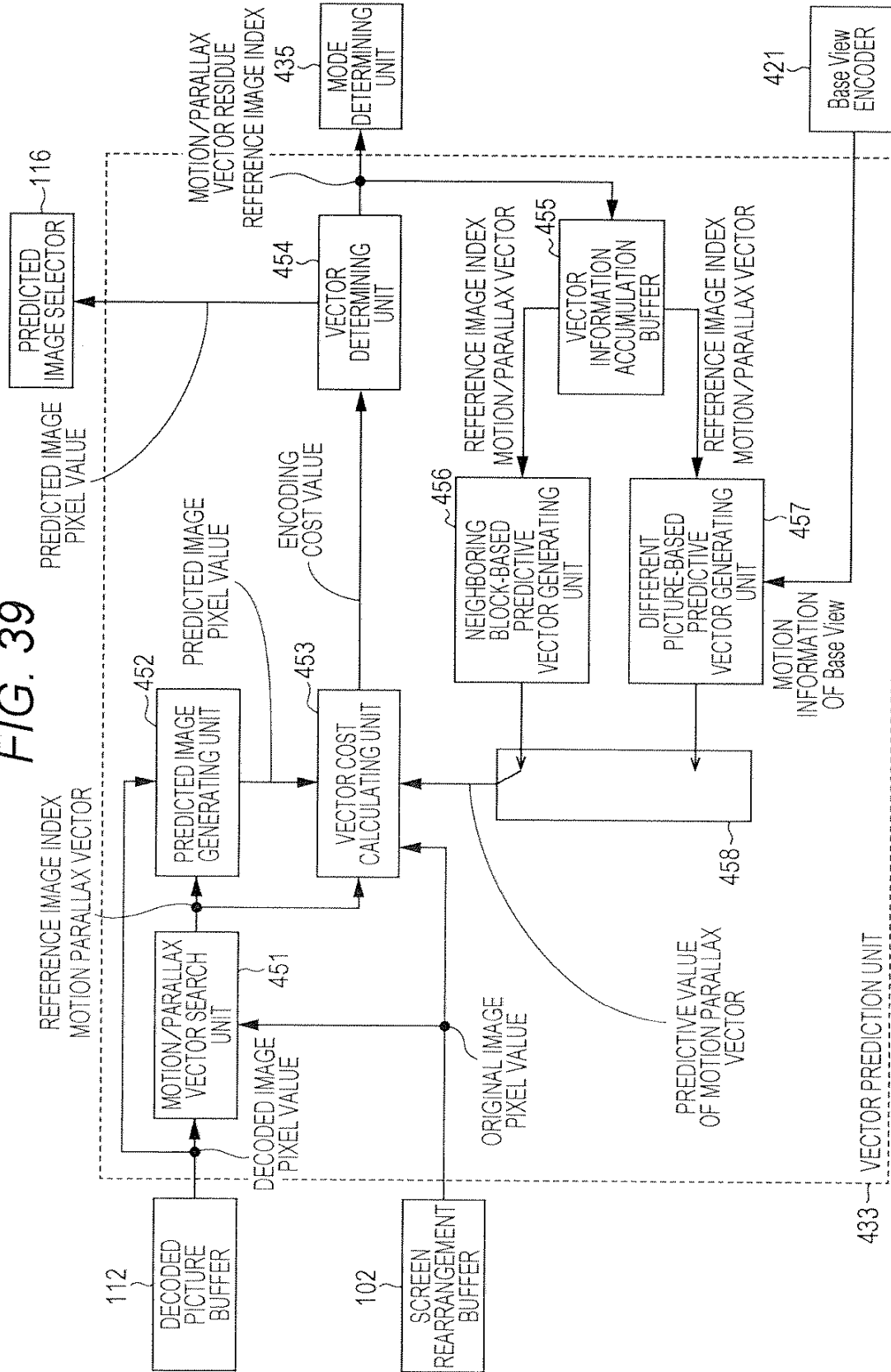


FIG. 40

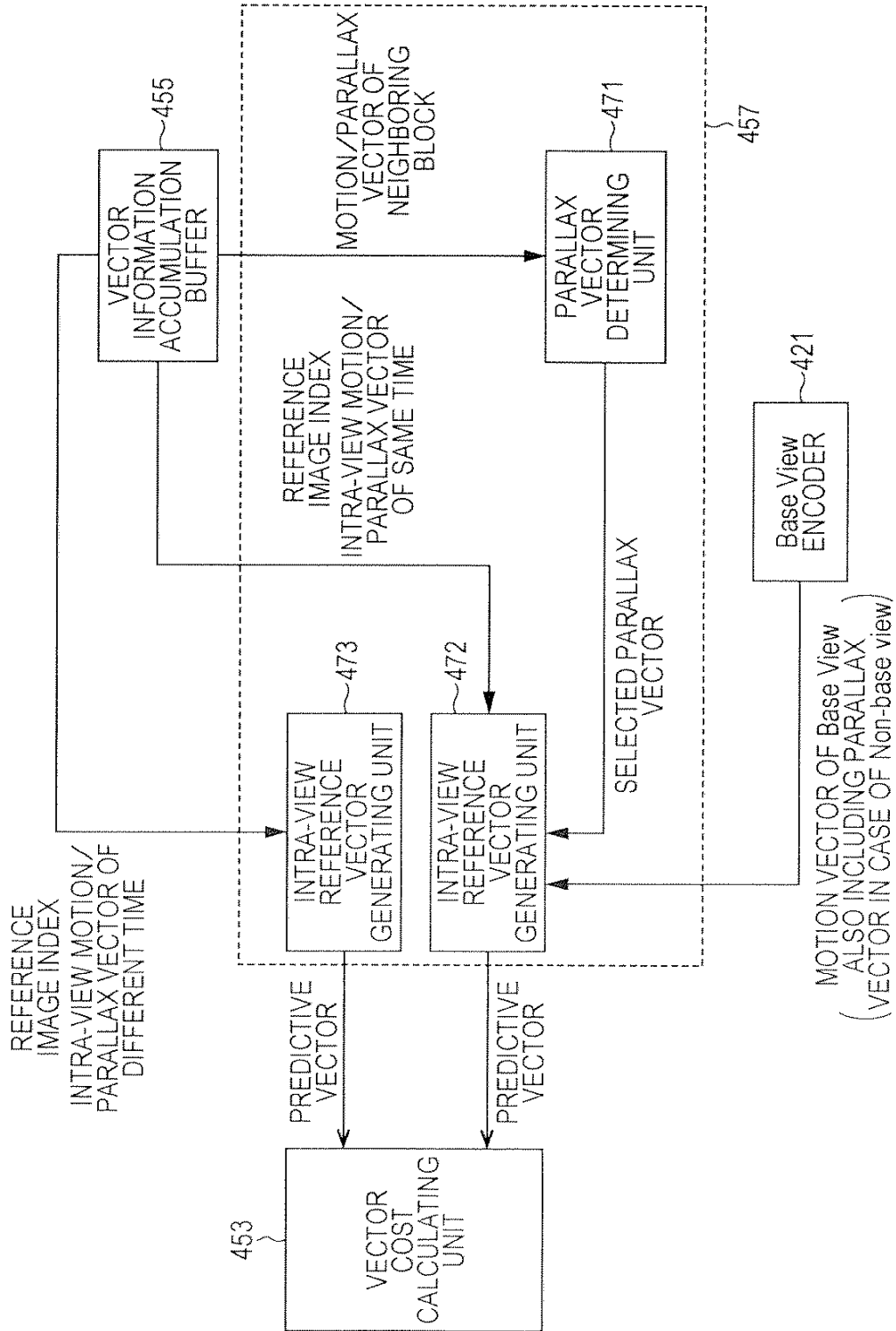


FIG. 41

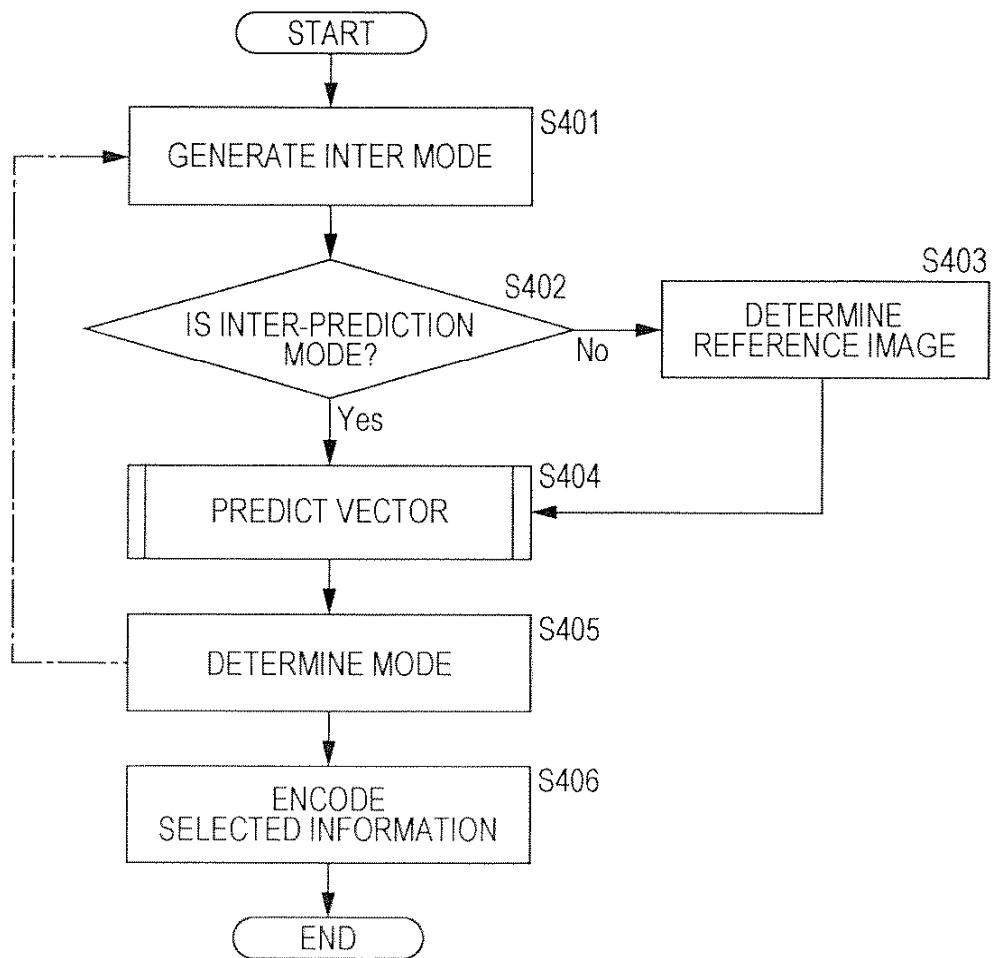


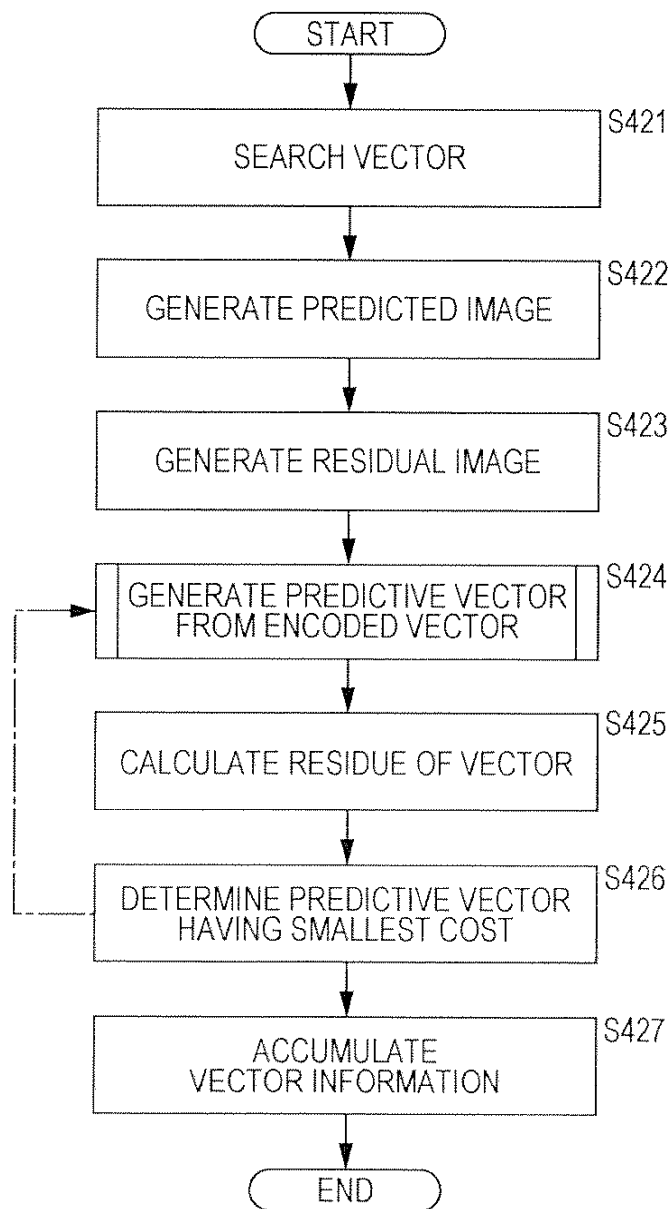
FIG. 42

FIG. 43

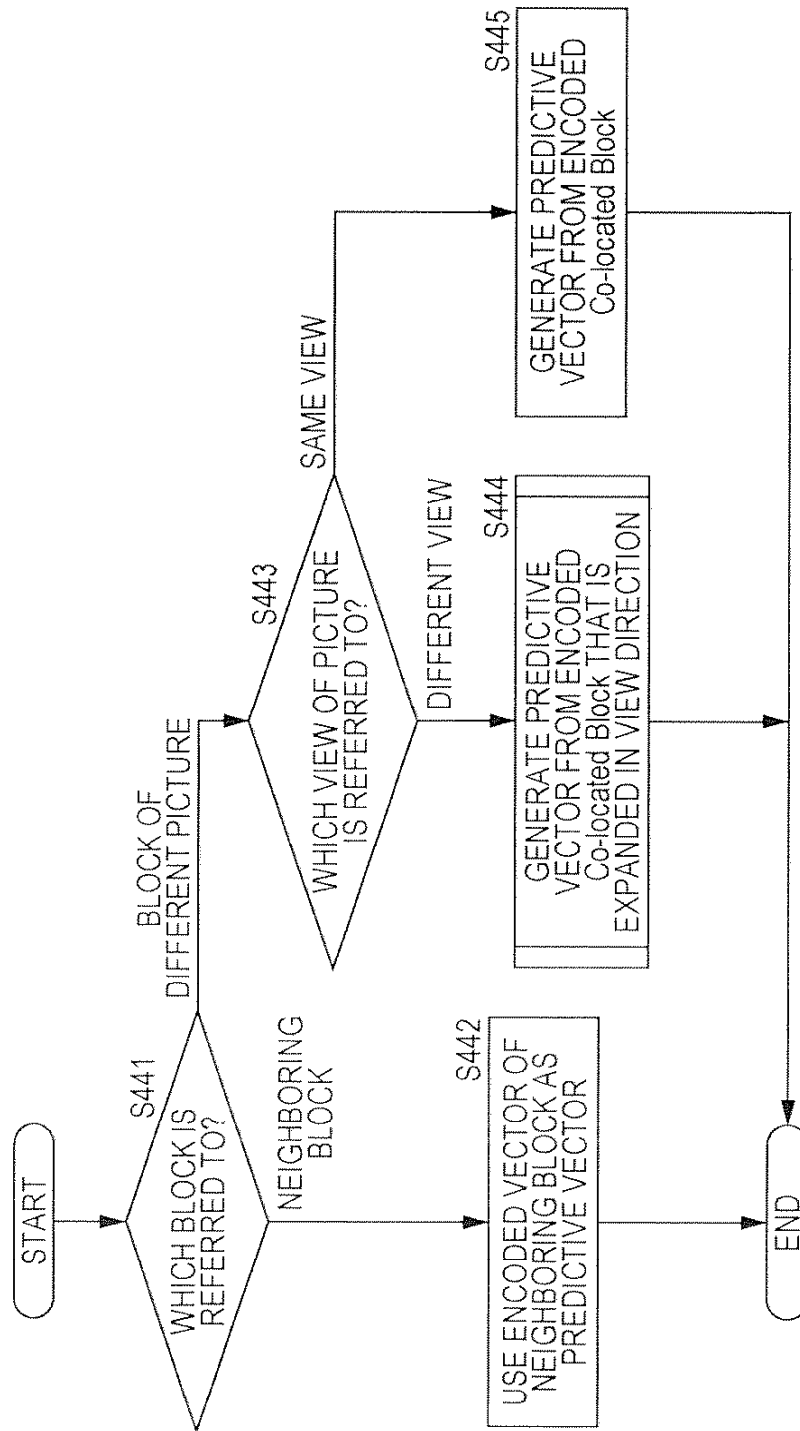


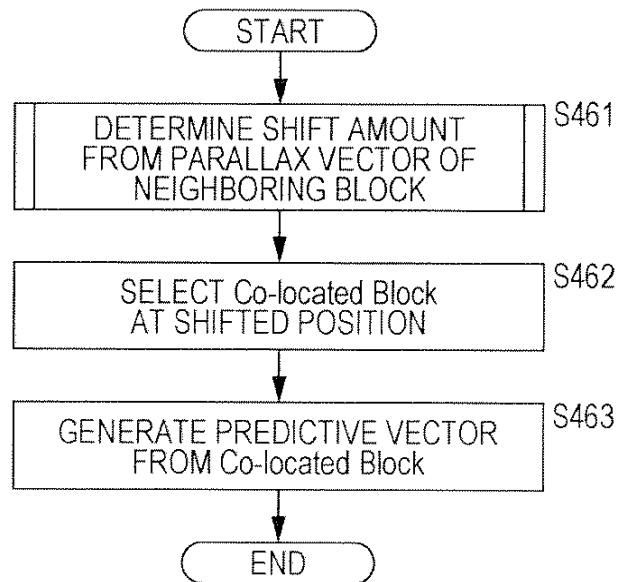
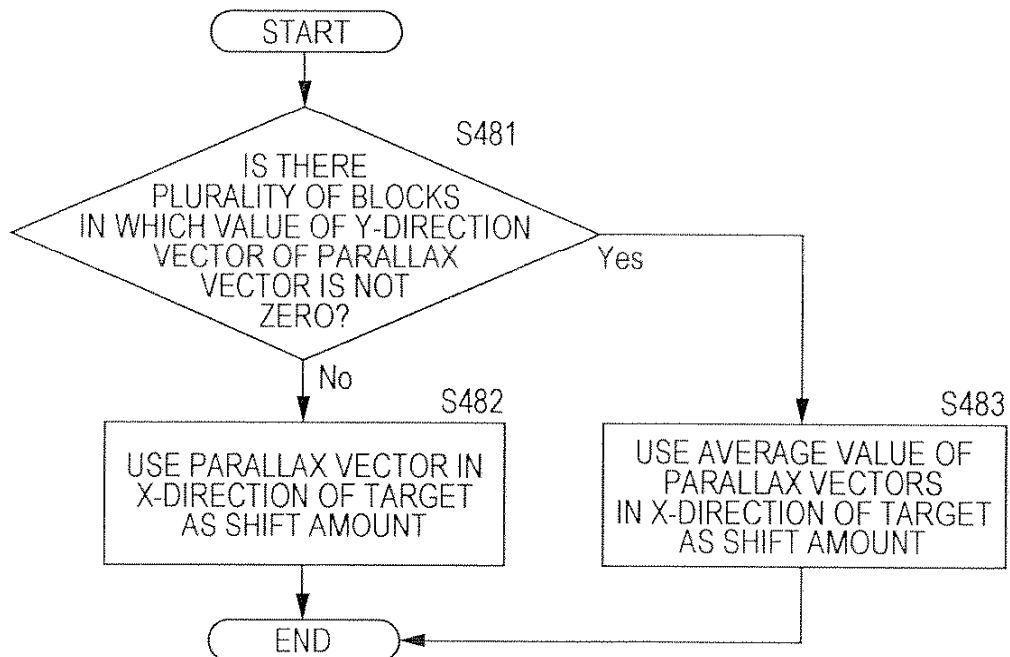
FIG. 44*FIG. 45*

FIG. 46

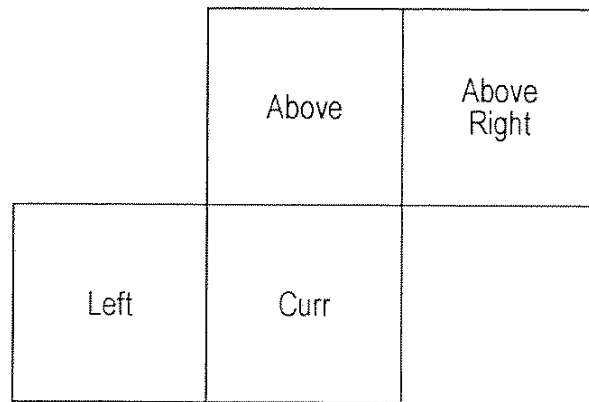


FIG. 47

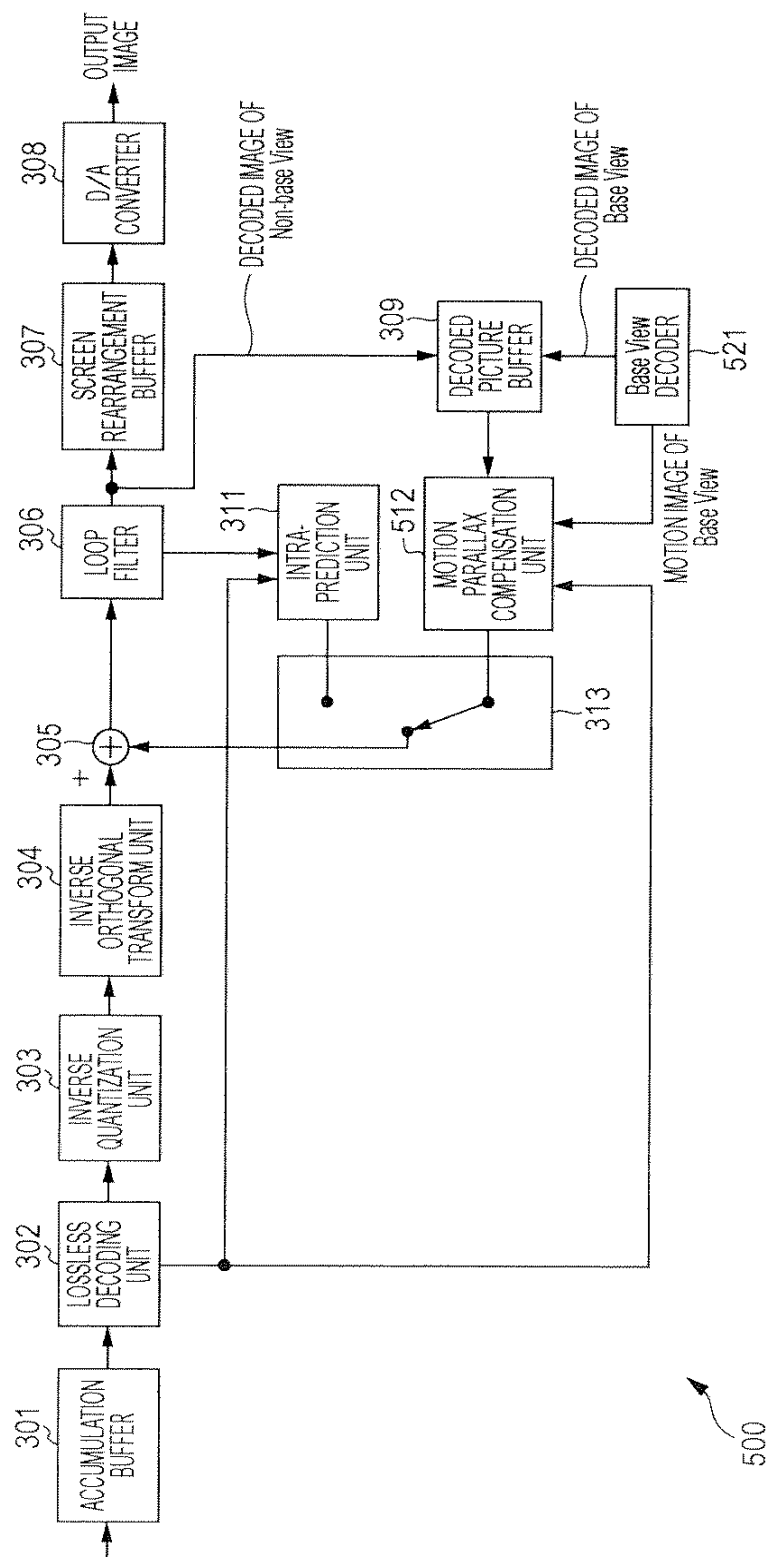


FIG. 48

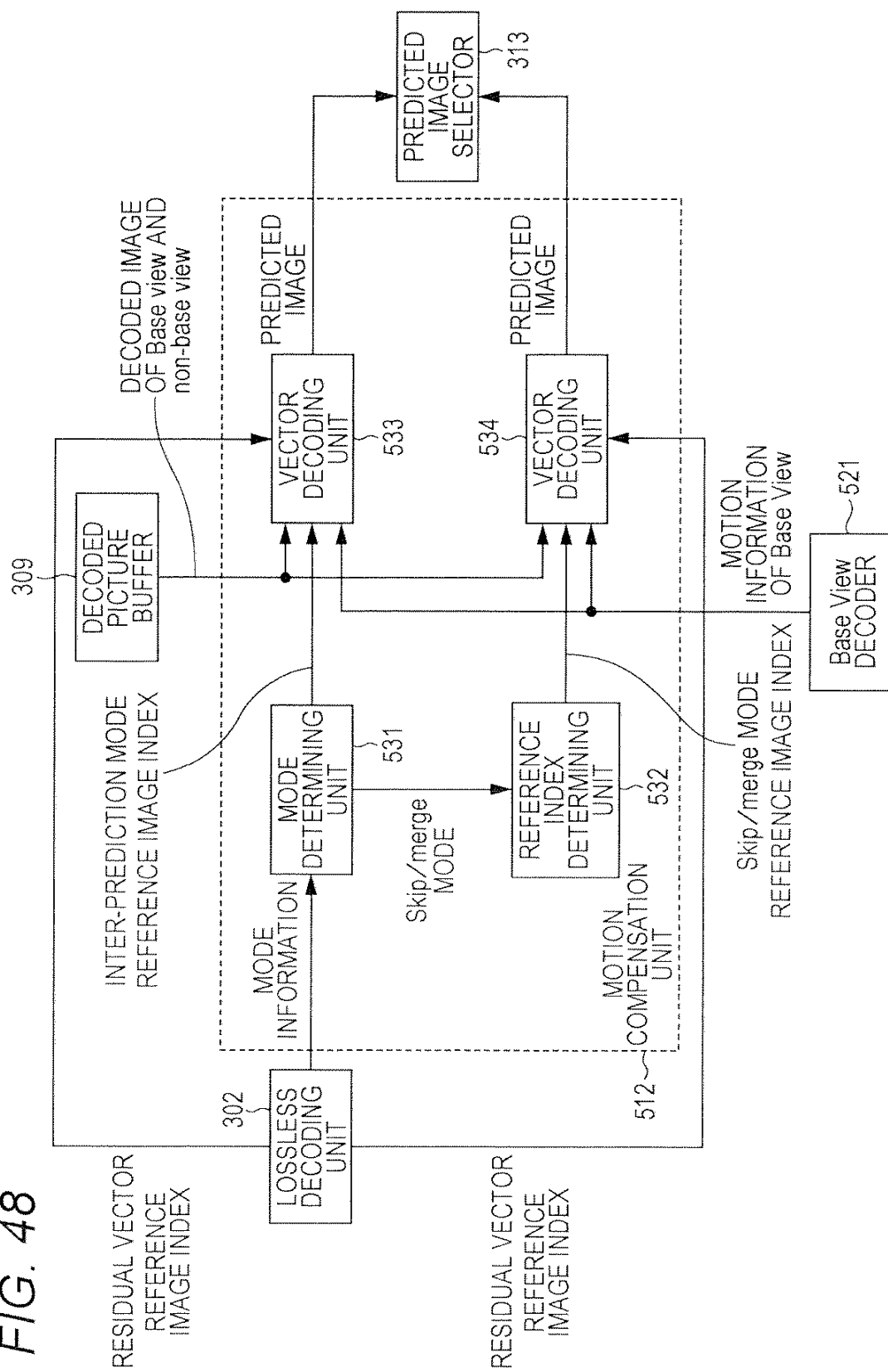


FIG. 49

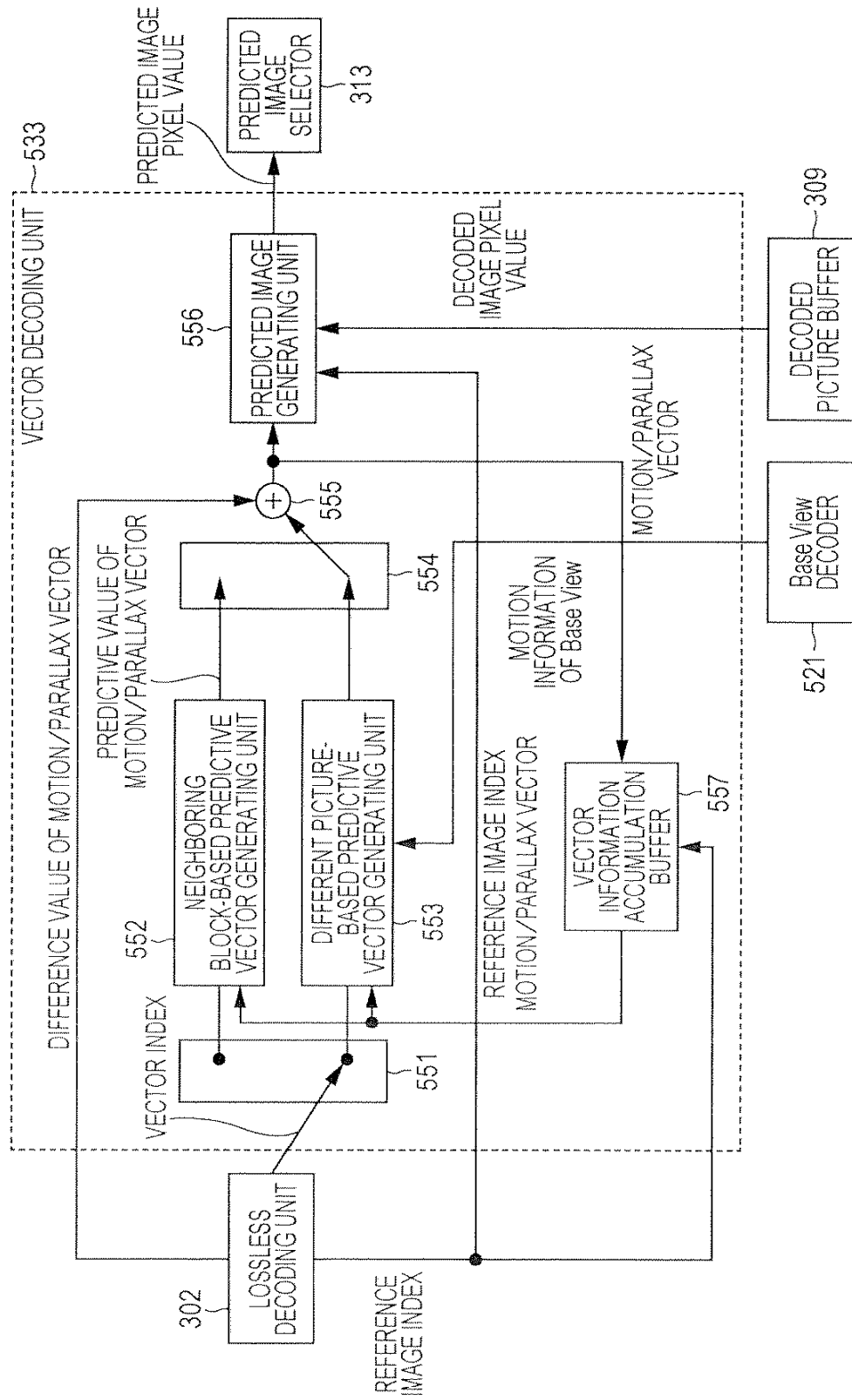


FIG. 50

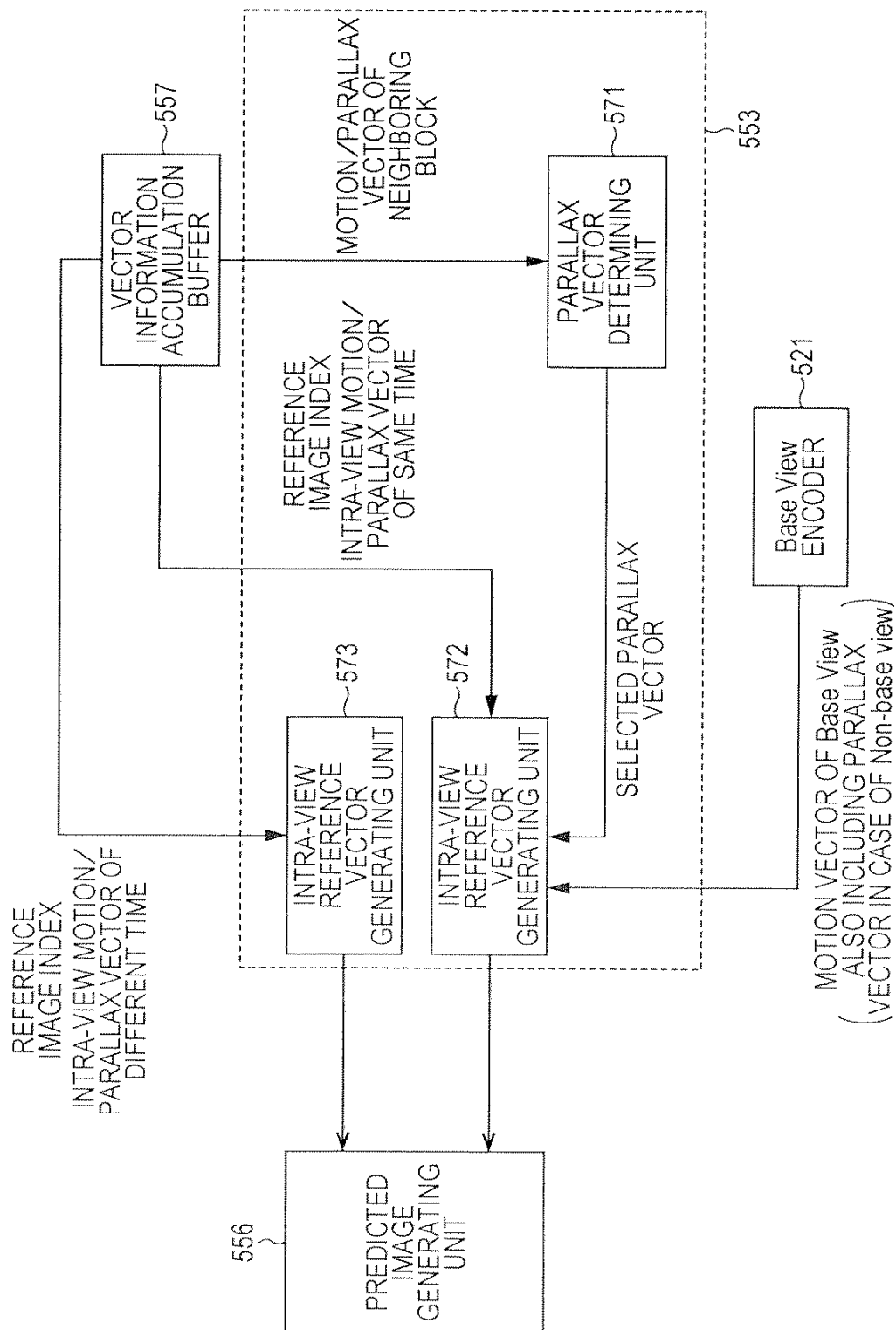


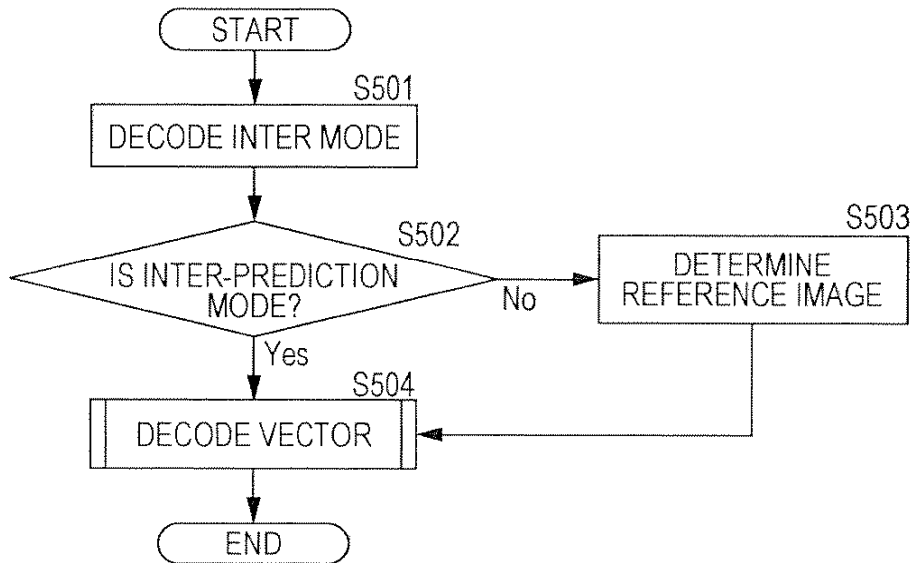
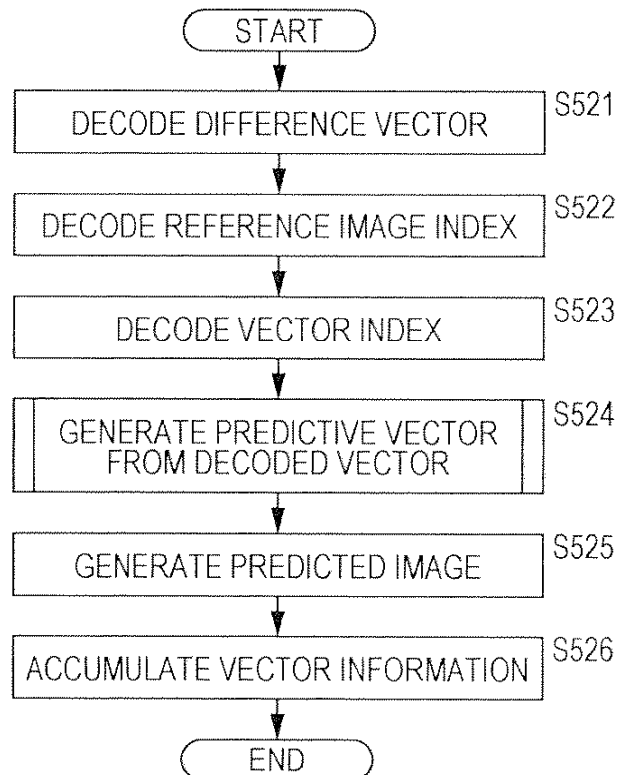
FIG. 51*FIG. 52*

FIG. 53

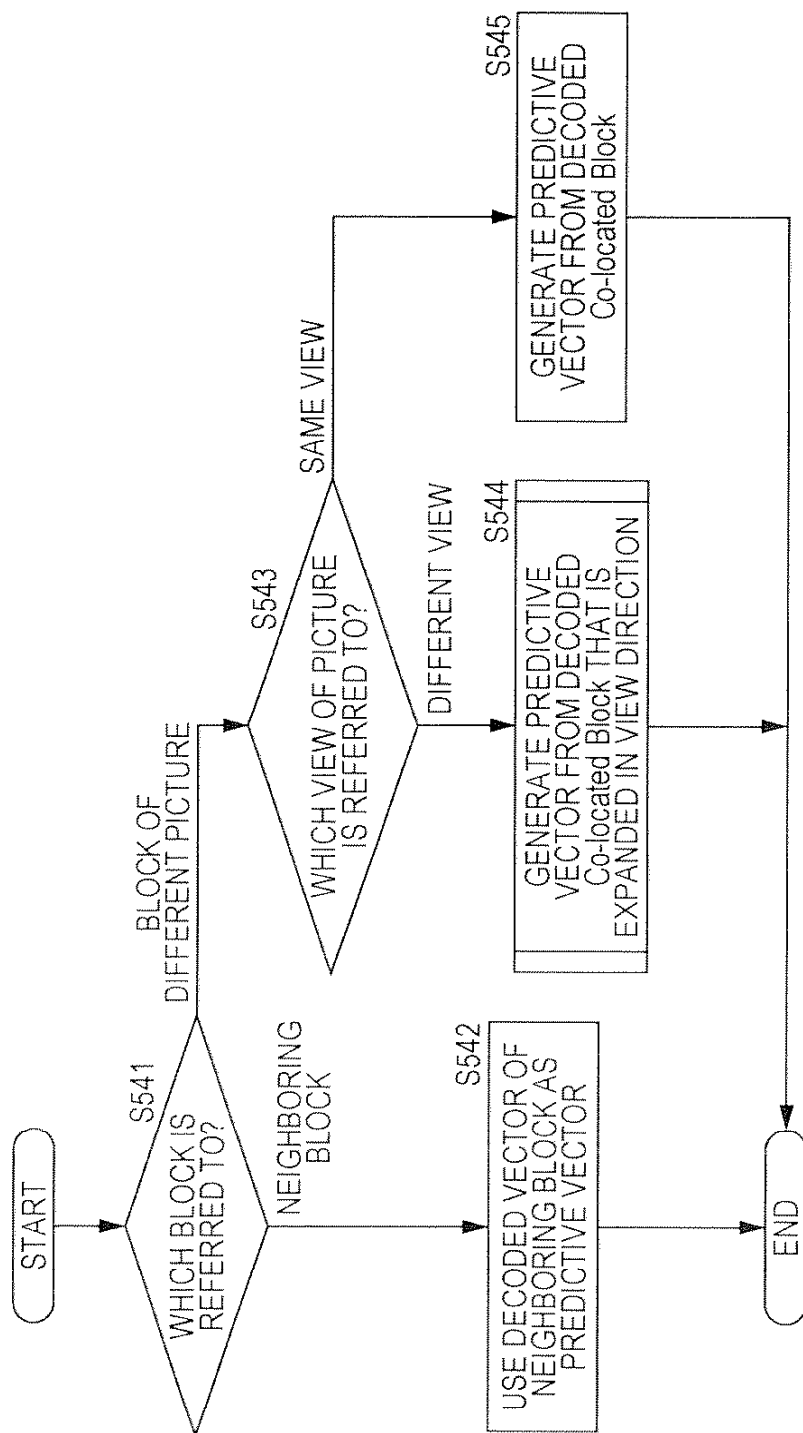


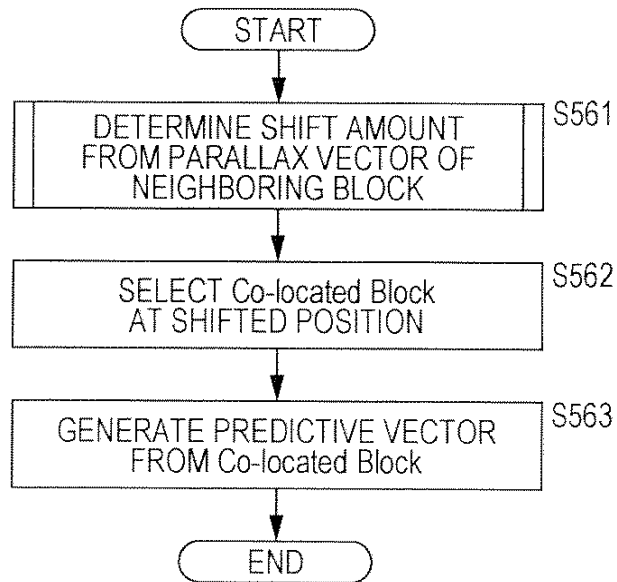
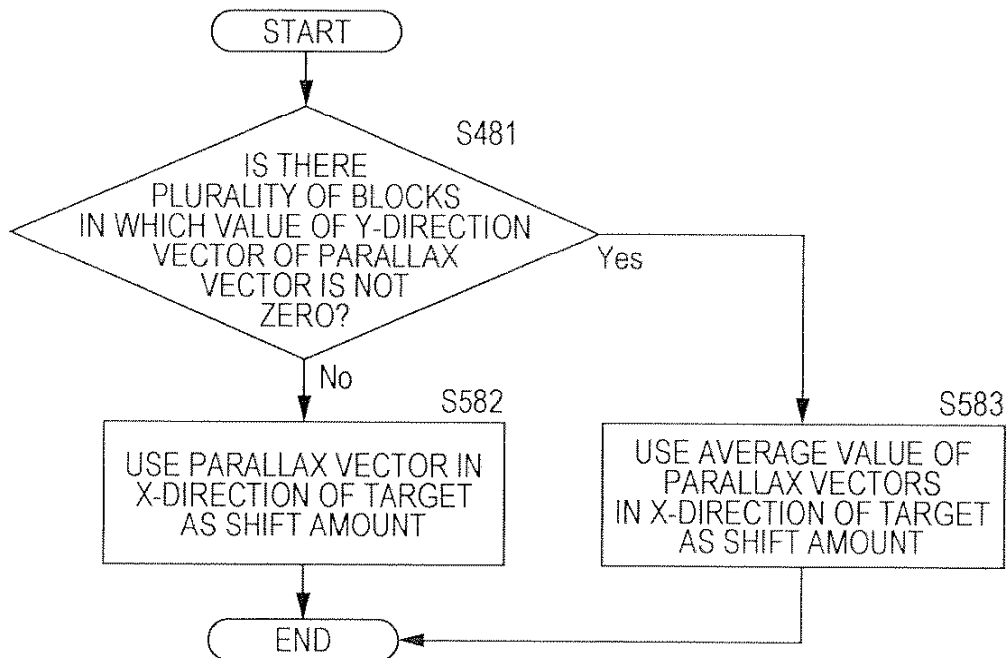
FIG. 54*FIG. 55*

FIG. 56

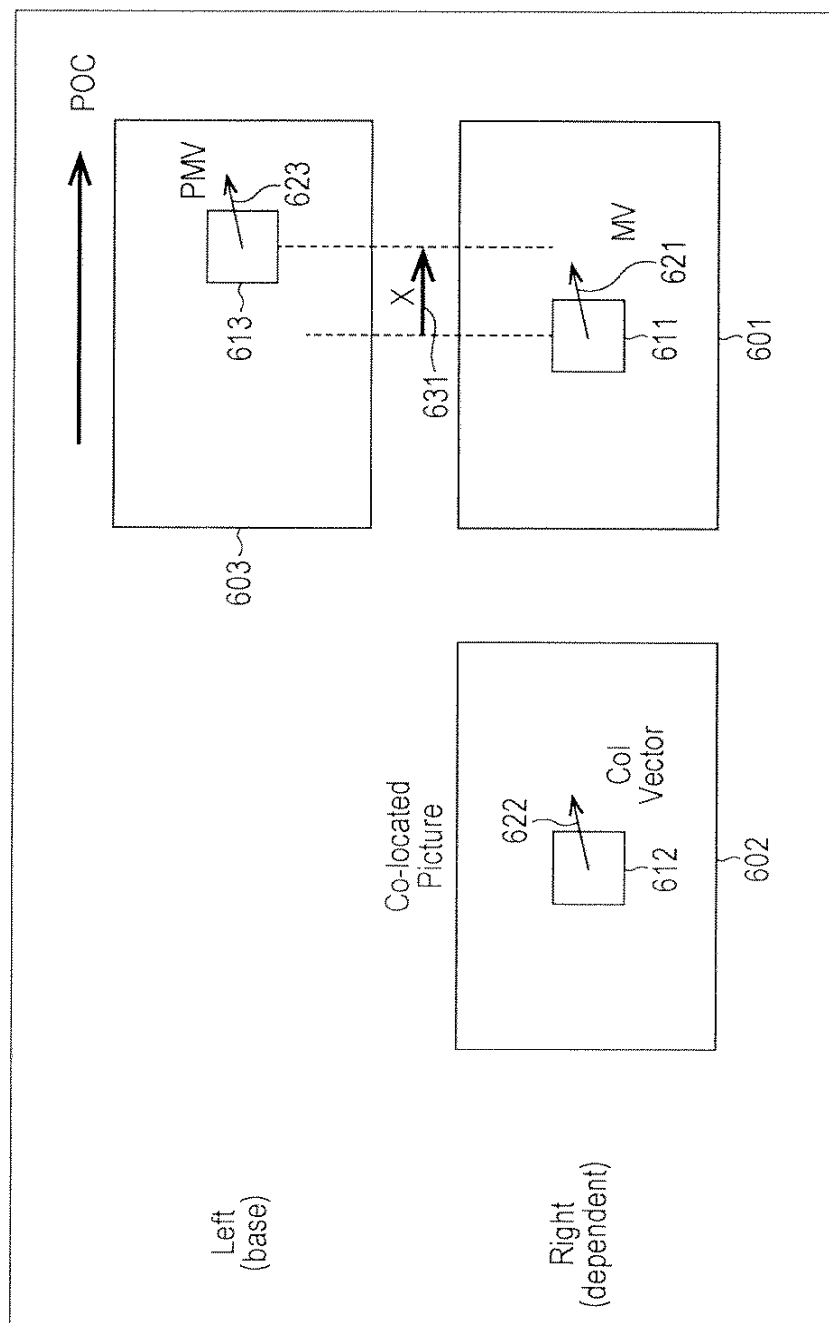


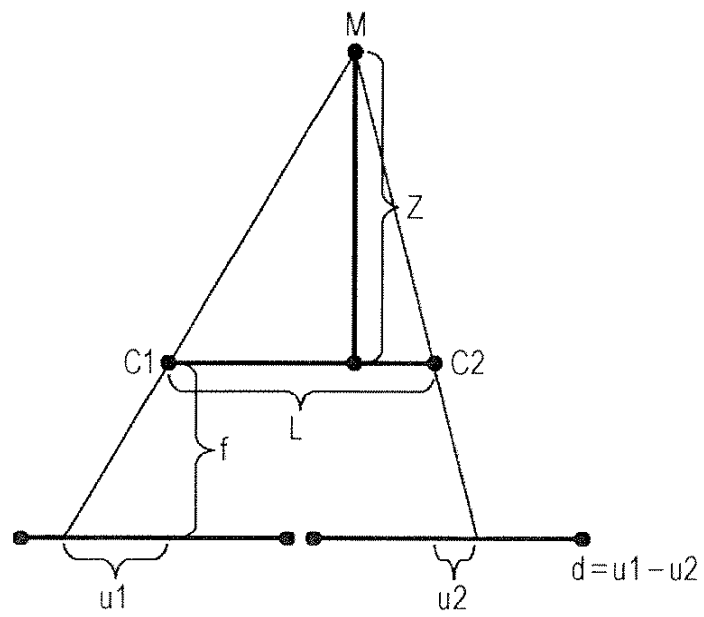
FIG. 57

FIG. 58

CODING VECTOR	Co-located VECTOR	PROCESS
Motion vector	Motion vector	USE Co-located VECTOR AS PREDICTIVE VECTOR CANDIDATE.
Motion vector	Inter-view vector	USE MOTION VECTOR OF Base View OF BLOCK SHIFTED BY Co-located VECTOR AS PREDICTIVE VECTOR CANDIDATE.
Motion vector	Intra mode	USE MOTION VECTOR OF Base View OF BLOCK SHIFTED BY GLOBAL PARALLAX VECTOR AS PREDICTIVE VECTOR CANDIDATE.
Inter-view vector	Motion vector	USE GLOBAL PARALLAX VECTOR AS PREDICTIVE VECTOR CANDIDATE.
Inter-view vector	Inter-view vector	USE Co-located VECTOR AS PREDICTIVE VECTOR CANDIDATE.
Inter-view vector	Intra mode	USE GLOBAL PARALLAX VECTOR AS PREDICTIVE VECTOR CANDIDATE.

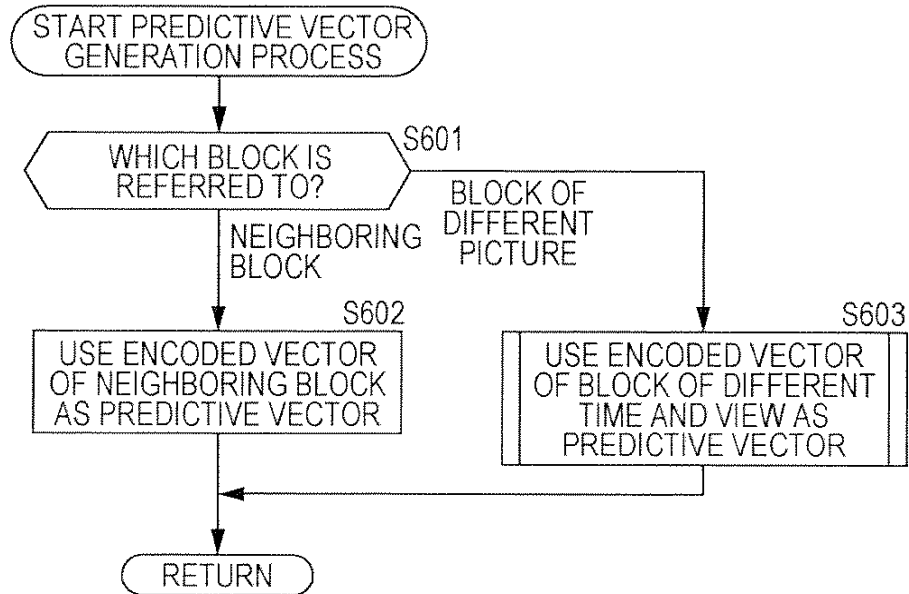
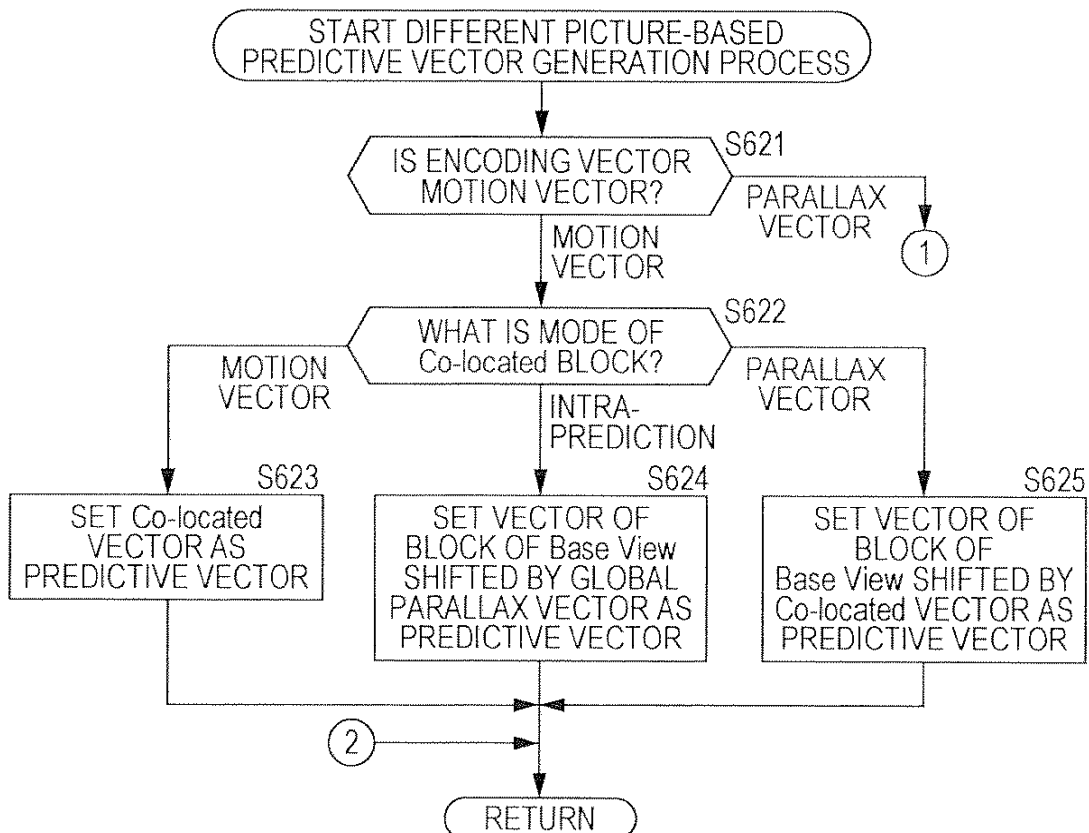
FIG. 59**FIG. 60**

FIG. 61

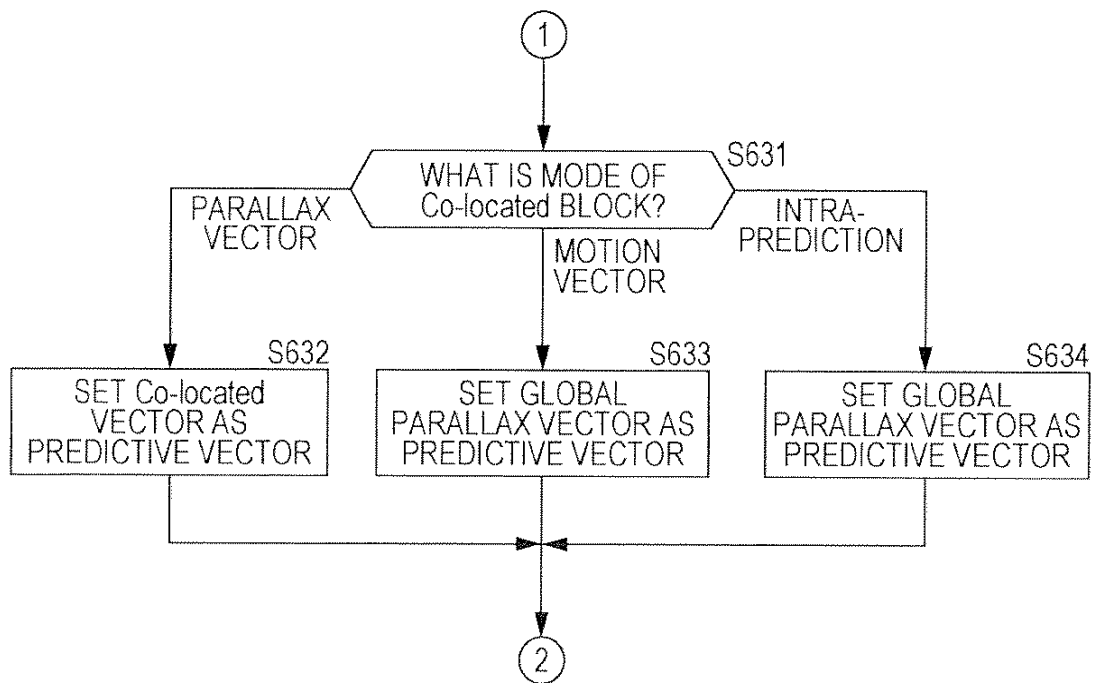


FIG. 62

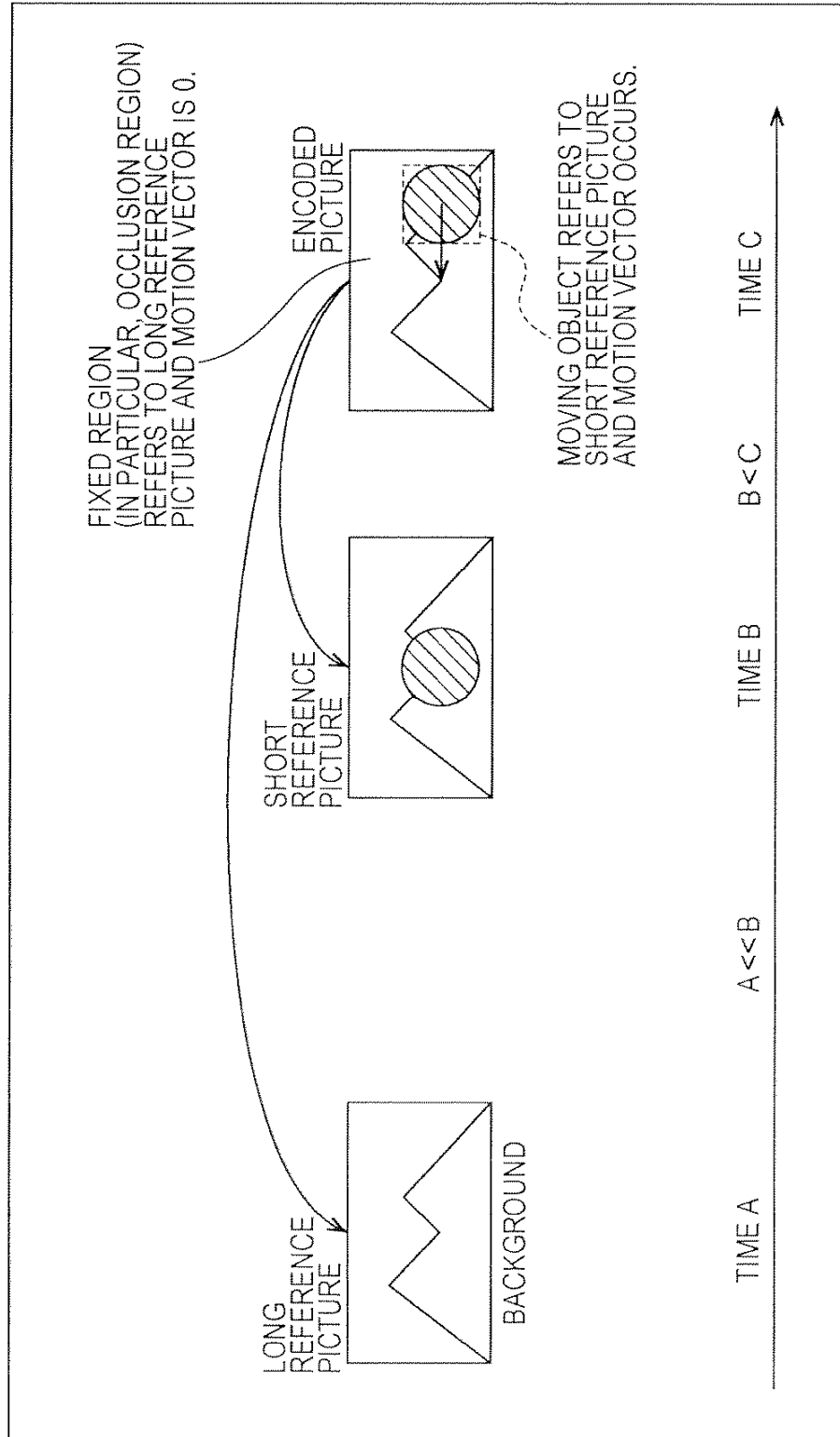


FIG. 63

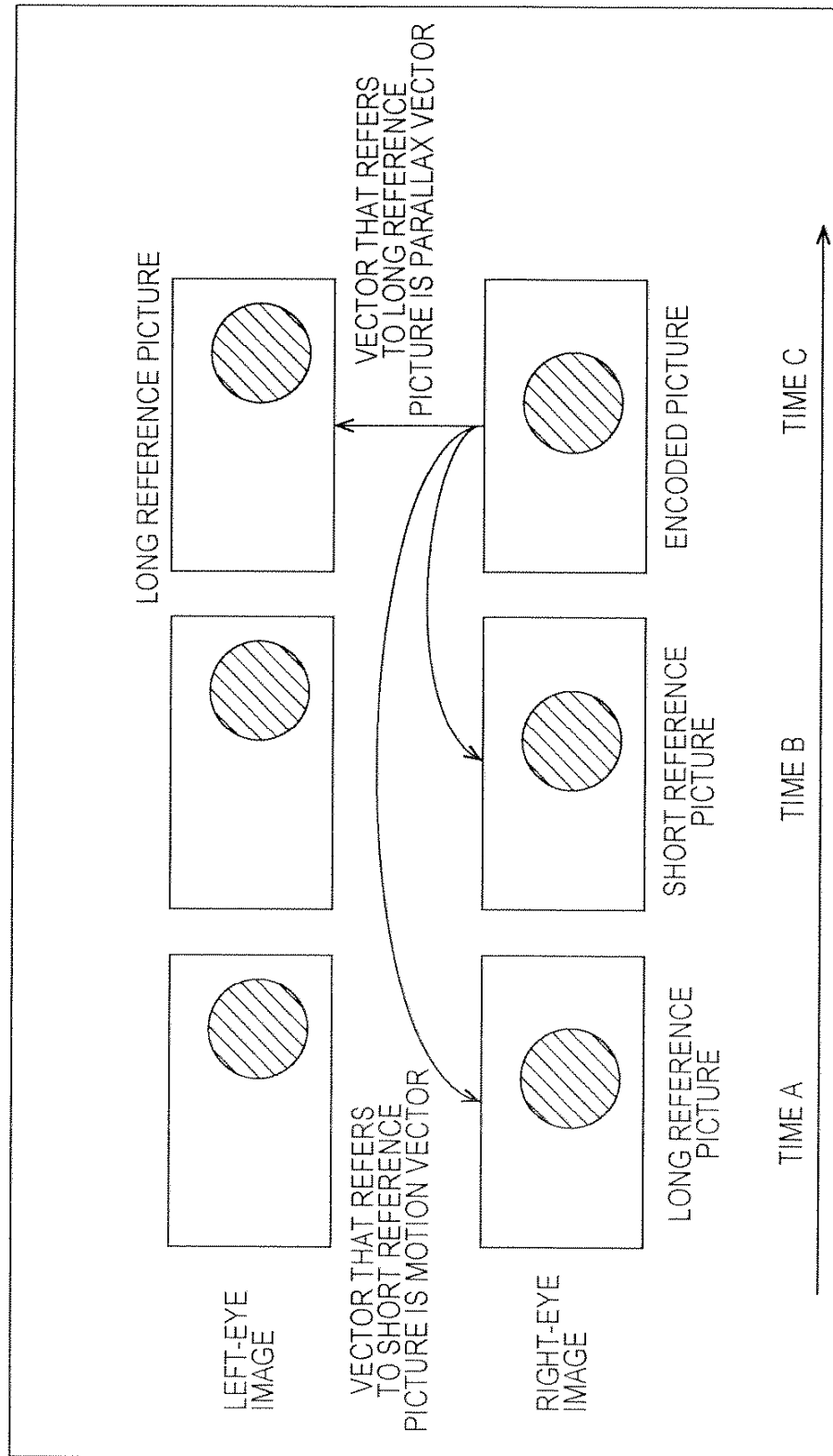


FIG. 64

FIXED BACKGROUND APPLICATION		
TYPE OF REFERENCE IMAGE	VECTOR PROPERTY	
SHORT REFERENCE PICTURE	MOTION VECTOR OCCURS (IS LONG) BECAUSE IT IS MAINLY REFERRED TO FOR MOVING OBJECT	
LONG REFERENCE PICTURE	MOTION VECTOR IS 0 (IS SHORT) BECAUSE IT IS MAINLY REFERRED TO FOR FIXED REGION (IN PARTICULAR, OCCLUSION REGION)	

A

STEREO APPLICATION		
TYPE OF REFERENCE IMAGE	VECTOR PROPERTY	
SHORT REFERENCE PICTURE	MOTION VECTOR OCCURS BECAUSE IT IS REFERRED TO FOR TEMPORAL PREDICTION	
LONG REFERENCE PICTURE	PARALLAX VECTOR OCCURS BECAUSE IT IS REFERRED TO FOR PARALLAX PREDICTION	

B

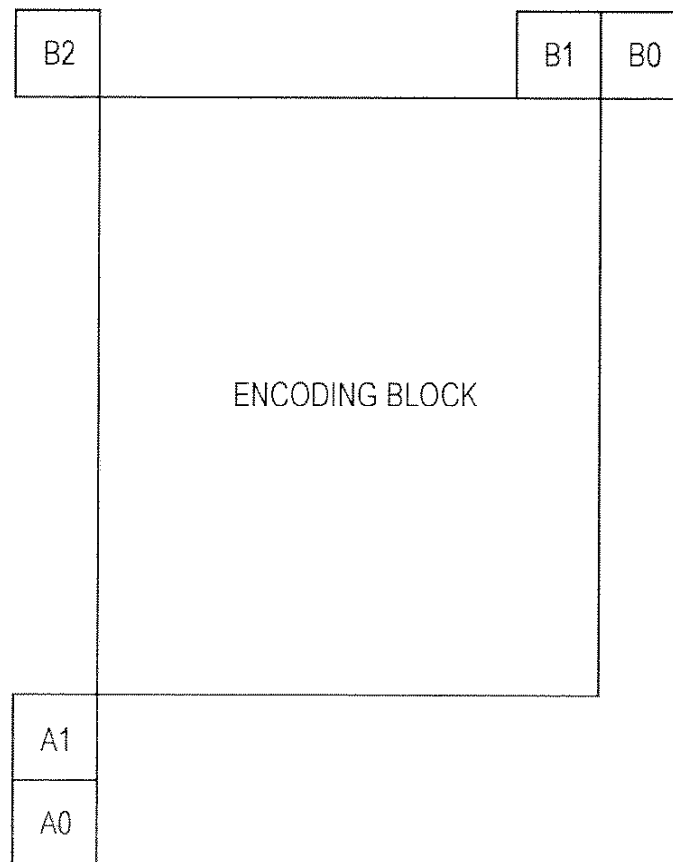
FIG. 65

FIG. 66

Index	REFERENCE IMAGE OF ENCODING BLOCK	REFERENCE IMAGE OF TEMPORAL CORRELATION BLOCK	PRESENCE OF CANDIDATE MOTION (PARALLAX) VECTOR OF TEMPORAL CORRELATION BLOCK	SCALING OF MOTION (PARALLAX) VECTOR OF TEMPORAL CORRELATION BLOCK
1	SHORT REFERENCE PICTURE	SHORT REFERENCE PICTURE	INCLUDED IN CANDIDATE	YES
2	SHORT REFERENCE PICTURE	LONG REFERENCE PICTURE	EXCLUDED FROM CANDIDATE	—
3	LONG REFERENCE PICTURE	LONG REFERENCE PICTURE	INCLUDED IN CANDIDATE	NO
4	LONG REFERENCE PICTURE	SHORT REFERENCE PICTURE	EXCLUDED FROM CANDIDATE	—

A

Index	REFERENCE IMAGE OF ENCODING BLOCK	REFERENCE IMAGE OF NEIGHBORING BLOCK	PRESENCE OF CANDIDATE MOTION (PARALLAX) VECTOR OF NEIGHBORING BLOCK	SCALING OF MOTION (PARALLAX) VECTOR OF NEIGHBORING BLOCK
1	SHORT REFERENCE PICTURE	SHORT REFERENCE PICTURE	INCLUDED IN CANDIDATE	YES
2	SHORT REFERENCE PICTURE	LONG REFERENCE PICTURE	EXCLUDED FROM CANDIDATE	—
3	LONG REFERENCE PICTURE	LONG REFERENCE PICTURE	INCLUDED IN CANDIDATE	NO
4	LONG REFERENCE PICTURE	SHORT REFERENCE PICTURE	EXCLUDED FROM CANDIDATE	—

B

FIG. 67

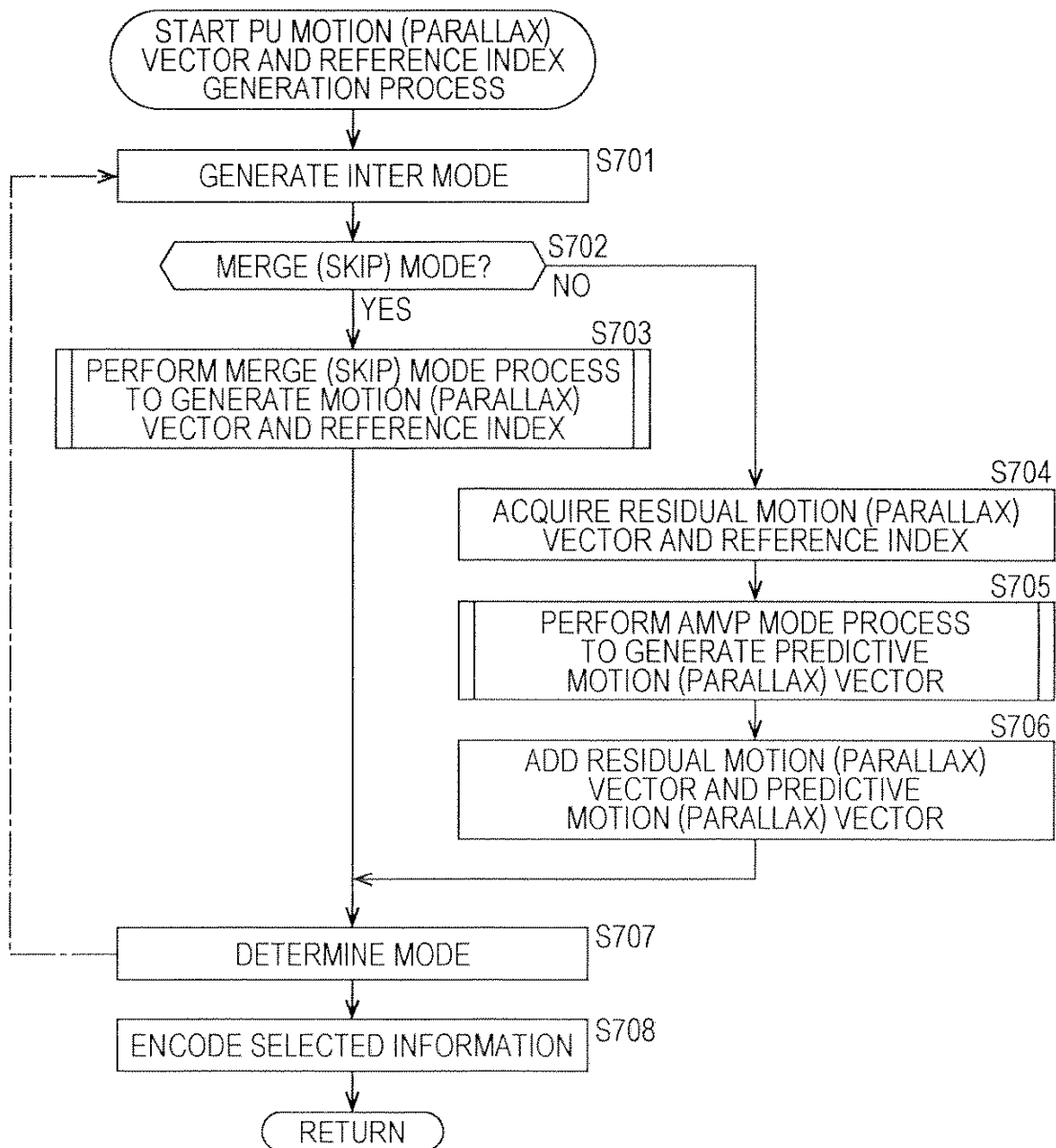


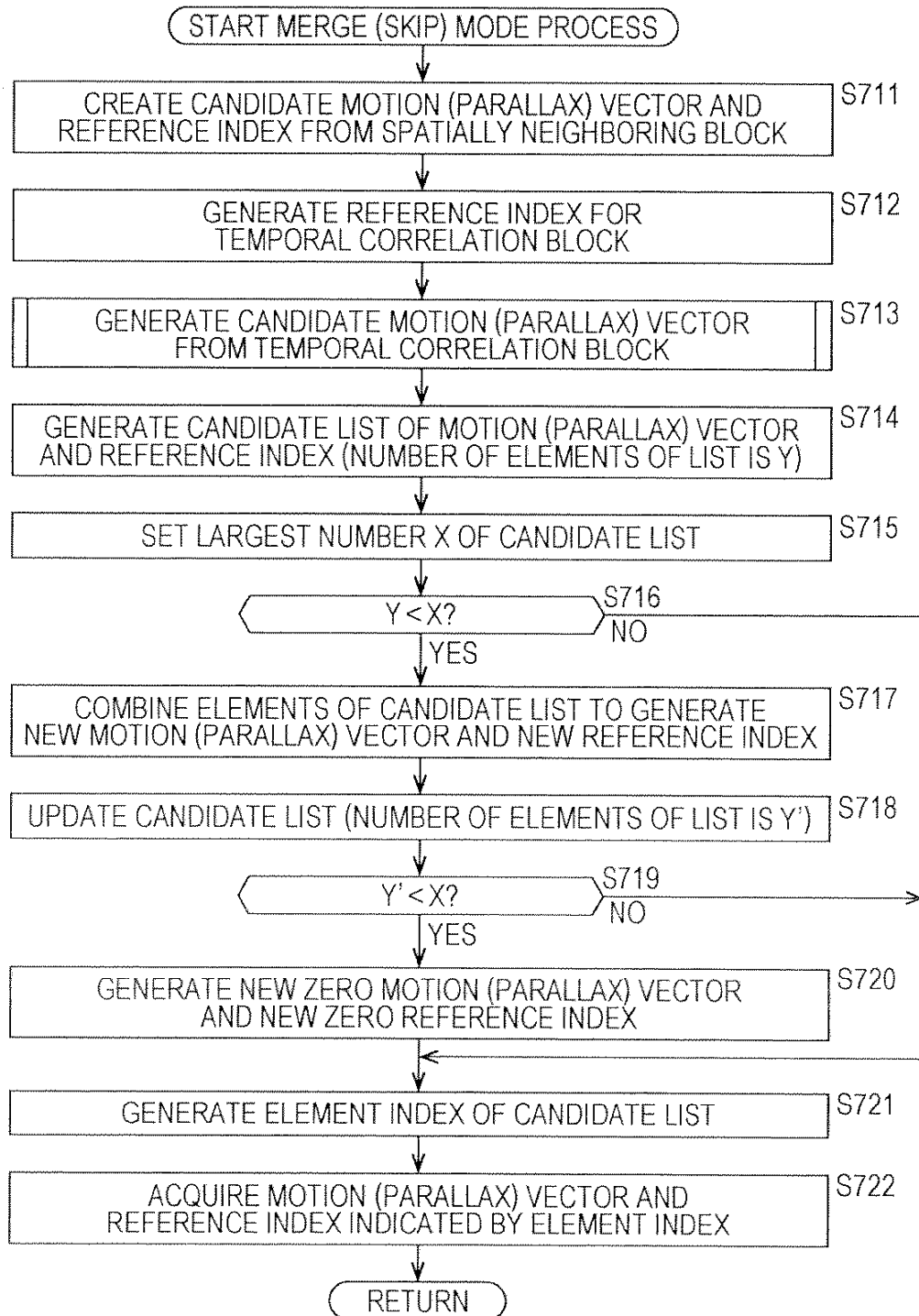
FIG. 68

FIG. 69

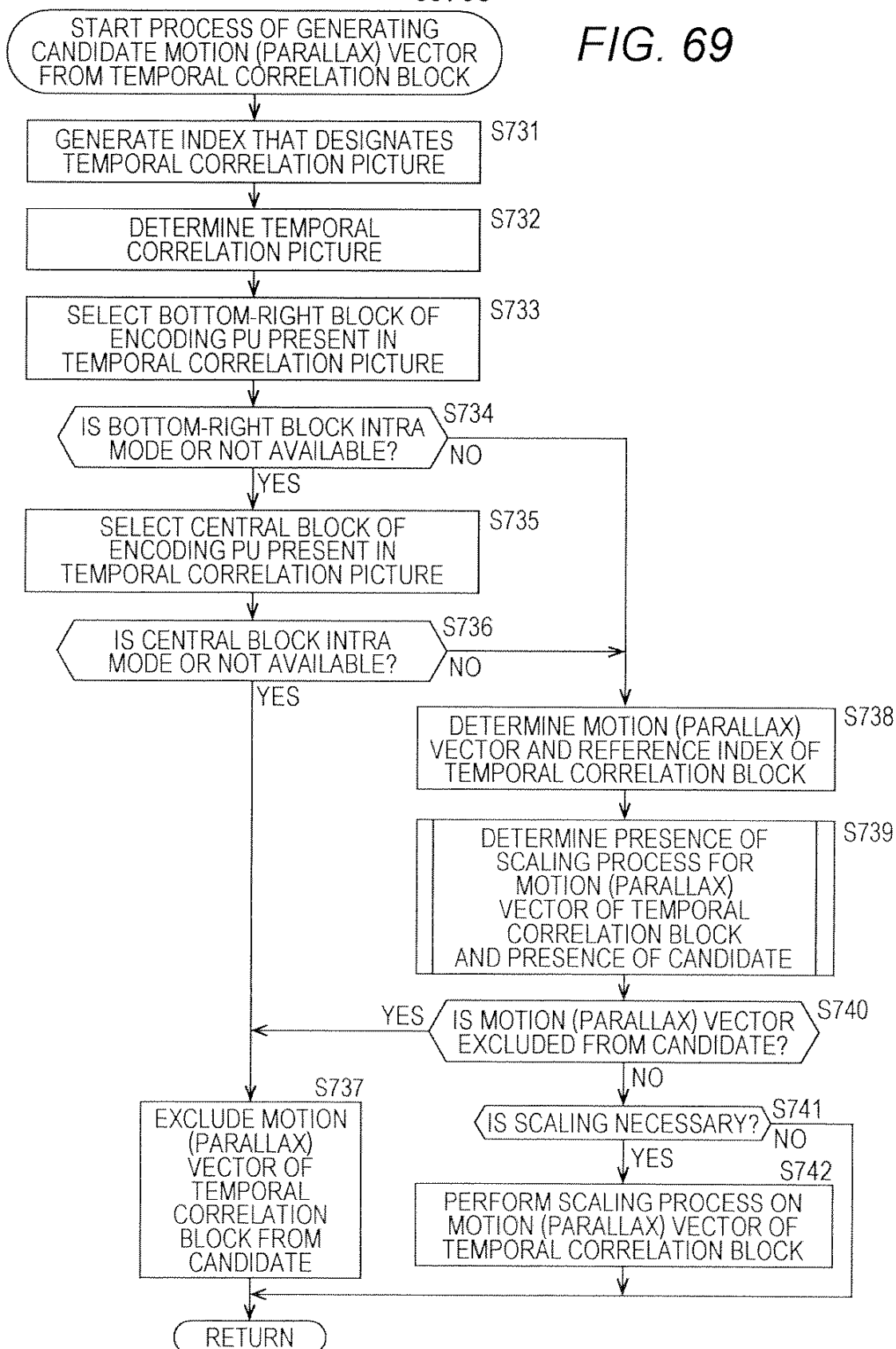


FIG. 70

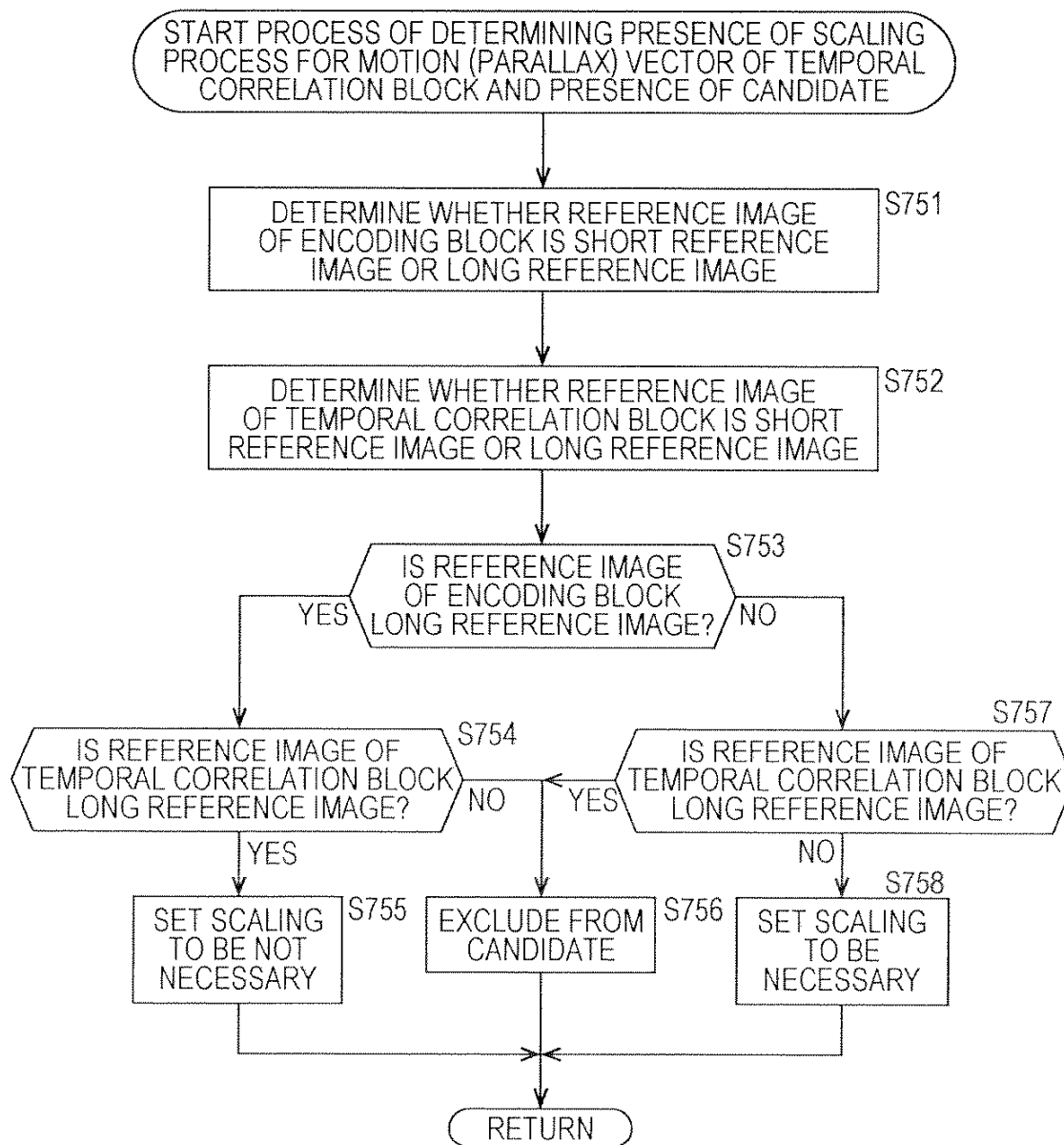


FIG. 71

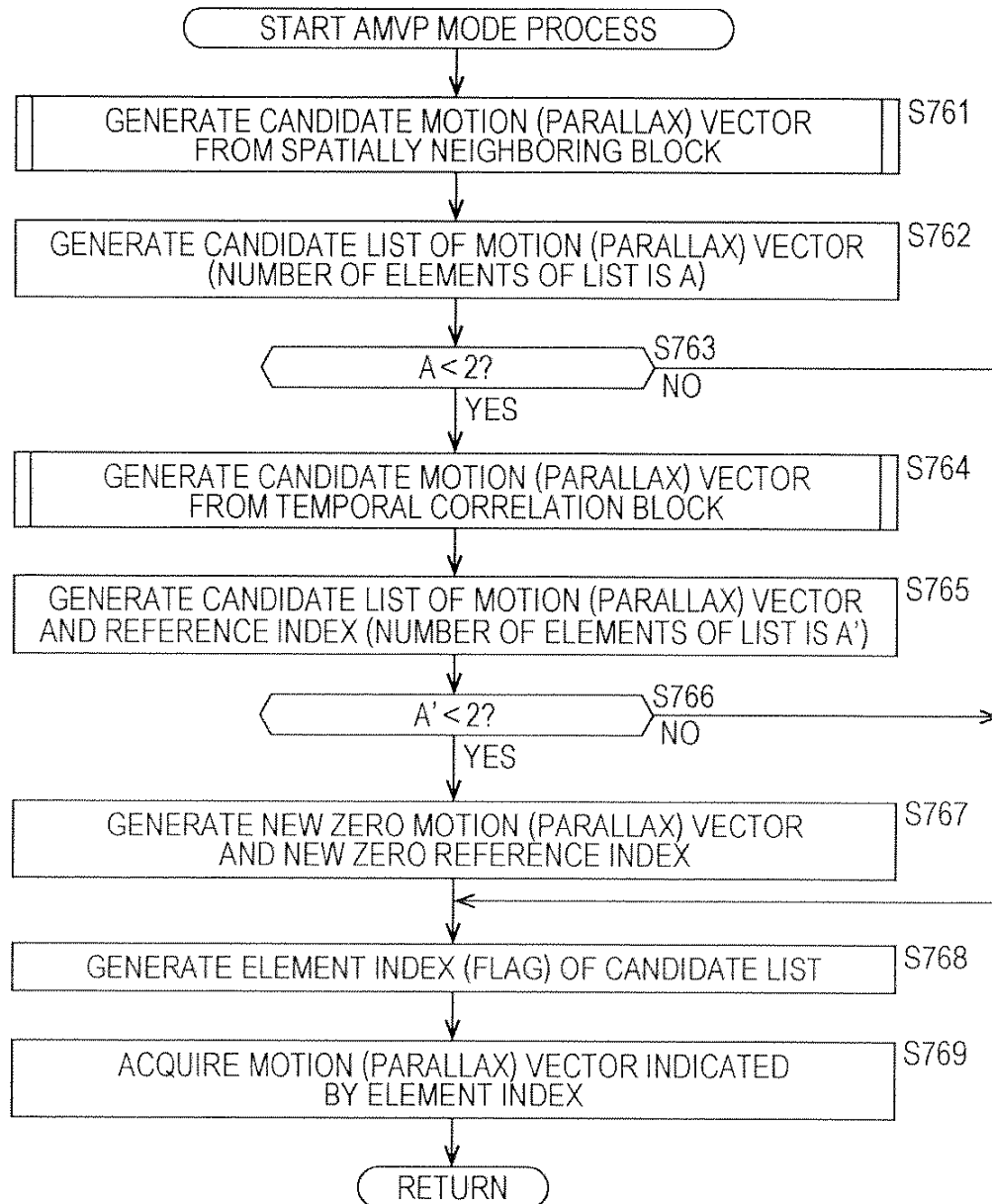


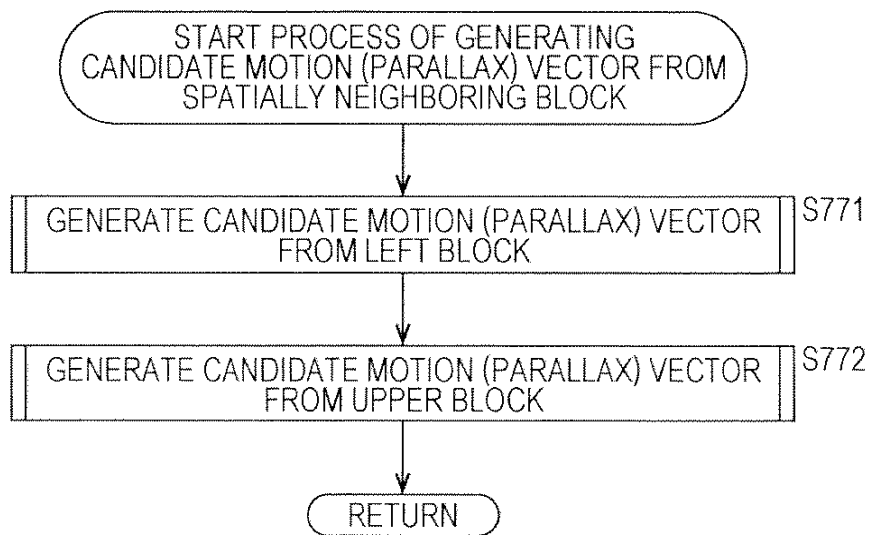
FIG. 72

FIG. 73

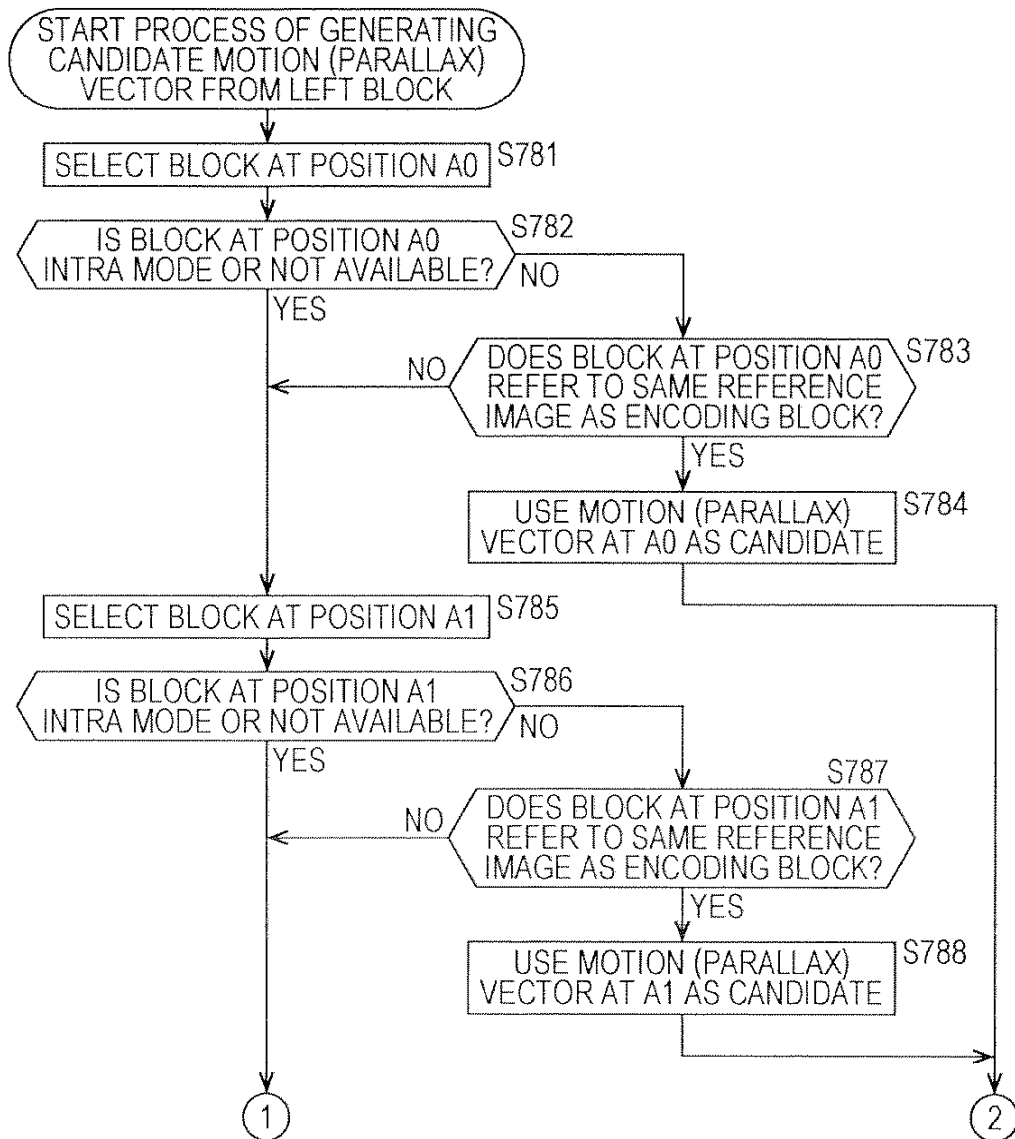


FIG. 74

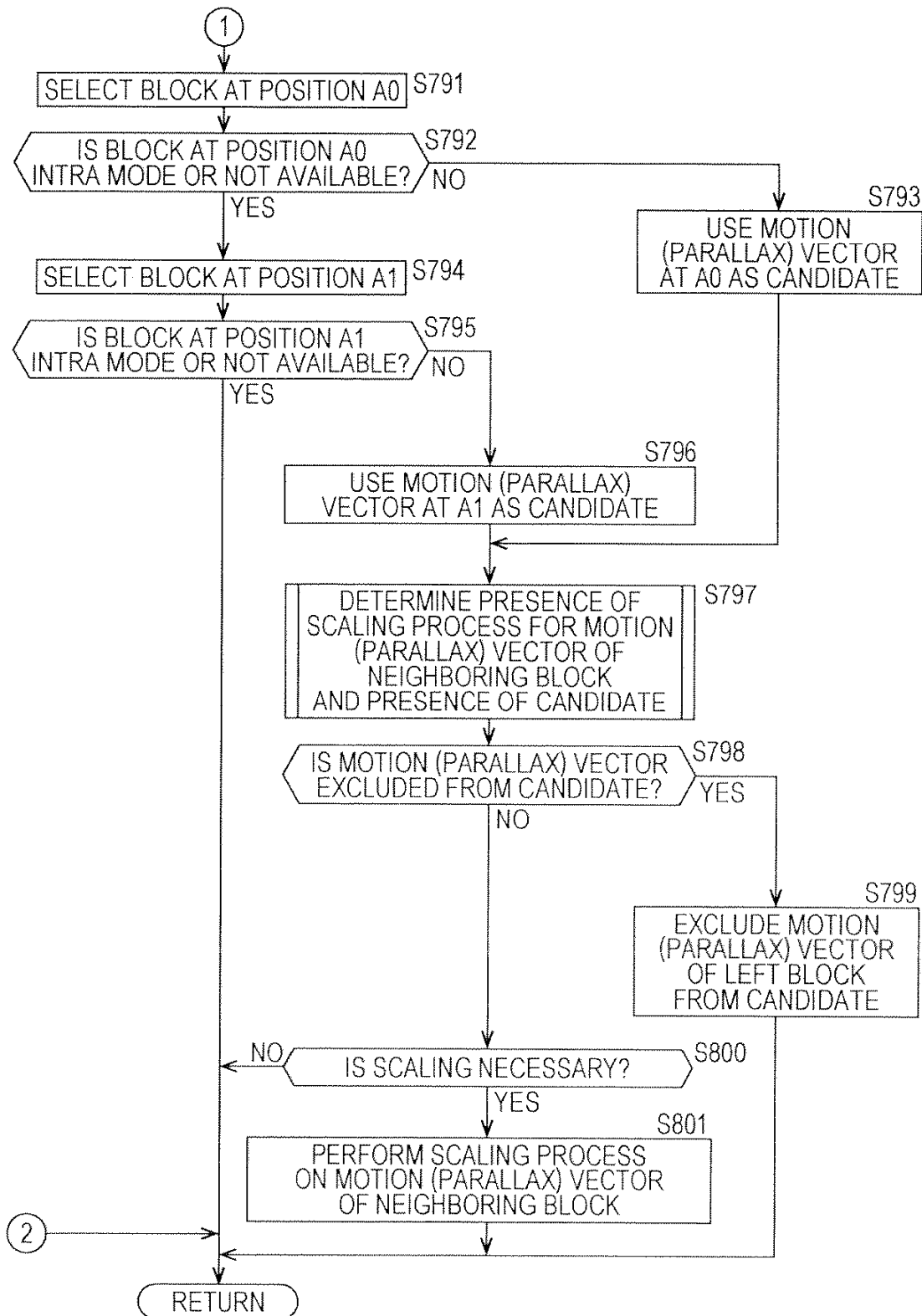
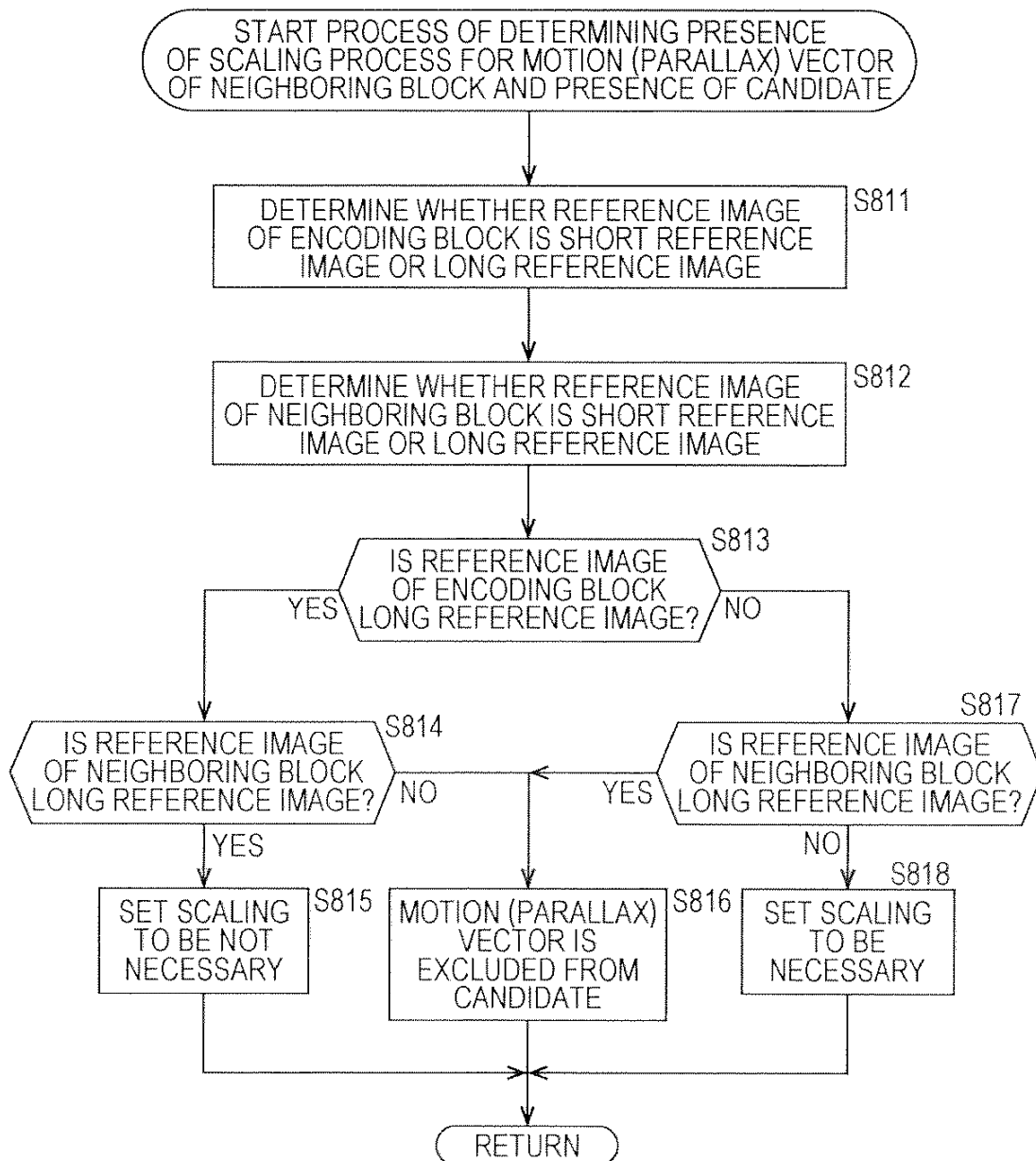


FIG. 75



70/93
FIG. 76

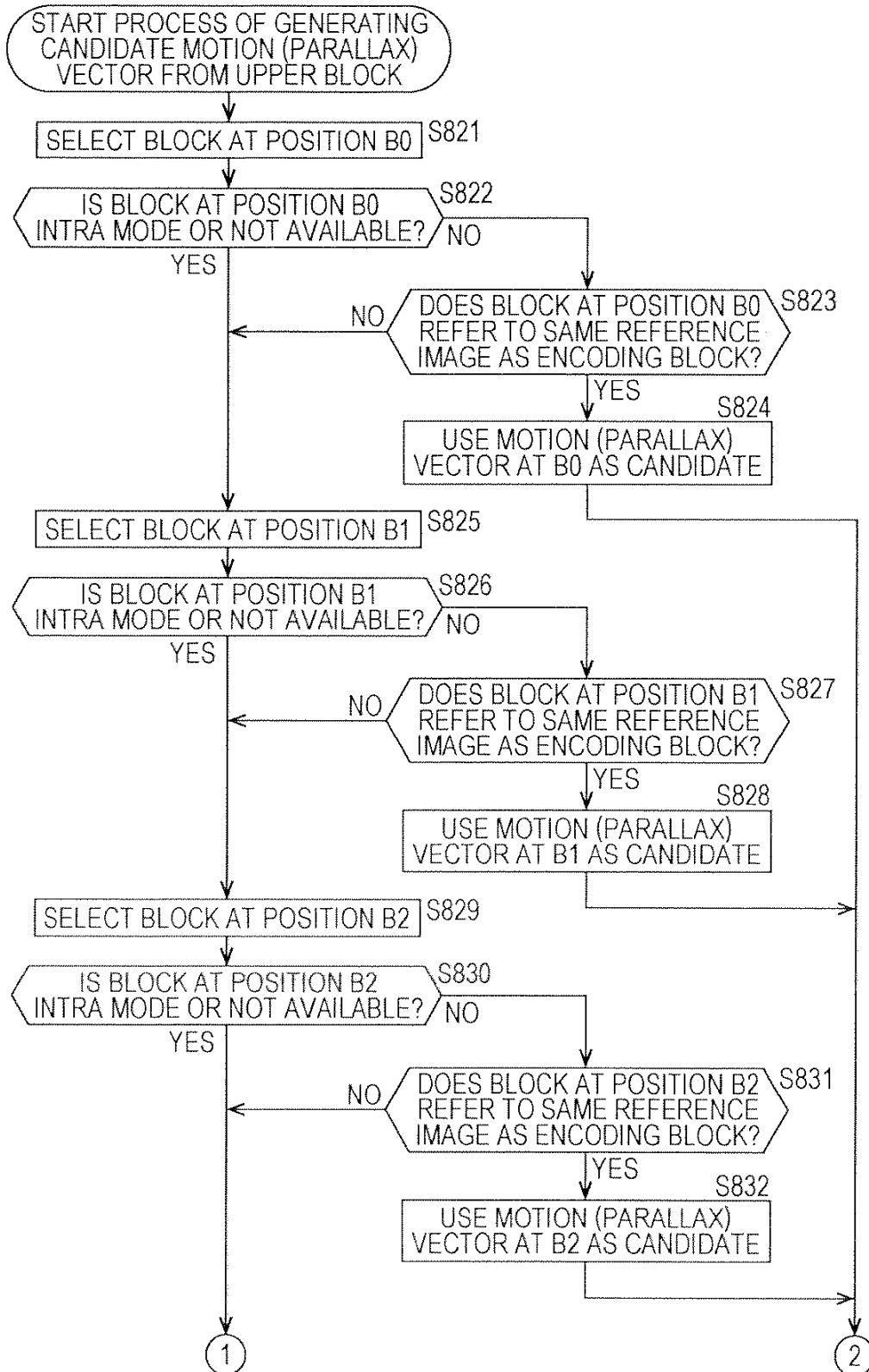


FIG. 77

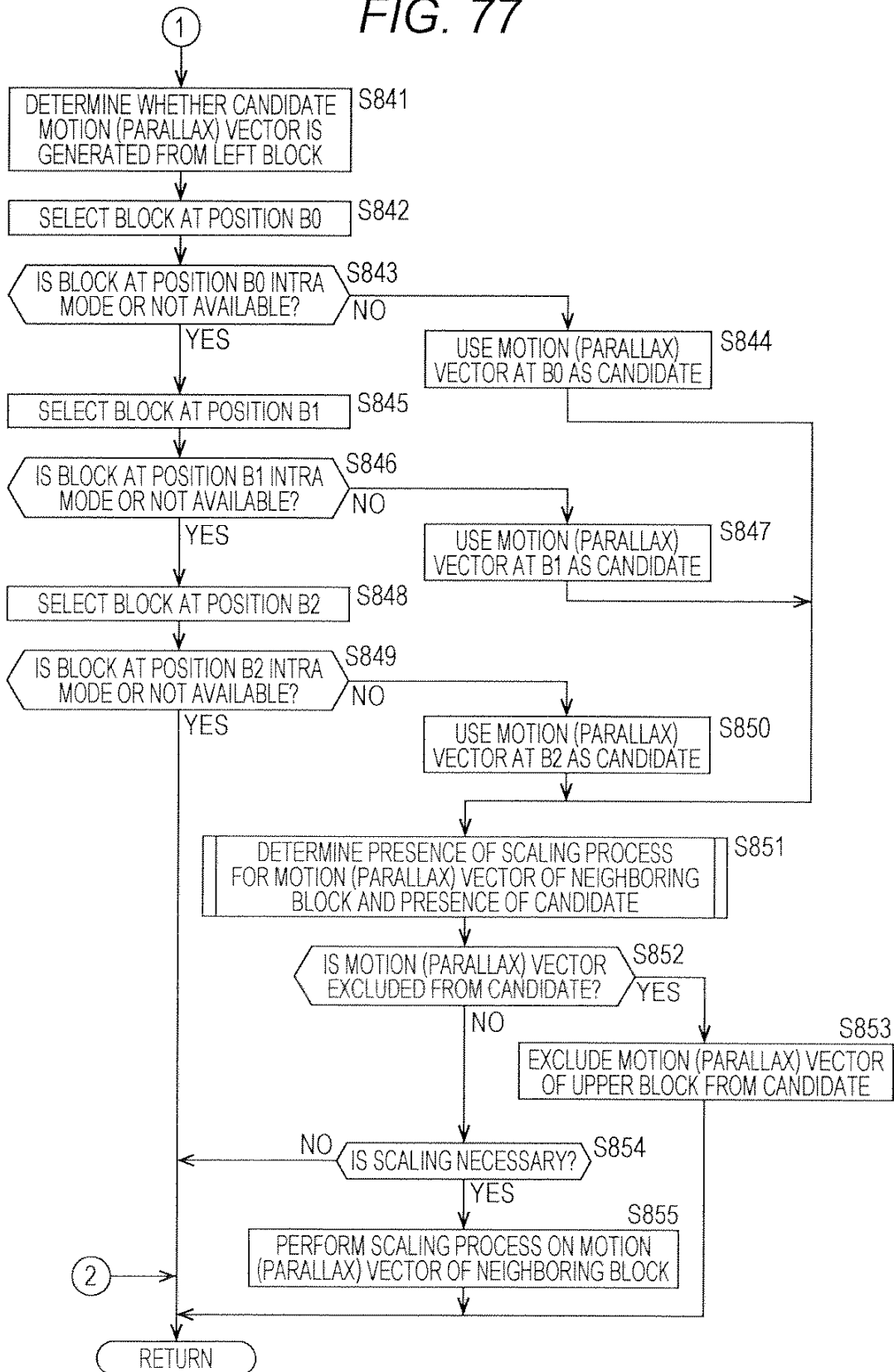


FIG. 78

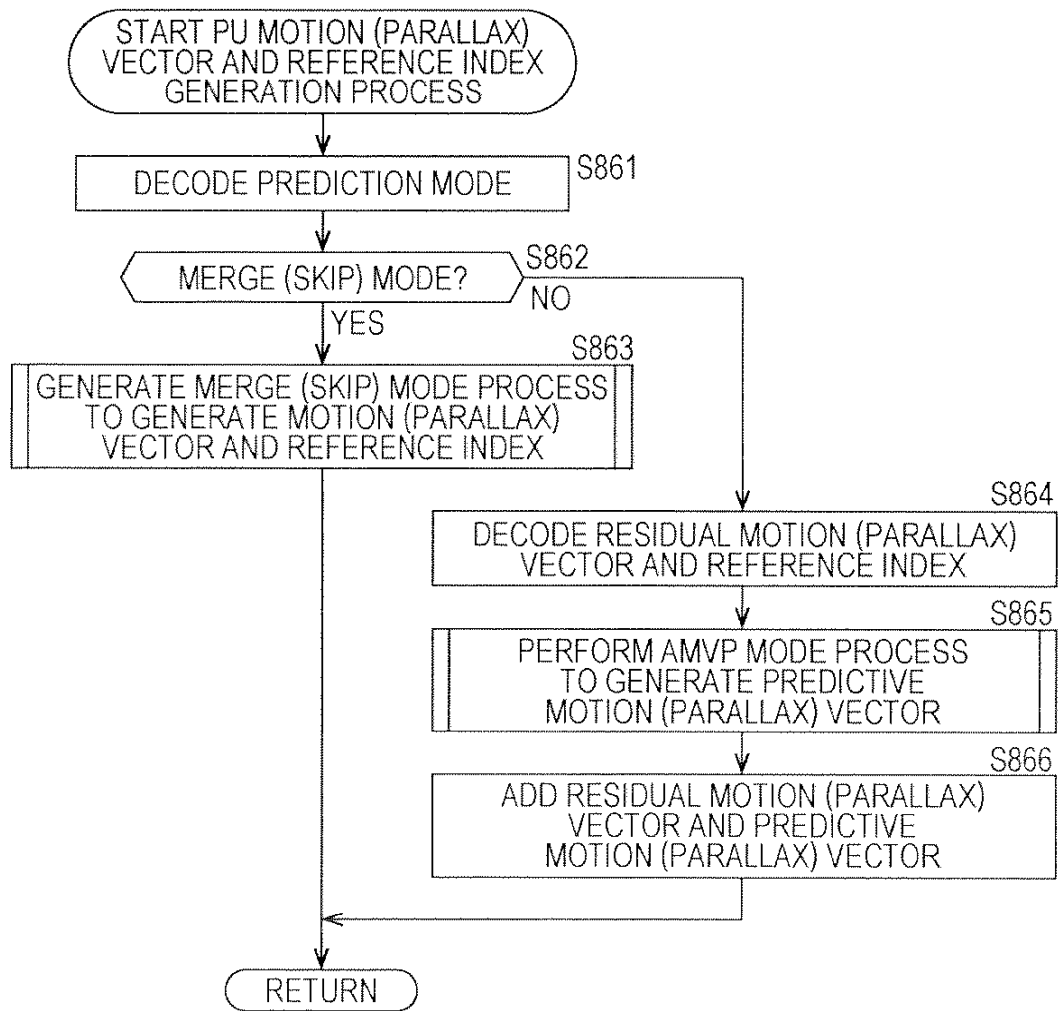


FIG. 79

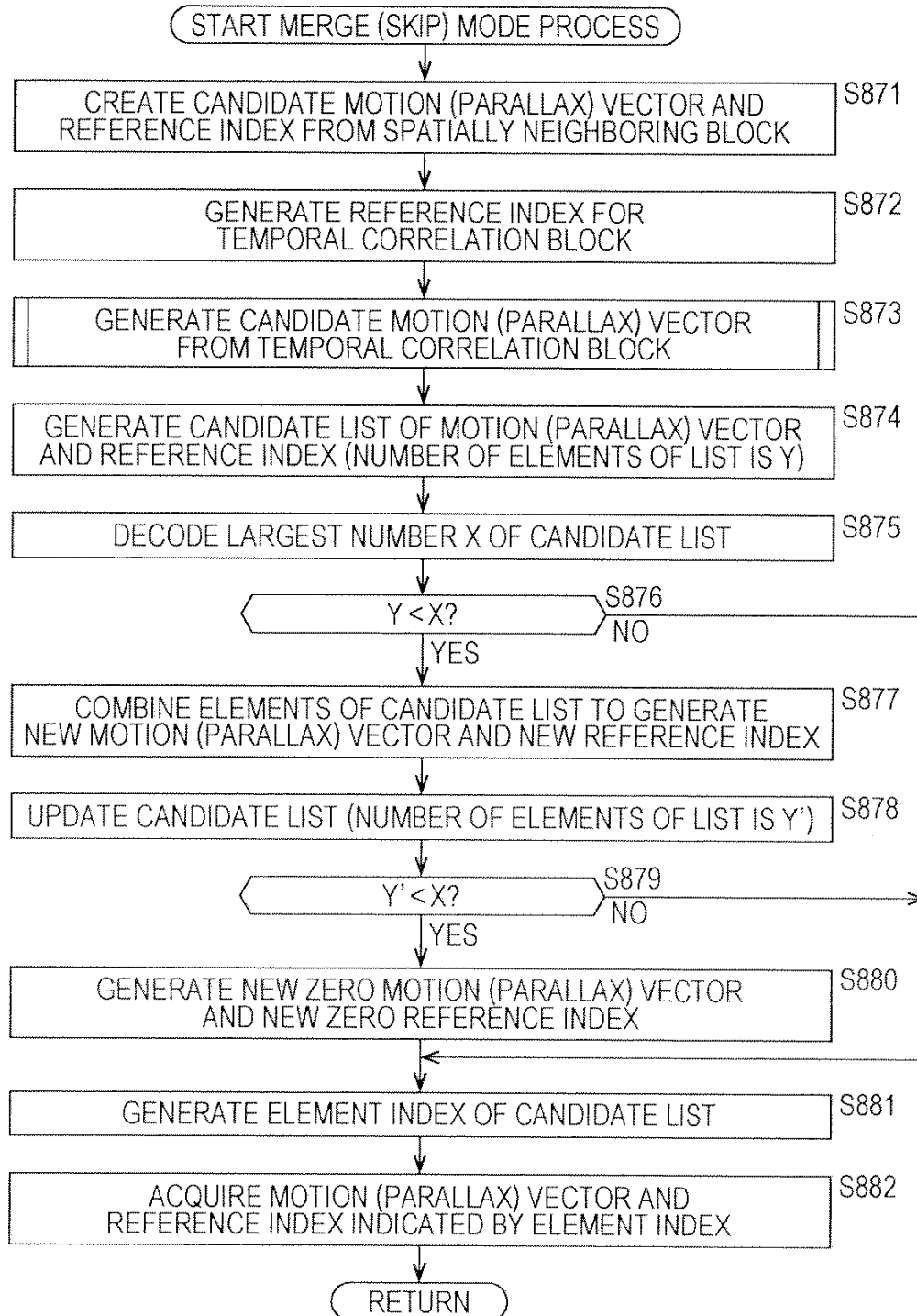


FIG. 80

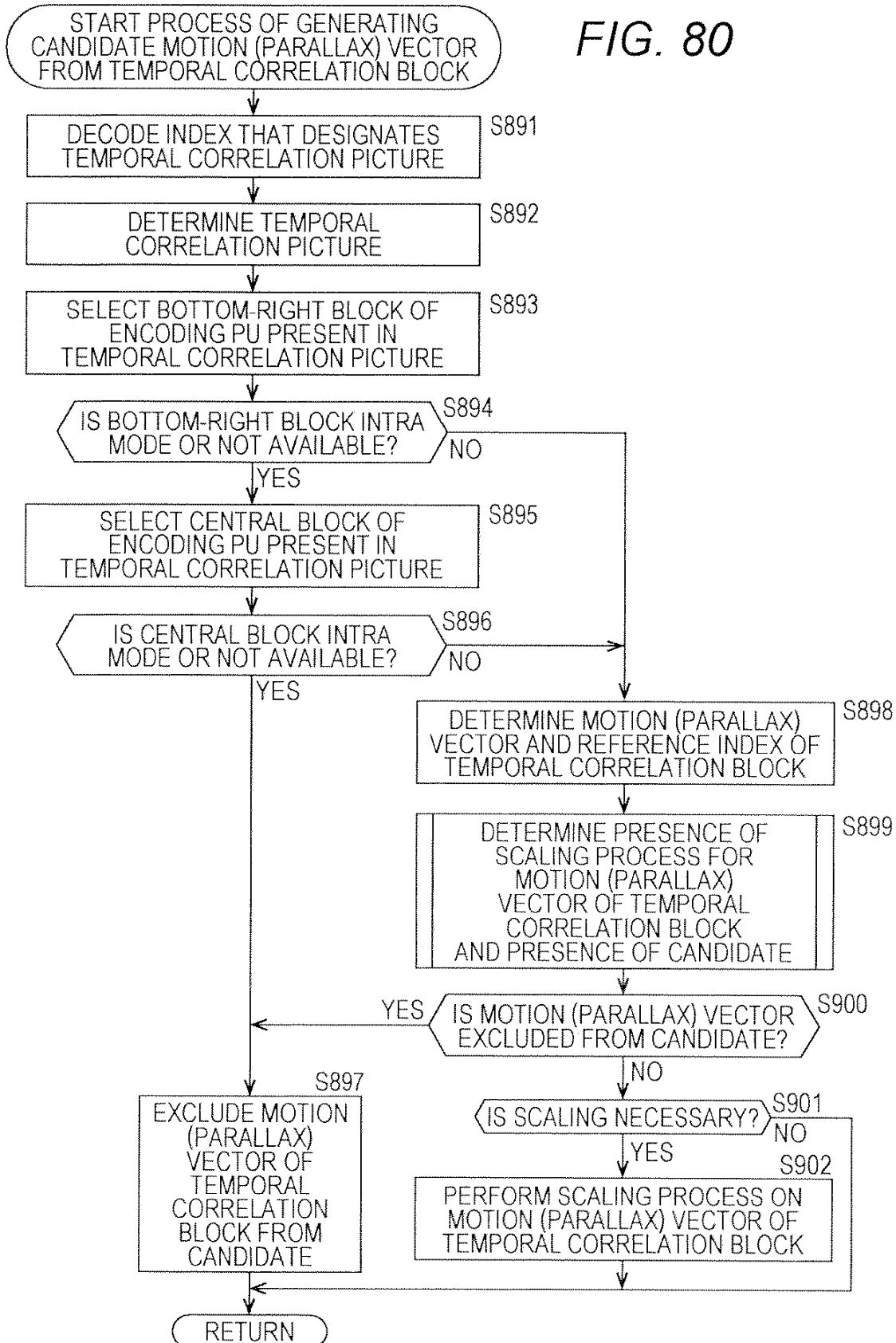


FIG. 81

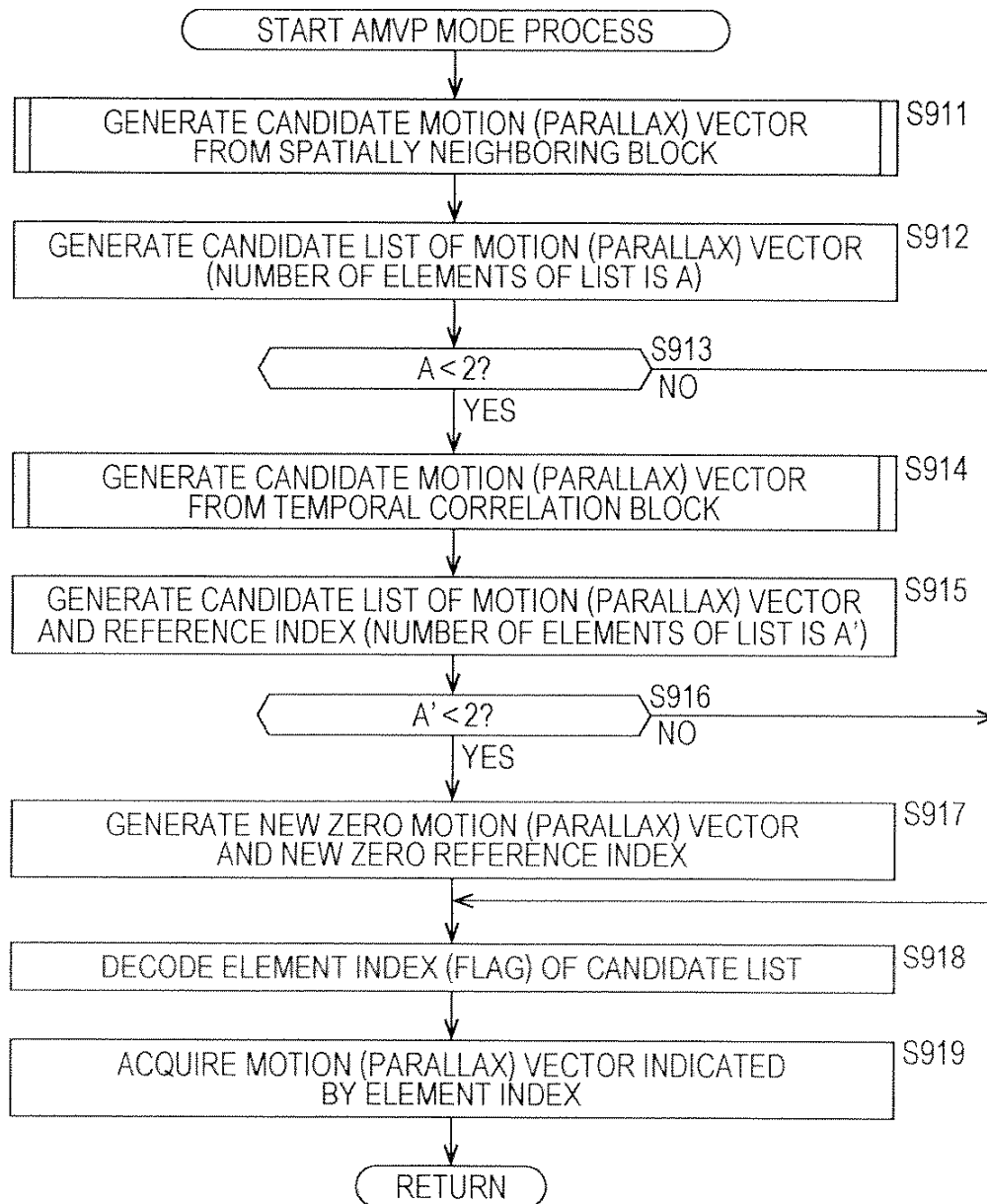


FIG. 82

Index	REFERENCE IMAGE OF ENCODING BLOCK	REFERENCE IMAGE OF NEIGHBORING BLOCK	PRESENCE OF CANDIDATE MOTION (PARALLAX) VECTOR OF NEIGHBORING BLOCK
1	SHORT REFERENCE PICTURE	SHORT REFERENCE PICTURE	INCLUDED IN CANDIDATE
2	SHORT REFERENCE PICTURE	LONG REFERENCE PICTURE	EXCLUDED FROM CANDIDATE
3	LONG REFERENCE PICTURE	LONG REFERENCE PICTURE	INCLUDED IN CANDIDATE
4	LONG REFERENCE PICTURE	SHORT REFERENCE PICTURE	EXCLUDED FROM CANDIDATE

A

Index	REFERENCE IMAGE OF ENCODING BLOCK	REFERENCE IMAGE OF NEIGHBORING BLOCK	SCALING OF MOTION (PARALLAX) VECTOR OF NEIGHBORING BLOCK
1	SHORT REFERENCE PICTURE	SHORT REFERENCE PICTURE	YES
2	SHORT REFERENCE PICTURE	LONG REFERENCE PICTURE	NO
3	LONG REFERENCE PICTURE	LONG REFERENCE PICTURE	NO
4	LONG REFERENCE PICTURE	SHORT REFERENCE PICTURE	NO

B

FIG. 83

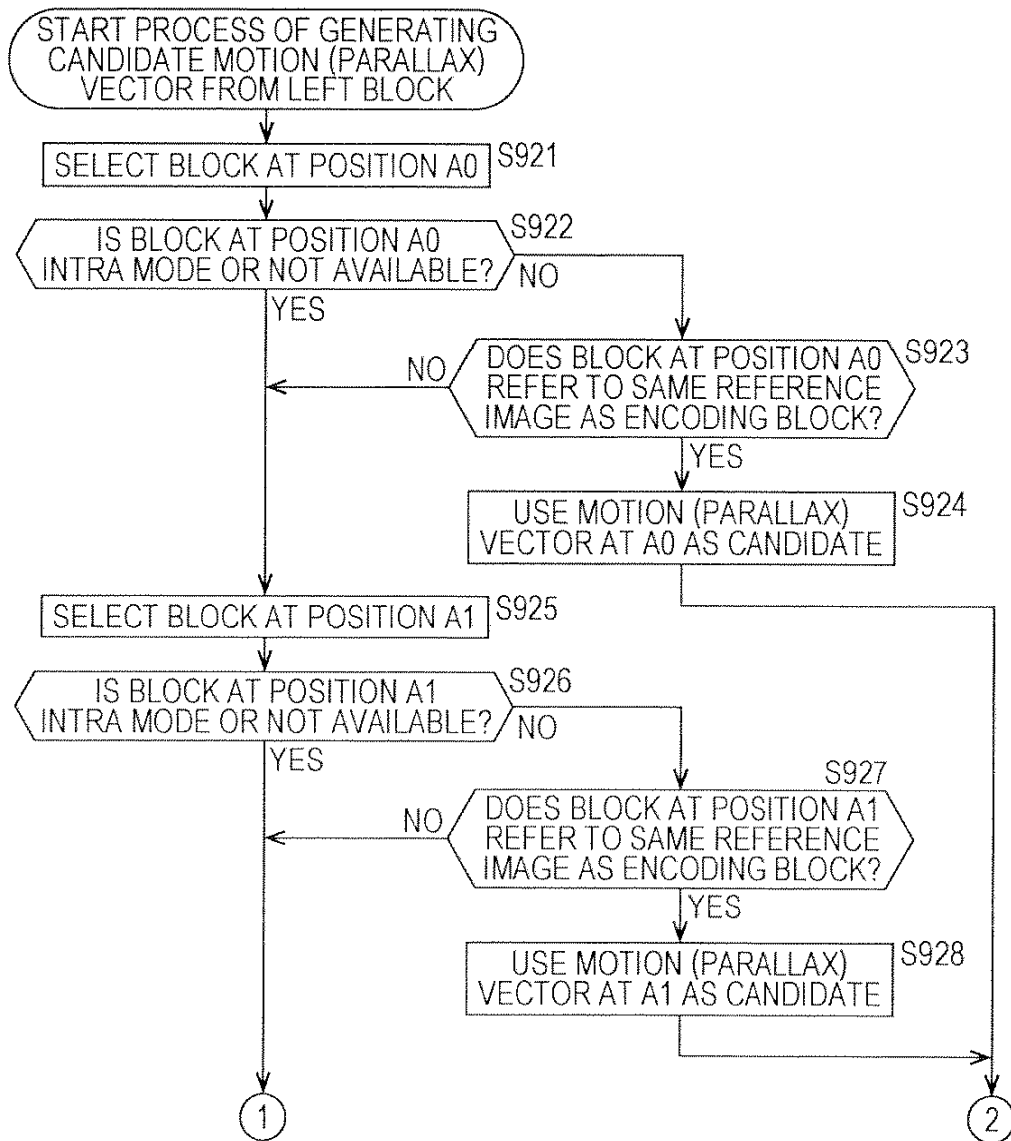


FIG. 84

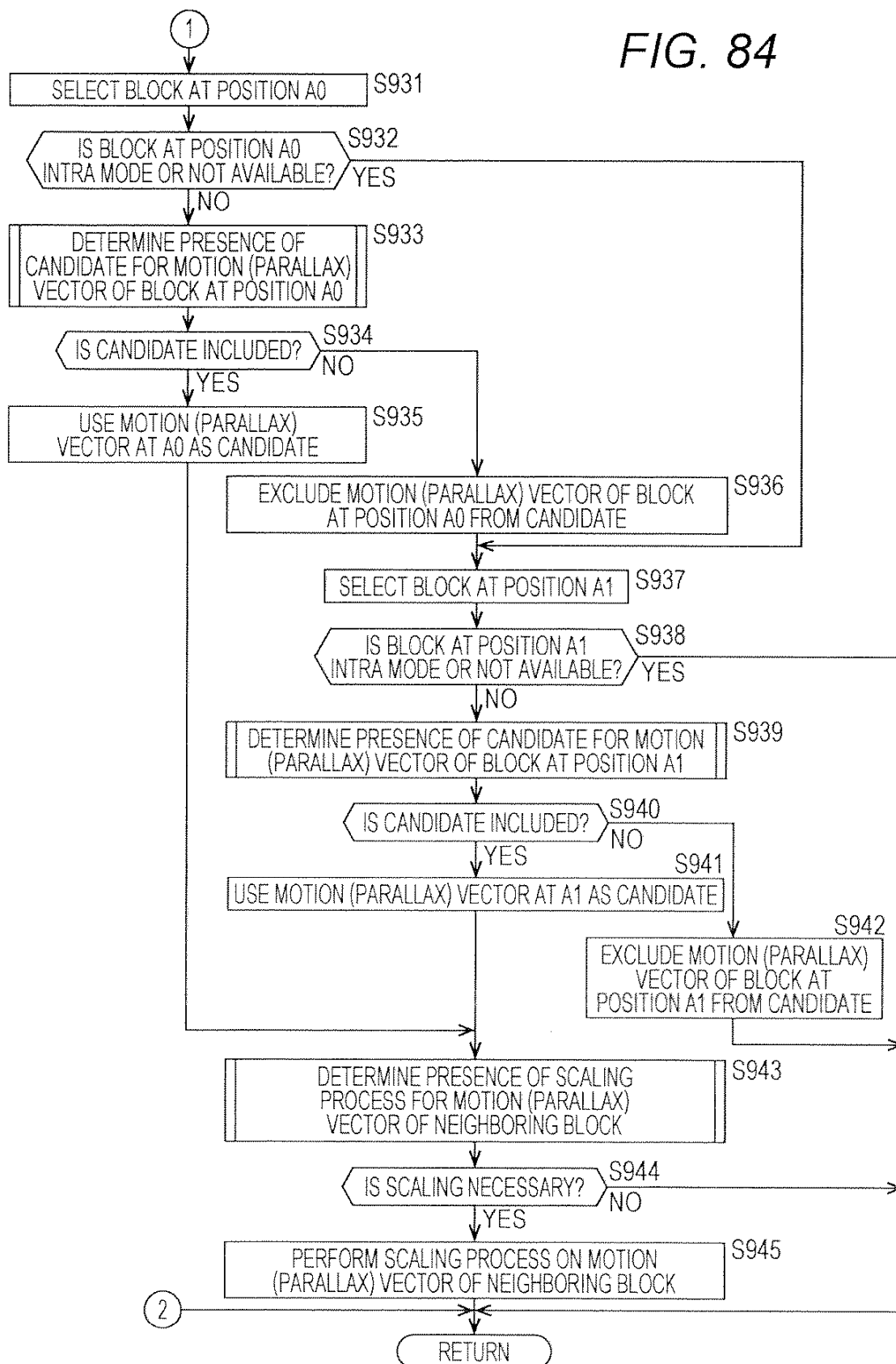


FIG. 85

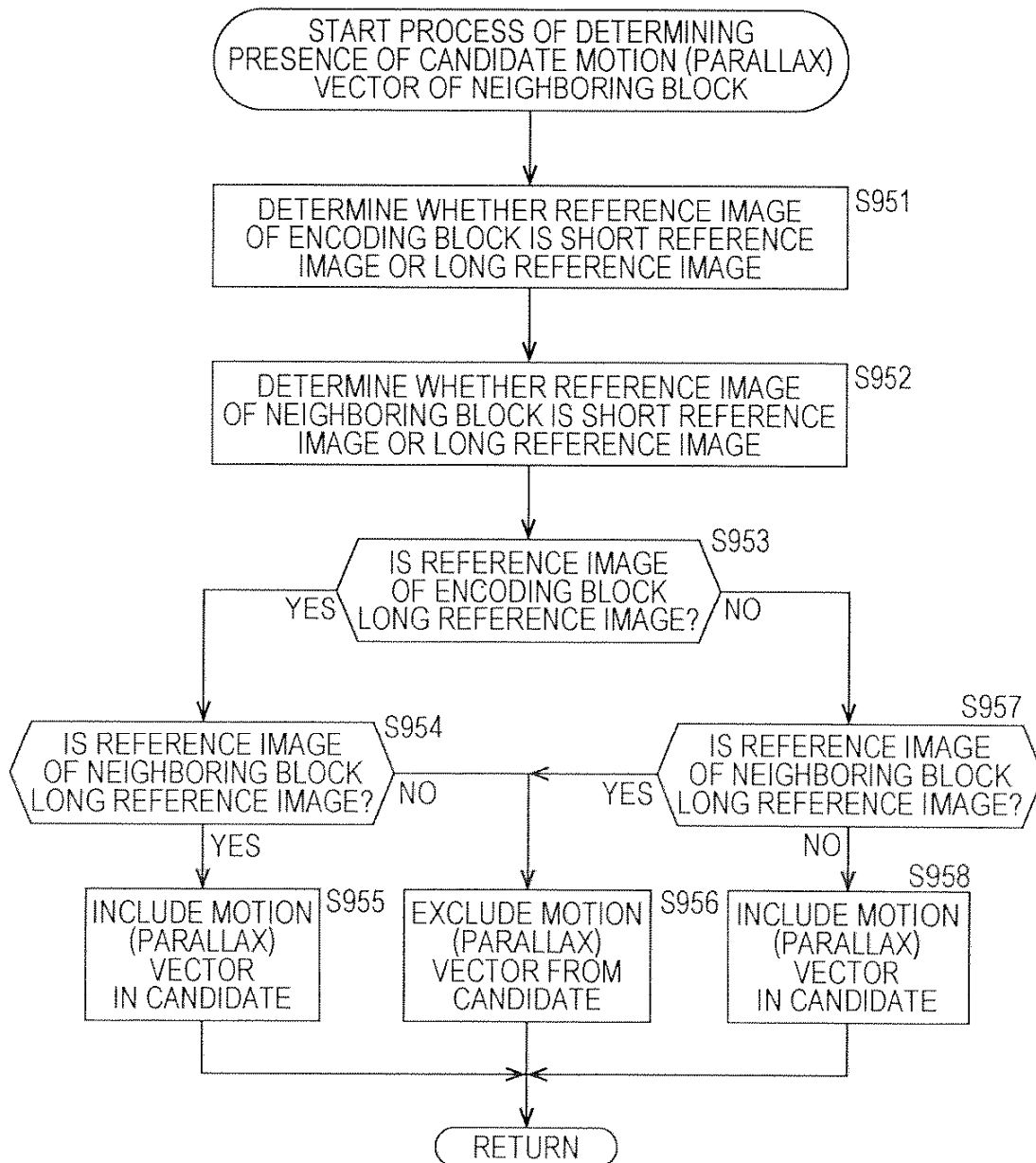


FIG. 86

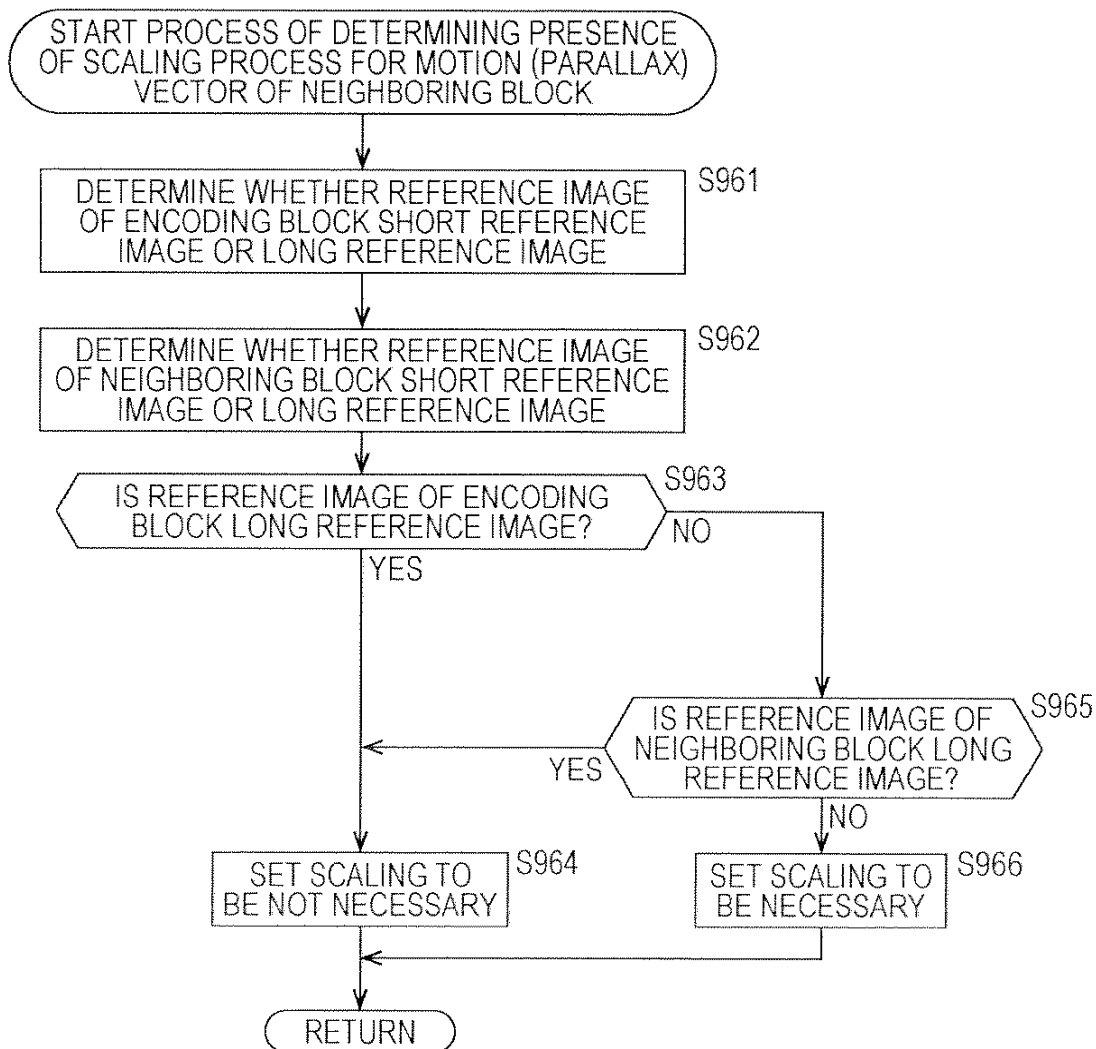
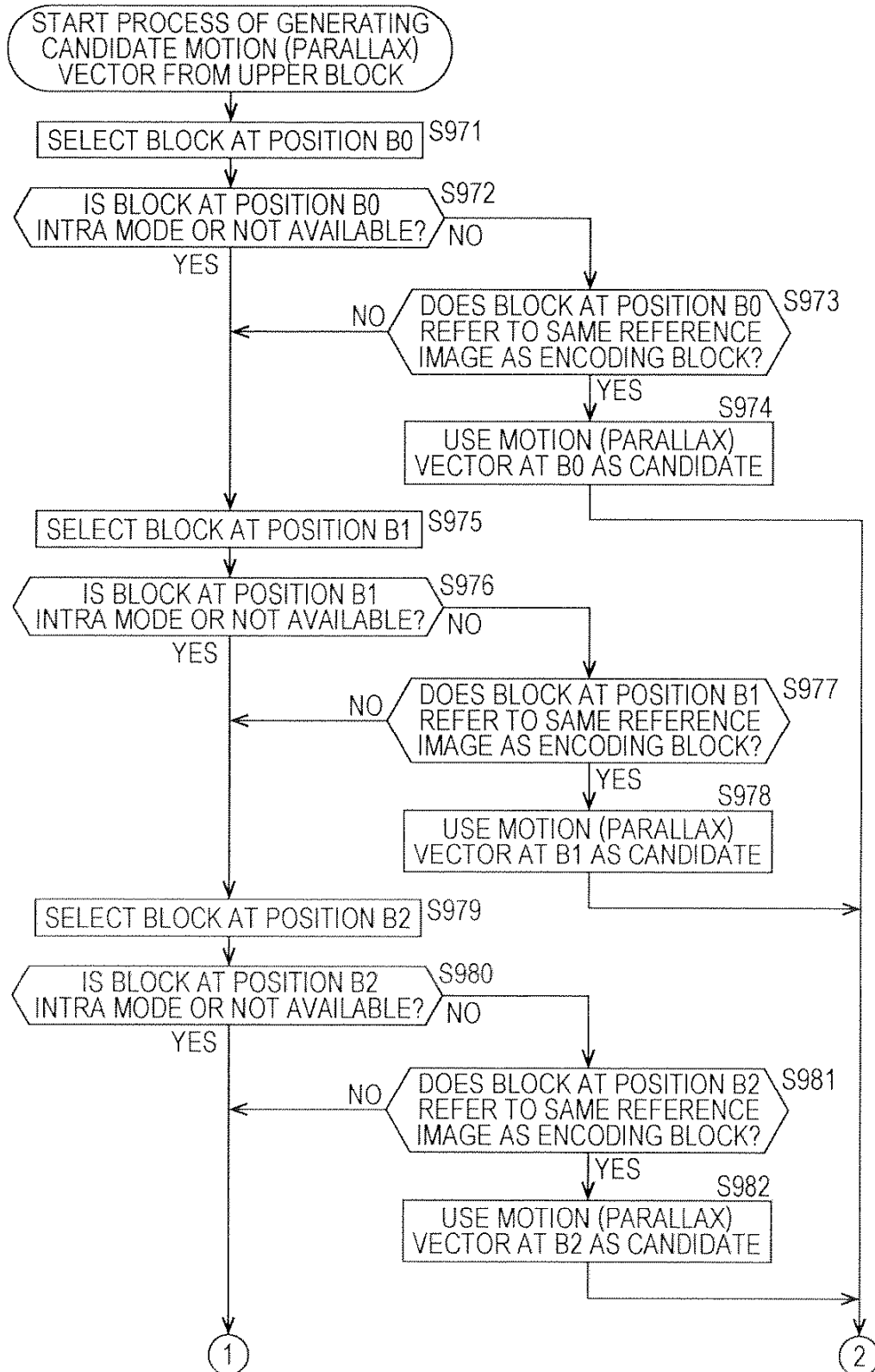


FIG. 87



82/93
FIG. 88

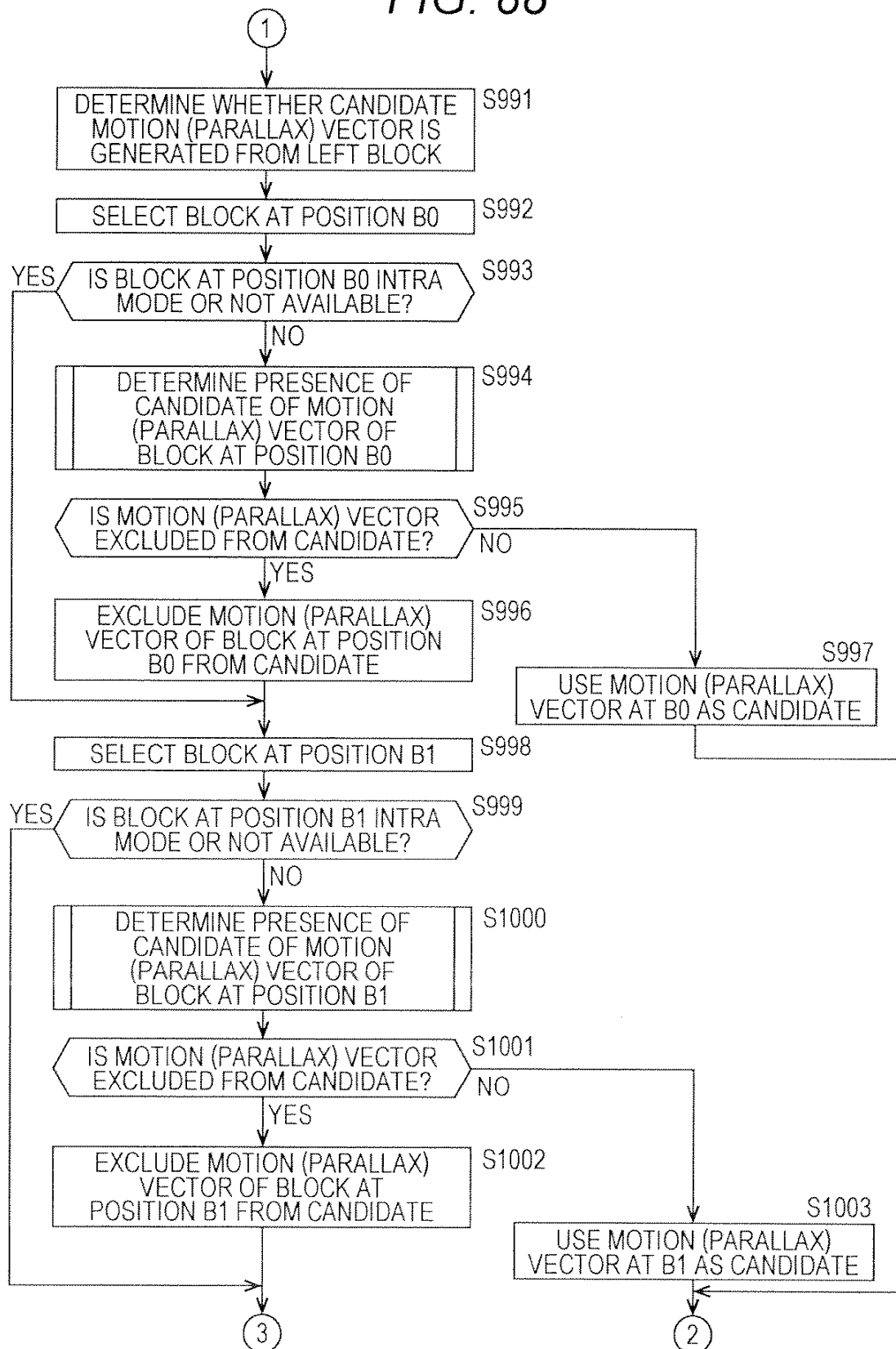


FIG. 89

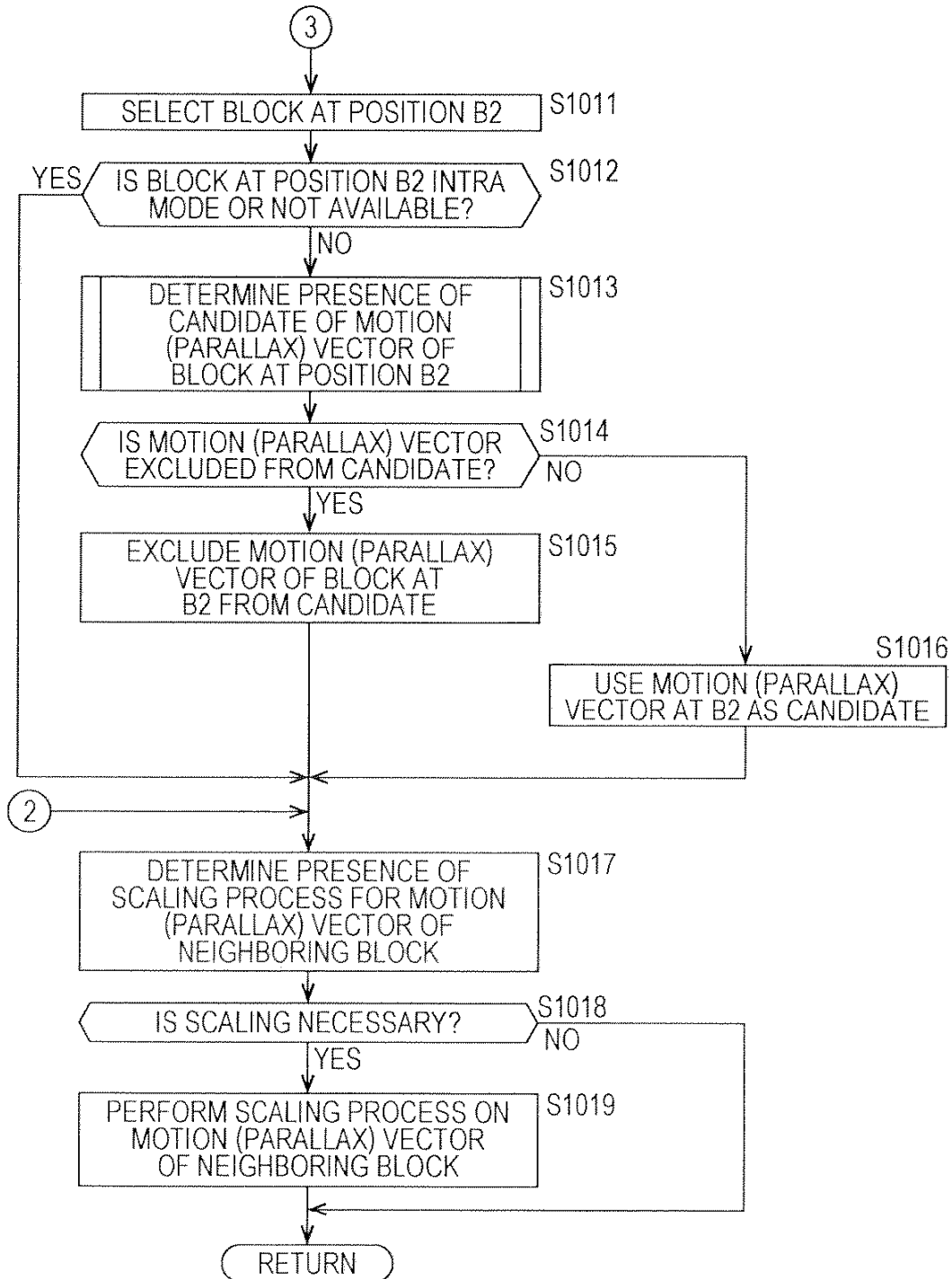


FIG. 90

Index	REFERENCE IMAGE OF ENCODING BLOCK	REFERENCE IMAGE OF TEMPORAL CORRELATION BLOCK	PRESENCE OF CANDIDATE MOTION (PARALLAX) VECTOR OF TEMPORAL CORRELATION BLOCK	SCALING OF MOTION (PARALLAX) VECTOR OF TEMPORAL CORRELATION BLOCK
1	SHORT REFERENCE PICTURE	SHORT REFERENCE PICTURE	INCLUDED IN CANDIDATE	YES
2	SHORT REFERENCE PICTURE	LONG REFERENCE PICTURE	EXCLUDED FROM CANDIDATE	—
3	LONG REFERENCE PICTURE	LONG REFERENCE PICTURE	INCLUDED IN CANDIDATE	NO
4	LONG REFERENCE PICTURE	SHORT REFERENCE PICTURE	EXCLUDED FROM CANDIDATE	—

A

Index	REFERENCE IMAGE OF ENCODING BLOCK	REFERENCE IMAGE OF NEIGHBORING BLOCK	PRESENCE OF CANDIDATE MOTION (PARALLAX) VECTOR OF NEIGHBORING BLOCK	SCALING OF MOTION (PARALLAX) VECTOR OF NEIGHBORING BLOCK
1	SHORT REFERENCE PICTURE	SHORT REFERENCE PICTURE	INCLUDED IN CANDIDATE	YES
2	SHORT REFERENCE PICTURE	LONG REFERENCE PICTURE	EXCLUDED FROM CANDIDATE	—
3	LONG REFERENCE PICTURE	LONG REFERENCE PICTURE	INCLUDED IN CANDIDATE (ONLY WHEN REFERENCE IMAGES ARE IDENTICAL)	NO
4	LONG REFERENCE PICTURE	SHORT REFERENCE PICTURE	EXCLUDED FROM CANDIDATE	—

B

FIG. 91

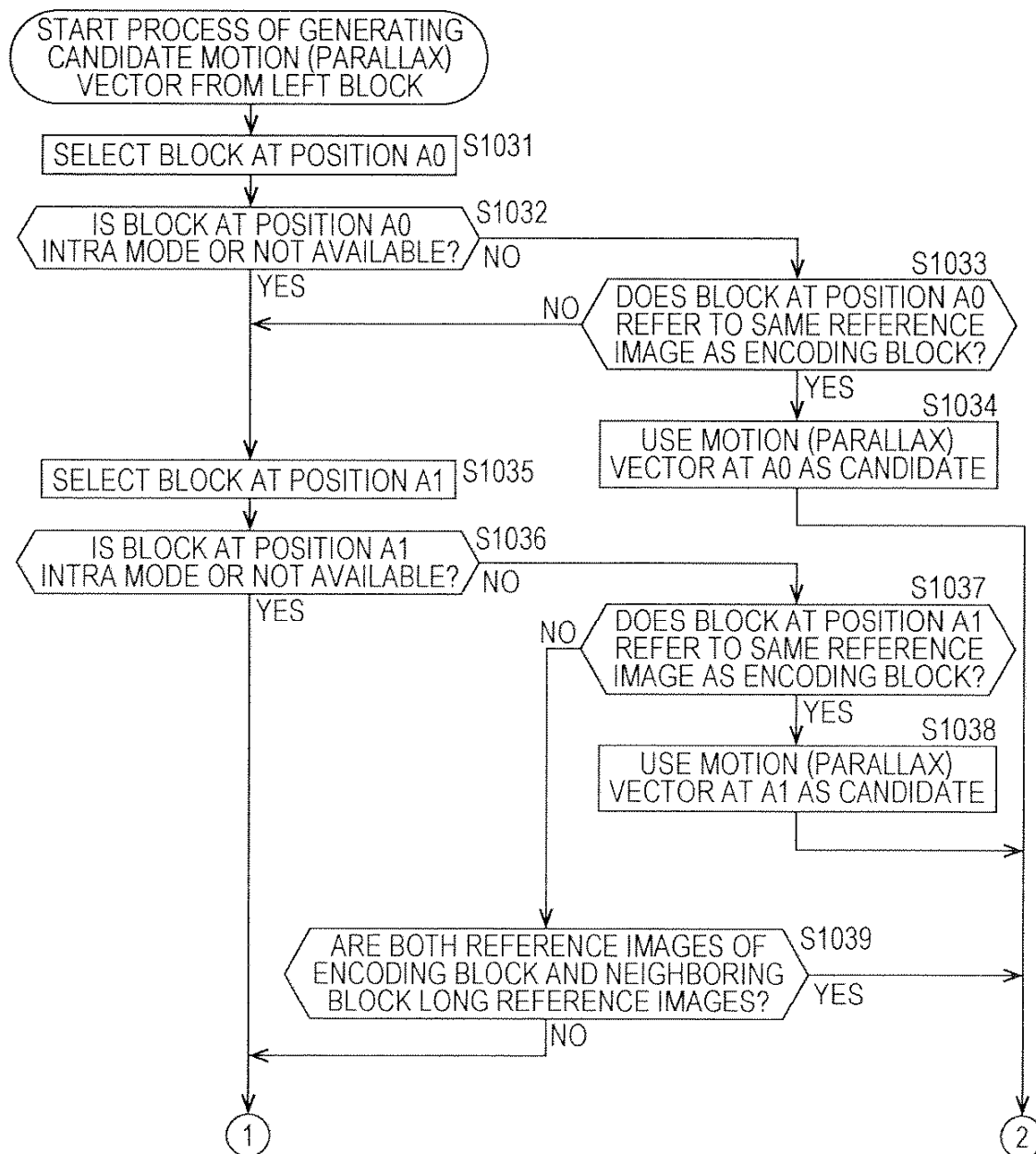
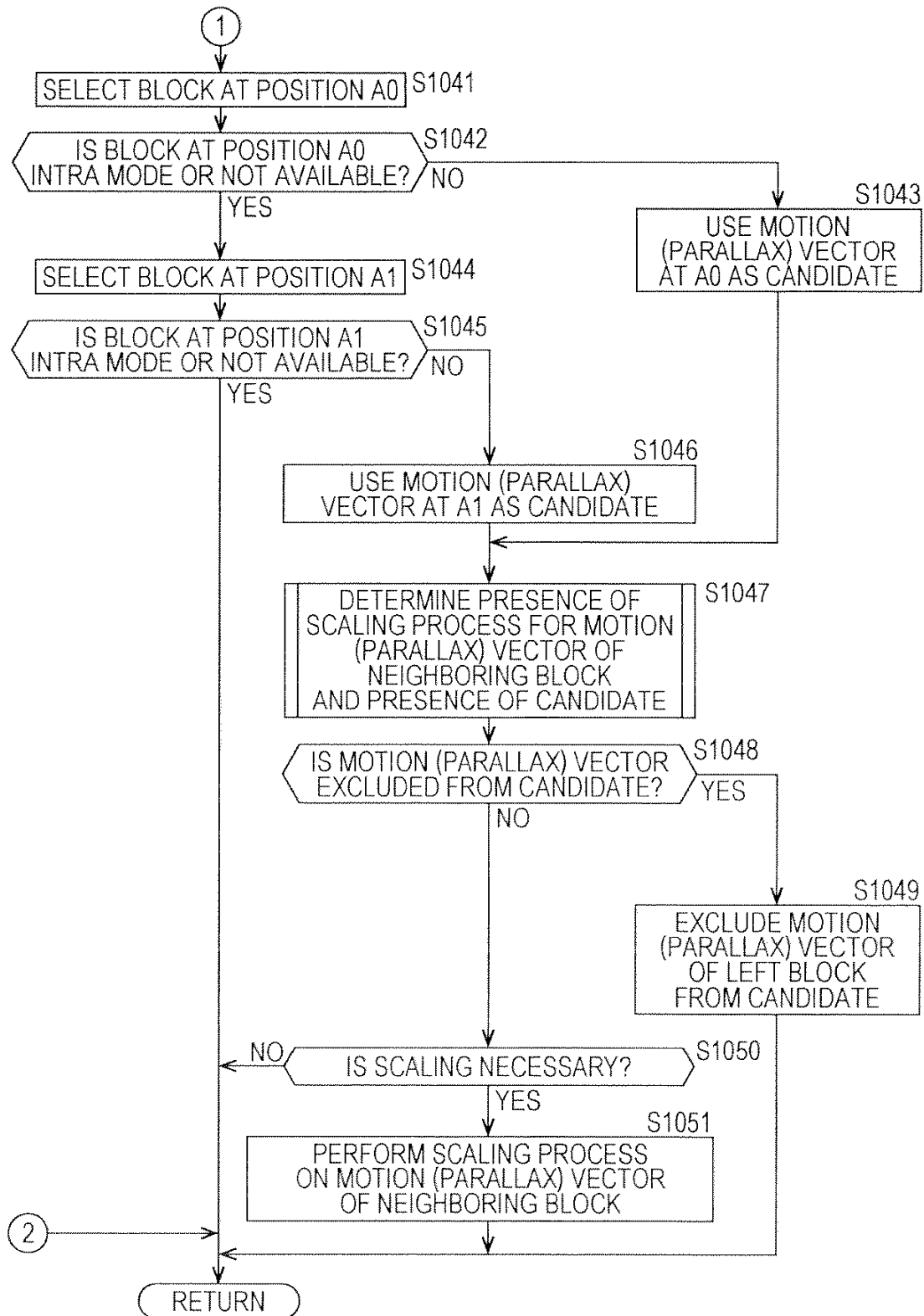
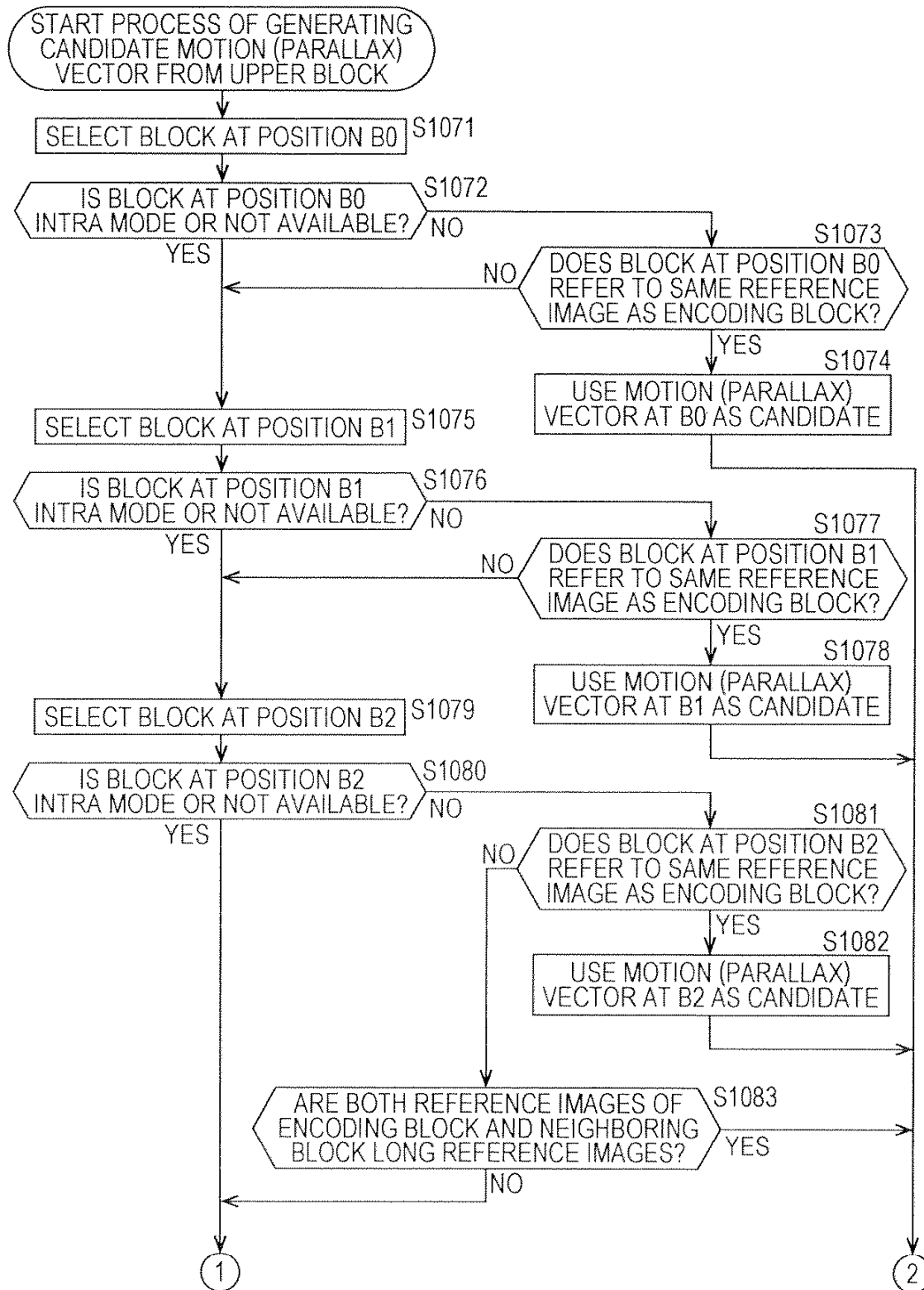


FIG. 92



87/93
FIG. 93



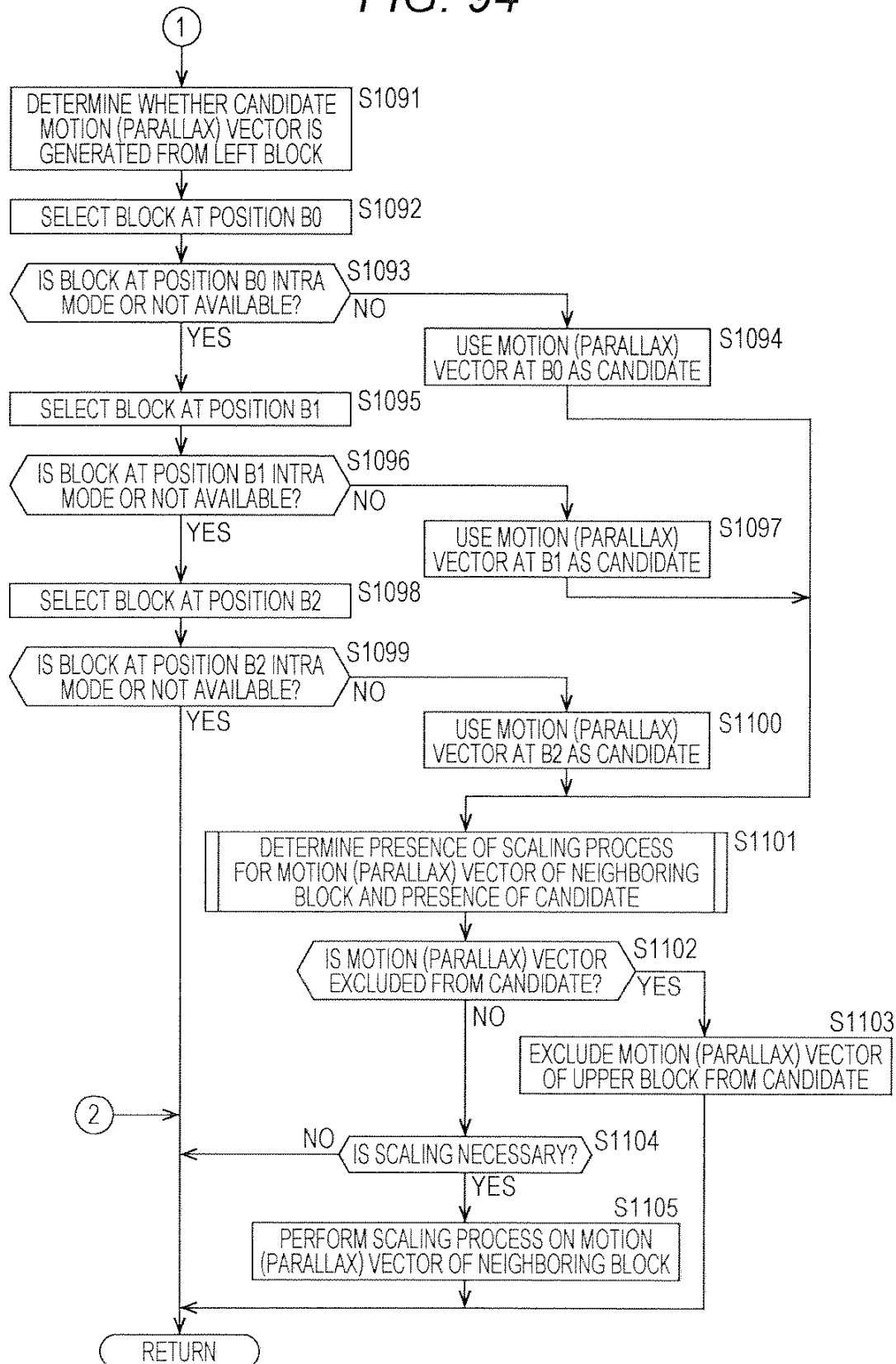


FIG. 95

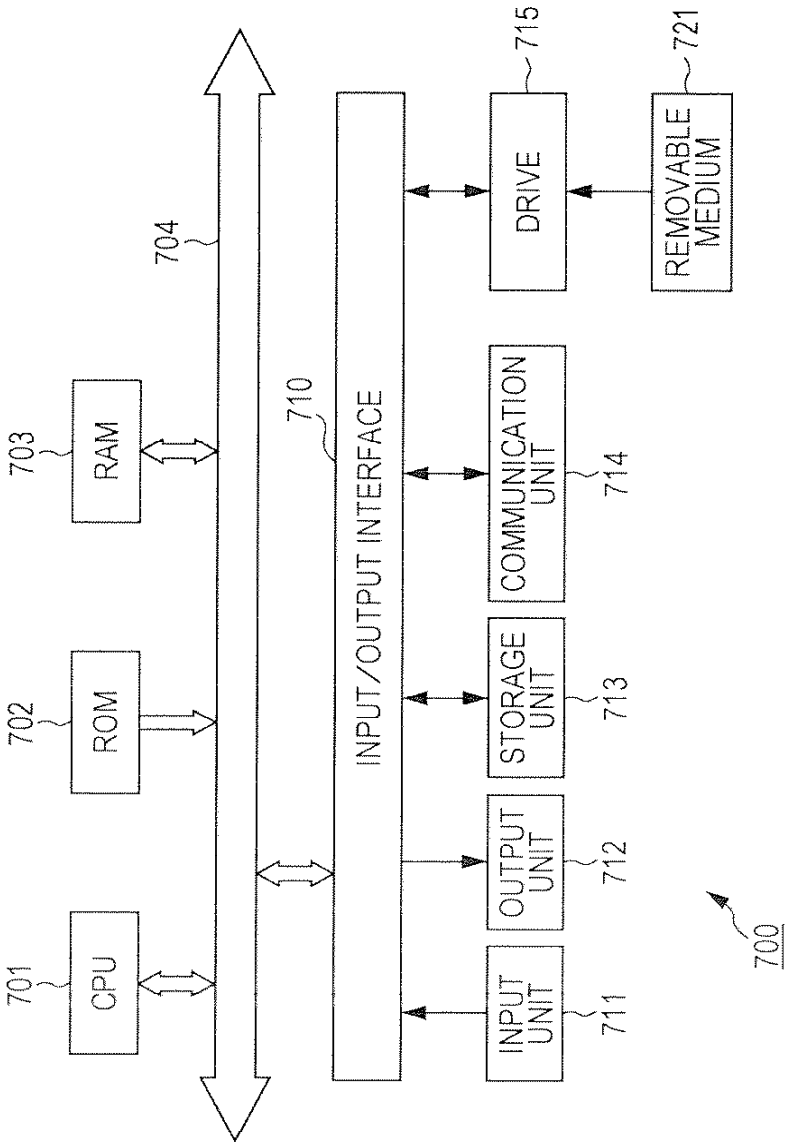


FIG. 96

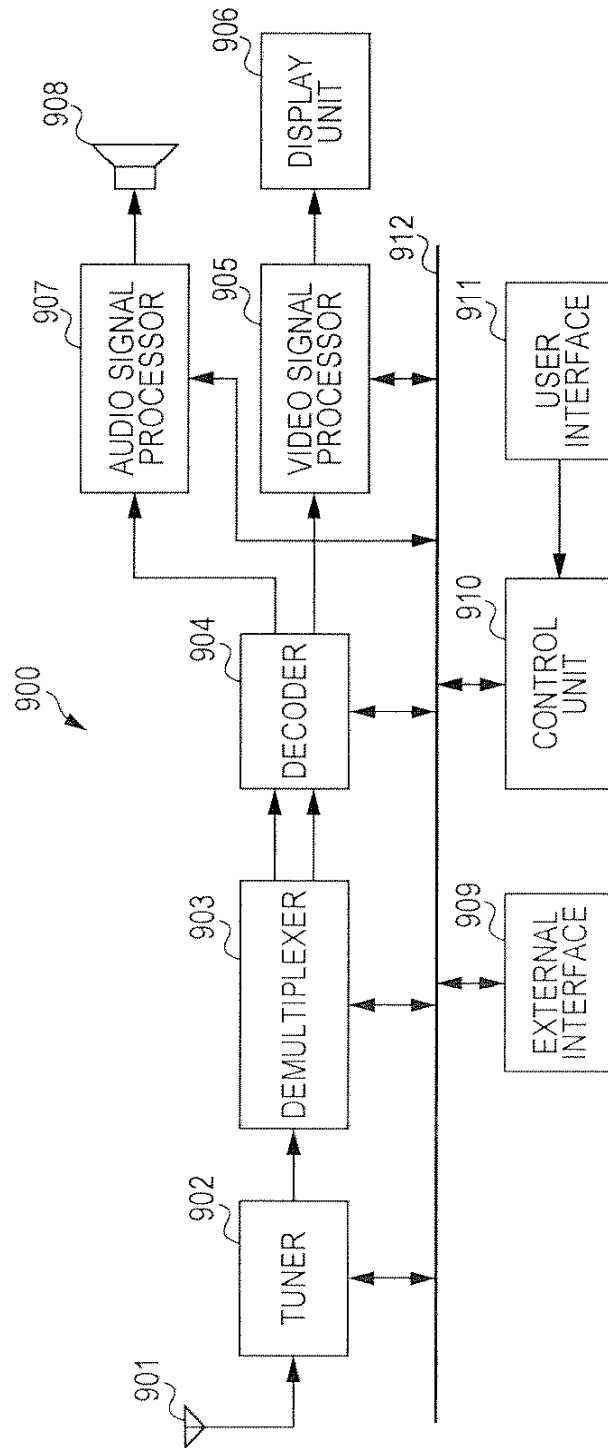


FIG. 97

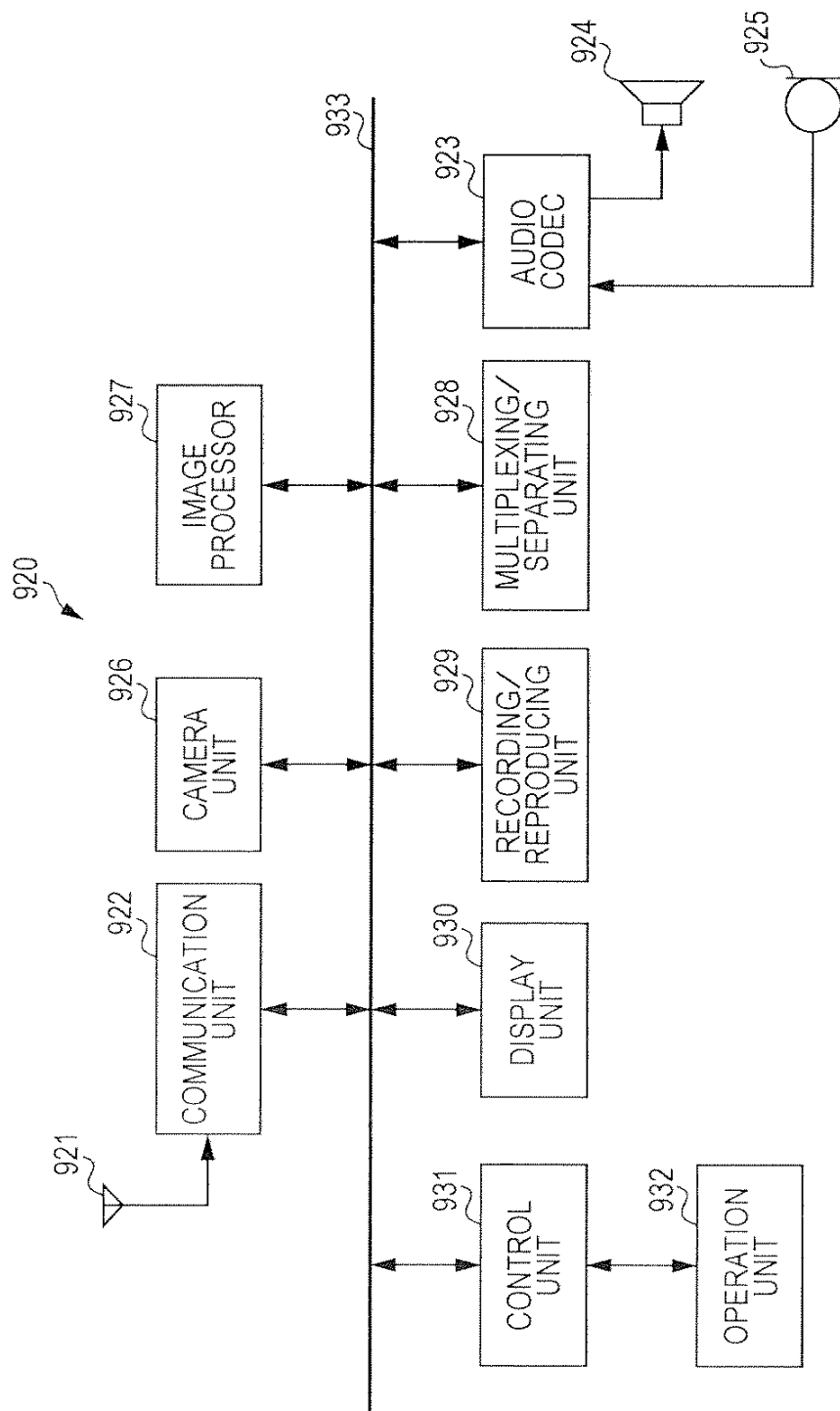


FIG. 98

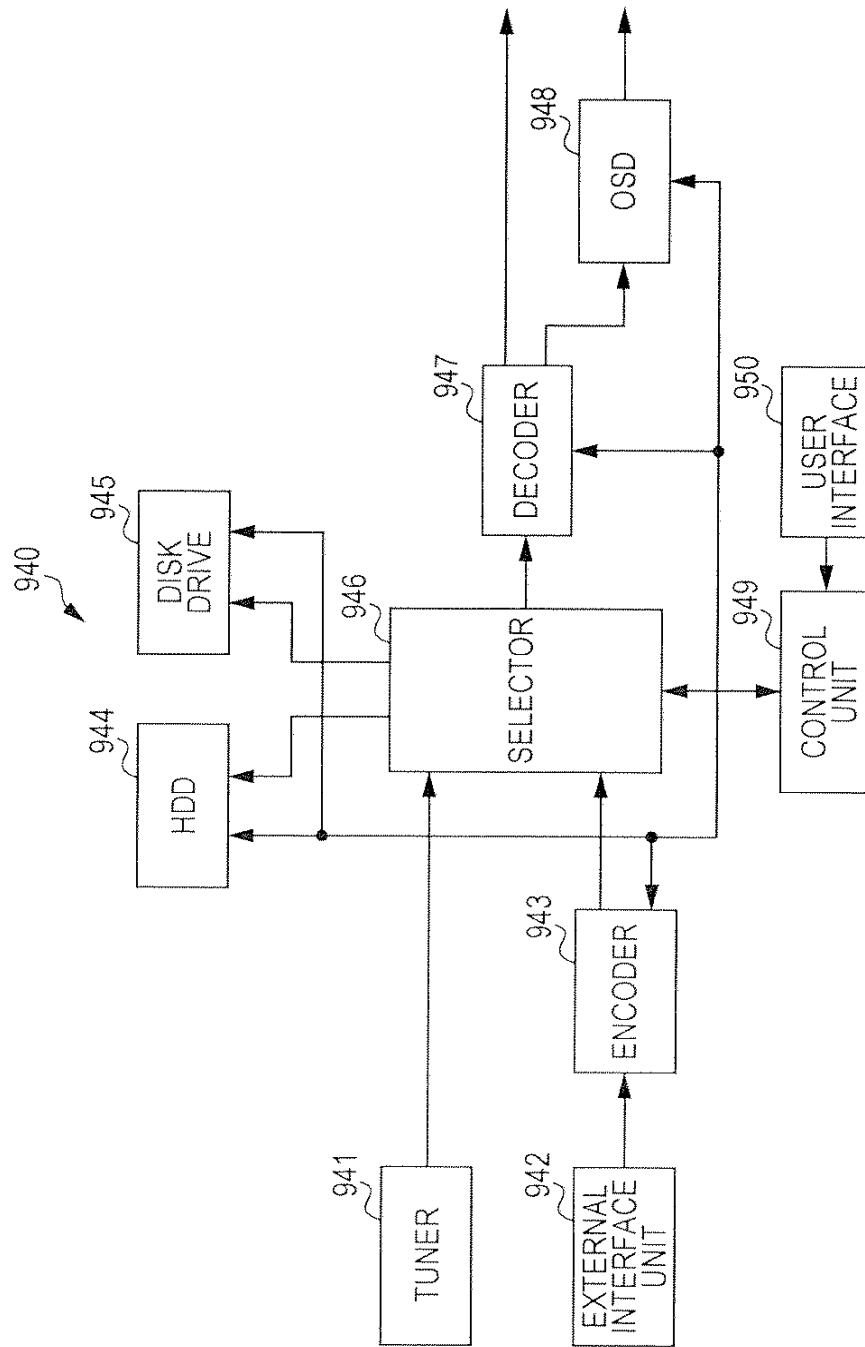


FIG. 99

