

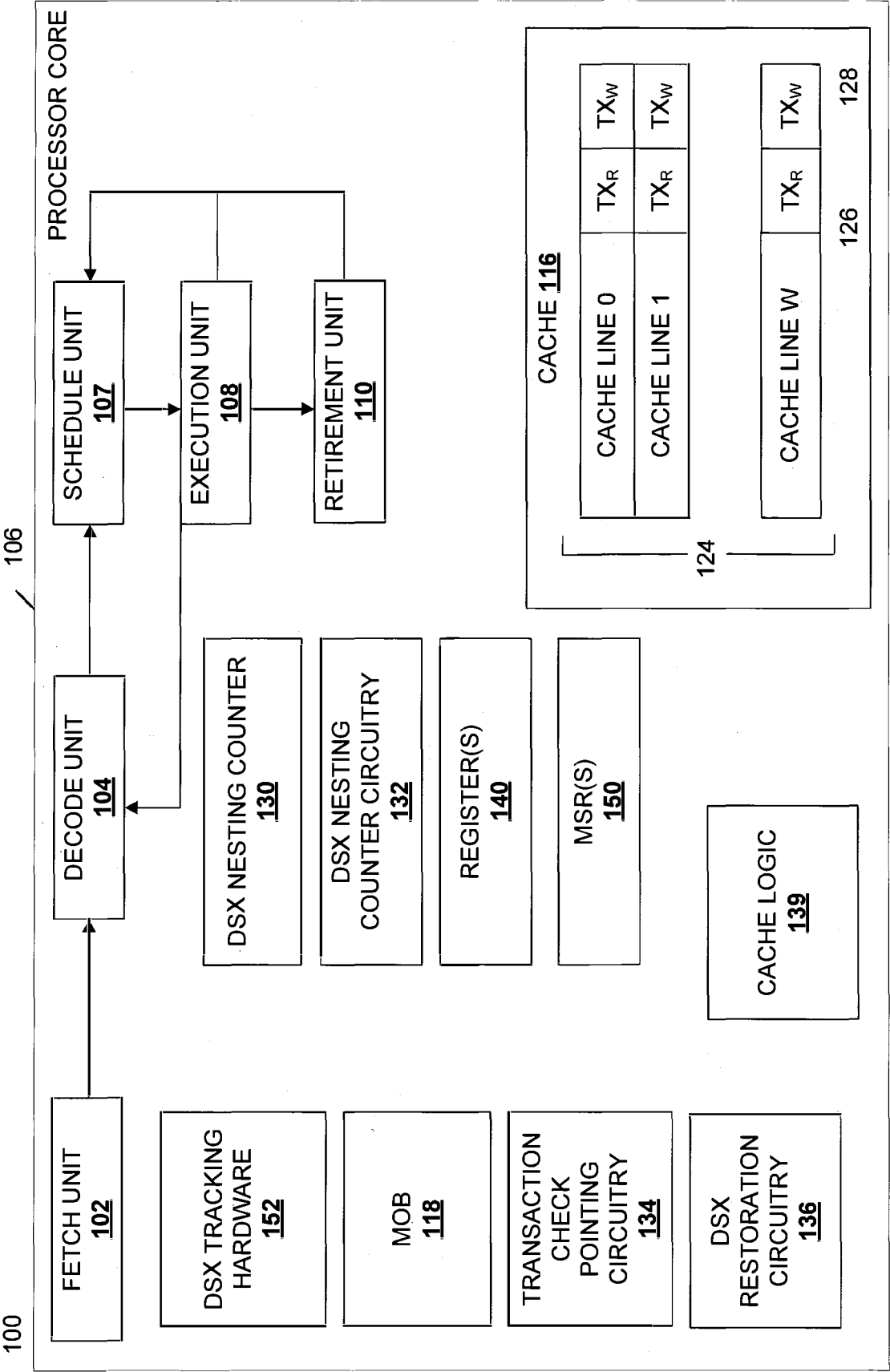


FIG. 1

2/41

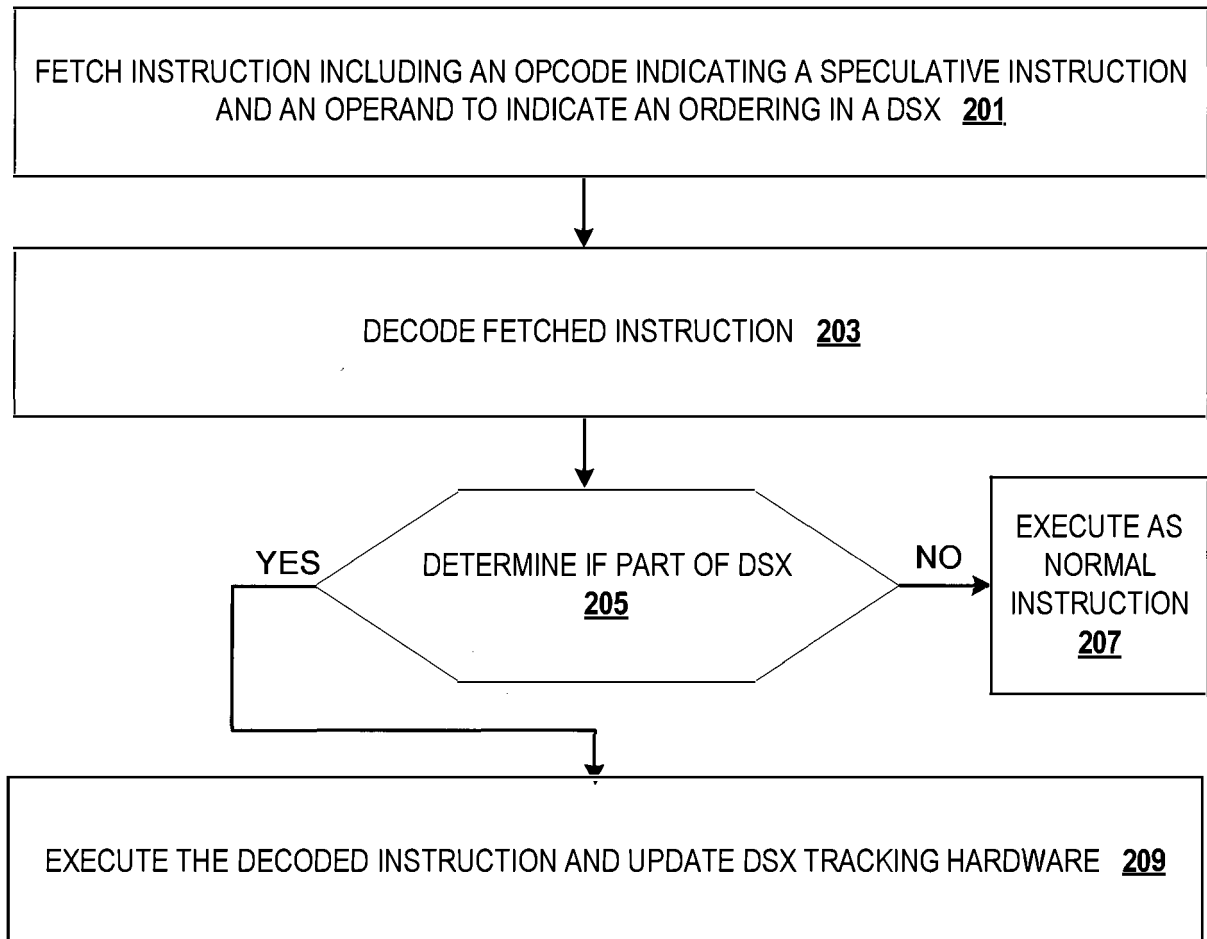


FIG. 2

3/41

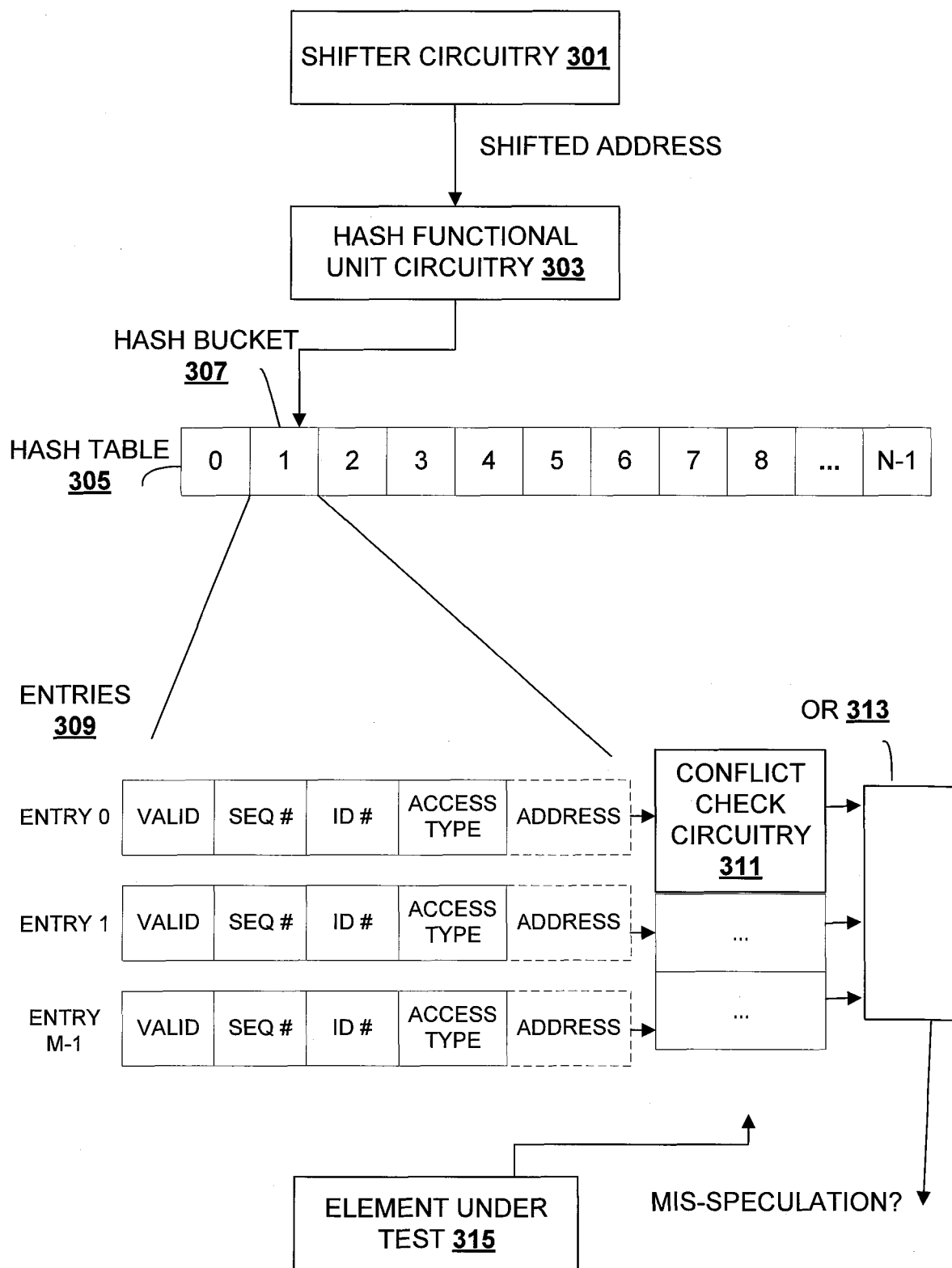


FIG. 3

4/41

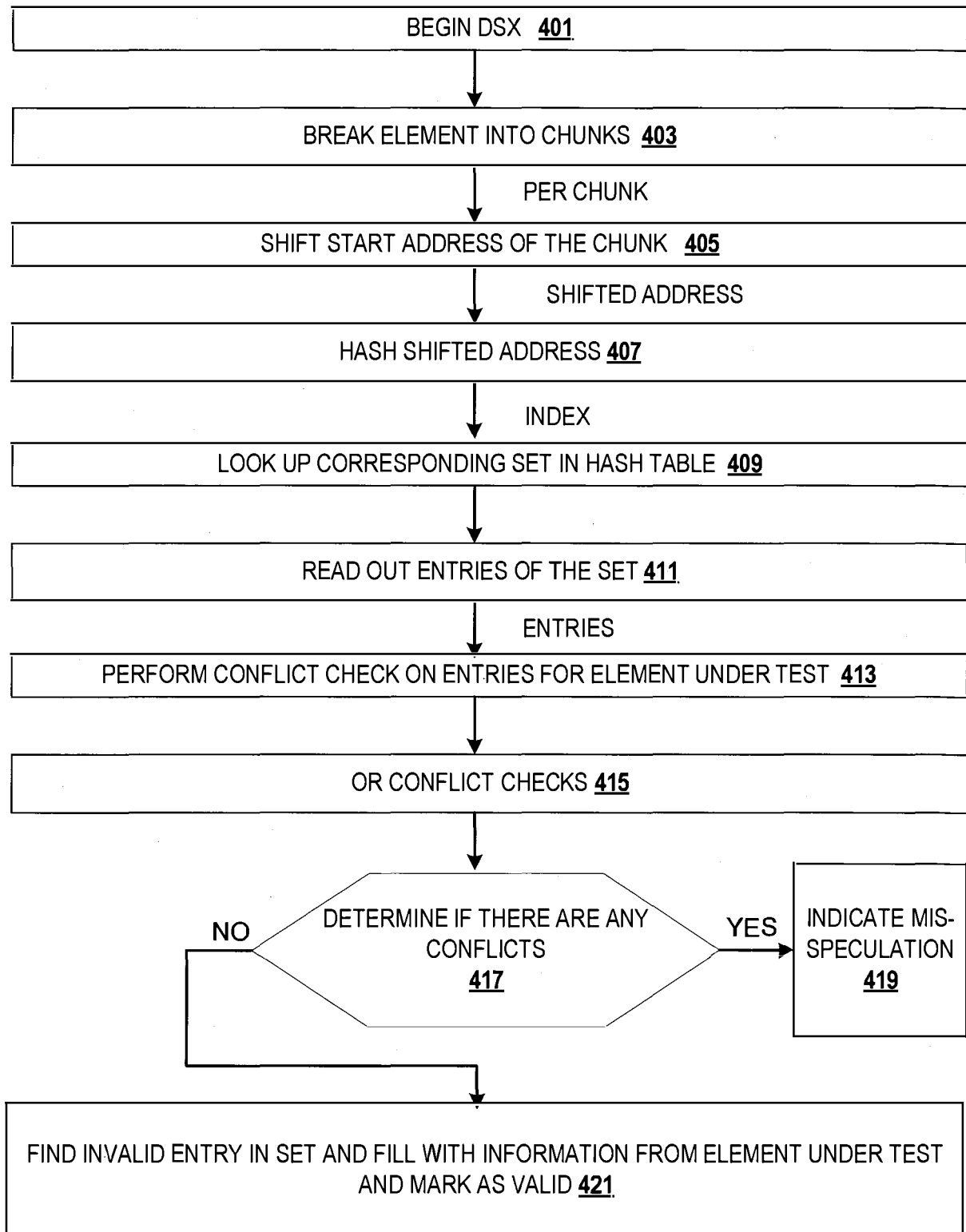


FIG. 4

5/41

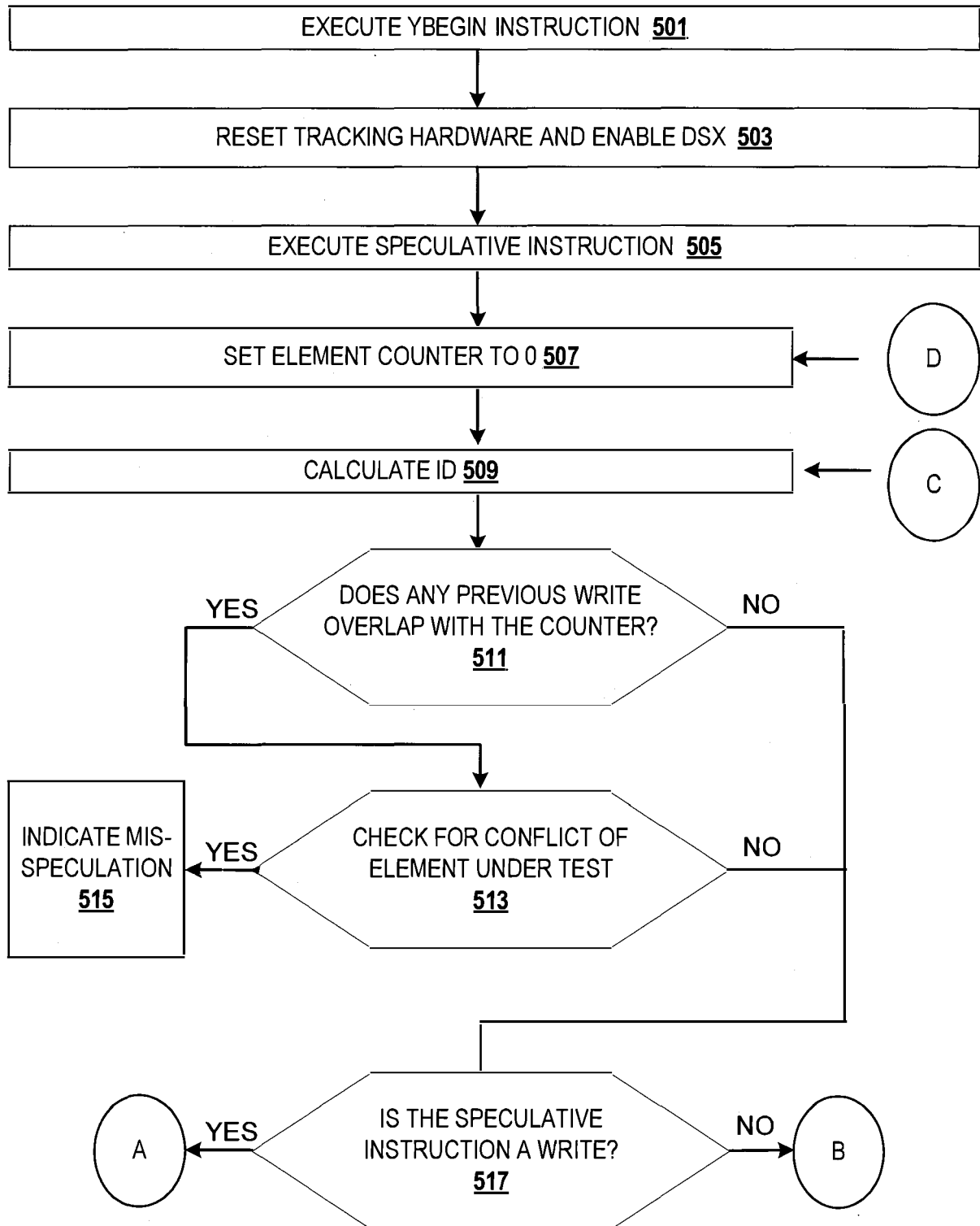


FIG. 5(A)

6/41

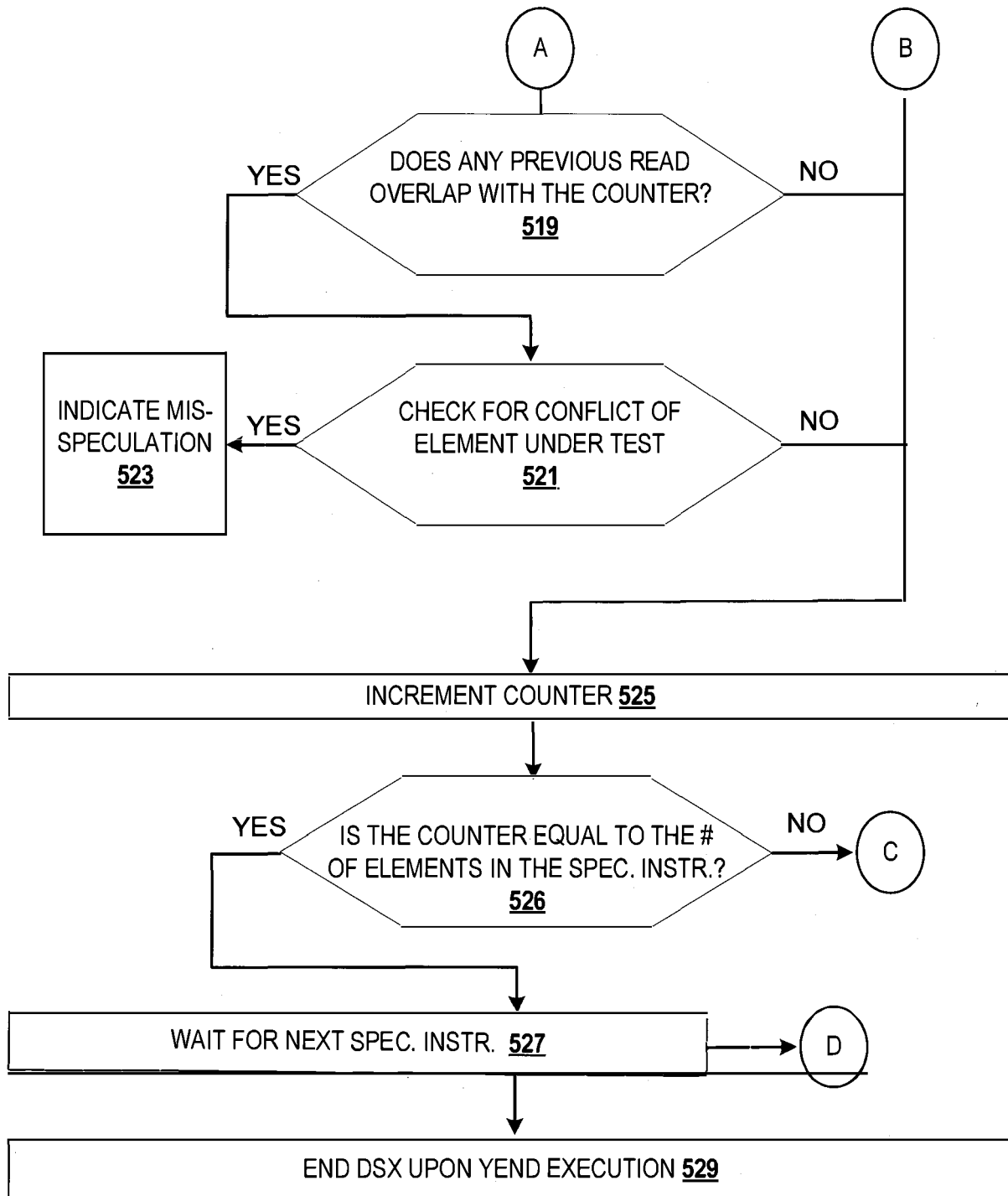


FIG. 5(B)

7/41

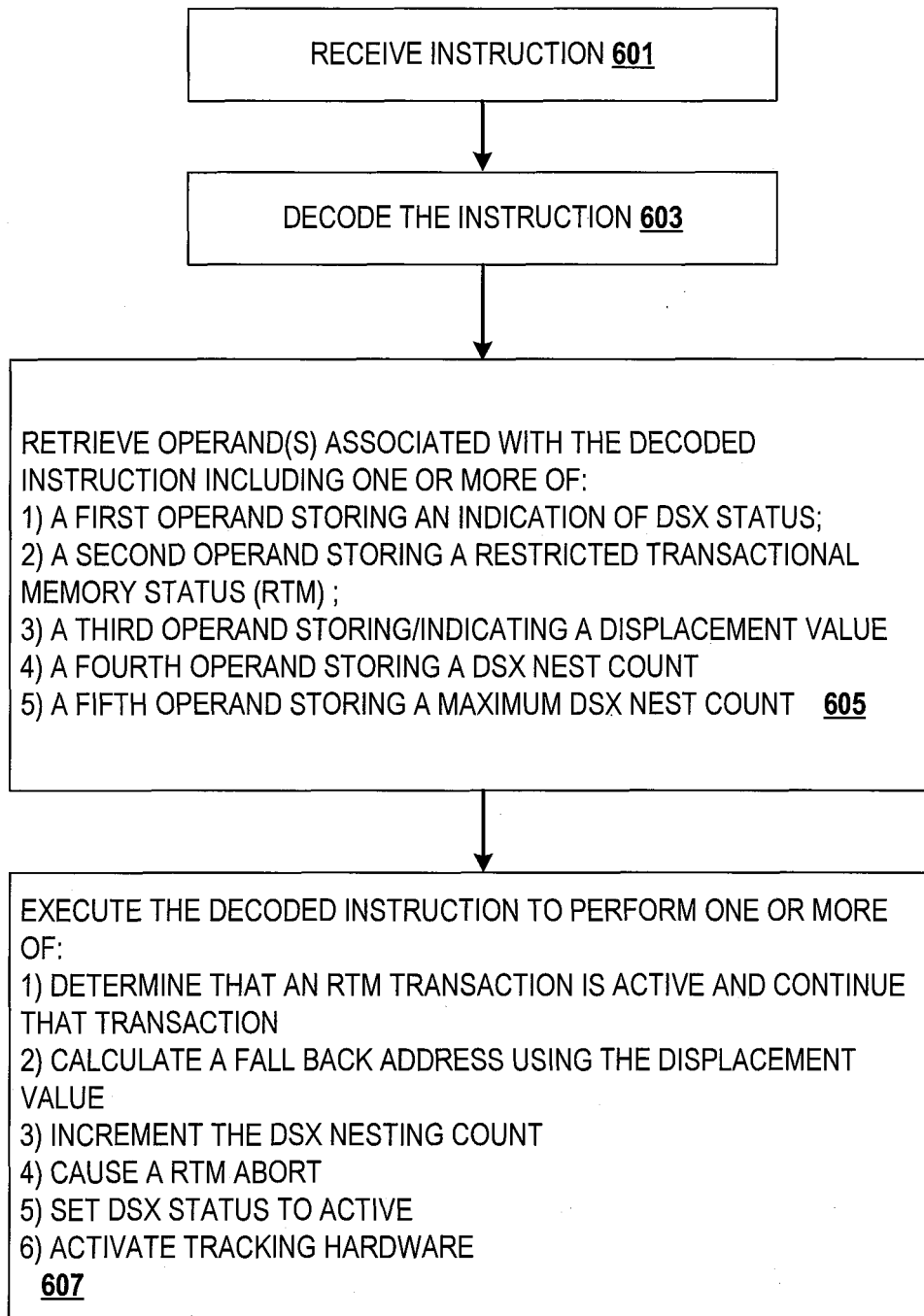


FIG. 6

8/41

<u>OPCODE</u>	<u>EXPLICIT OPERAND(S)</u>
701 YBEGIN	DISPLACEMENT
703 YBEGIN	DSX STATUS REGISTER, DISPLACEMENT
705 YBEGIN	DSX NEST COUNT REGISTER, DISPLACEMENT
707 YBEGIN	DSX STATUS REGISTER, DSX NEXT COUNT REGISTER, DISPLACEMENT
709 YBEGIN	DSX STATUS REGISTER, DSX NEST COUNT REGISTER, RTM STATUS REGISTER, DISPLACEMENT

FIG. 7

9/41

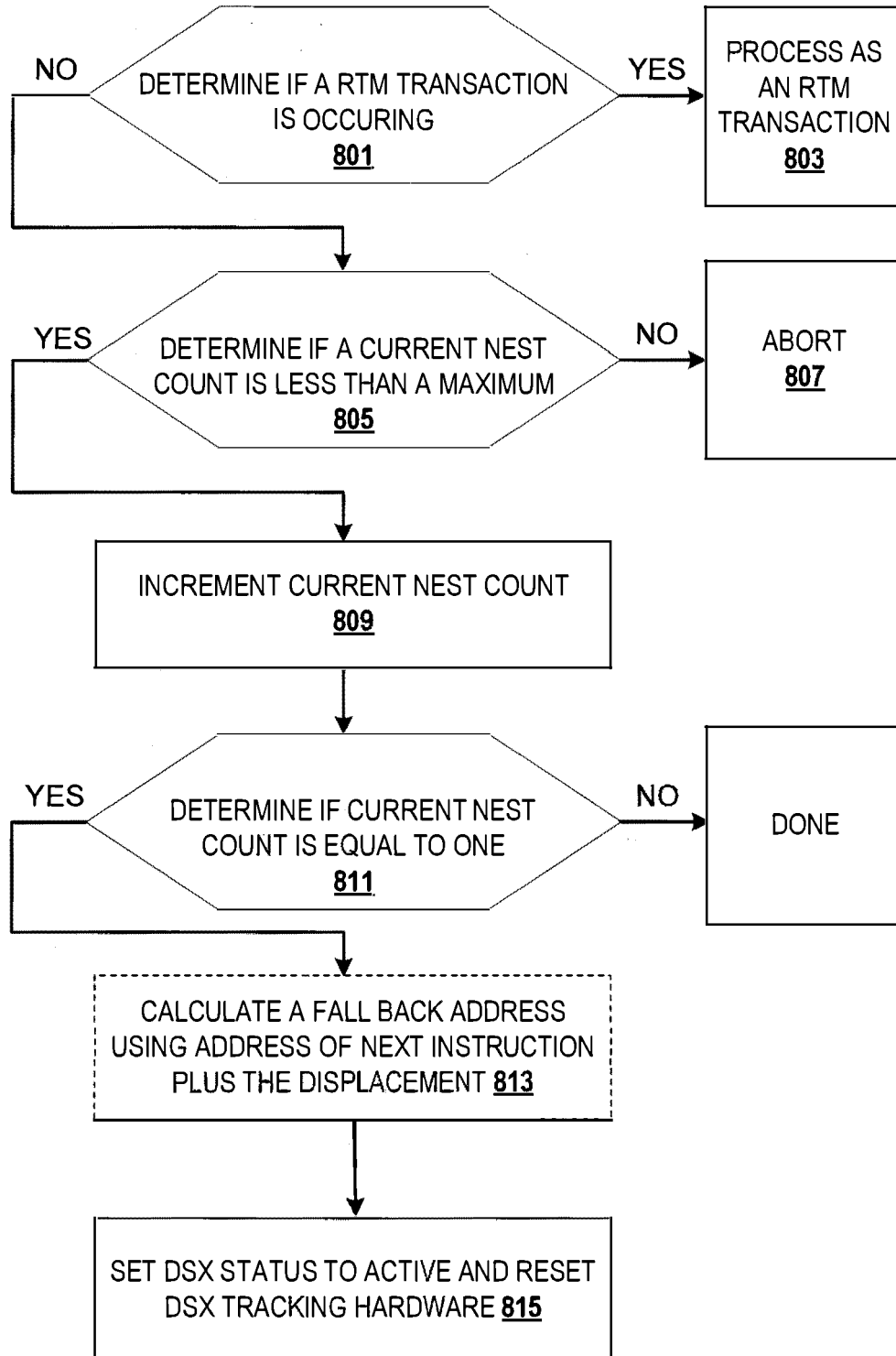


FIG. 8

10/41

```
YBEGIN DISPLACEMENT
IF (RTM_ACTIVE)
  GOTO XBEGIN
IF(DSX_NESTING_COUNT < MAX_DSX_NESTING_COUNT)
  DSX_NEST_COUNT++
IF(DSX_NEST_COUNT ==1)
  FALLBACK_IP = CALC_AND_FAULT_CHECK_IP (RIP, DISPLACEMENT)
  DSX_ACTIVE = 1
ENTER_DSX_STATE(REGISTER, MEMORY TRACKING)
FI
ELSE
YABORT
FI
```

FIG. 9

11/41

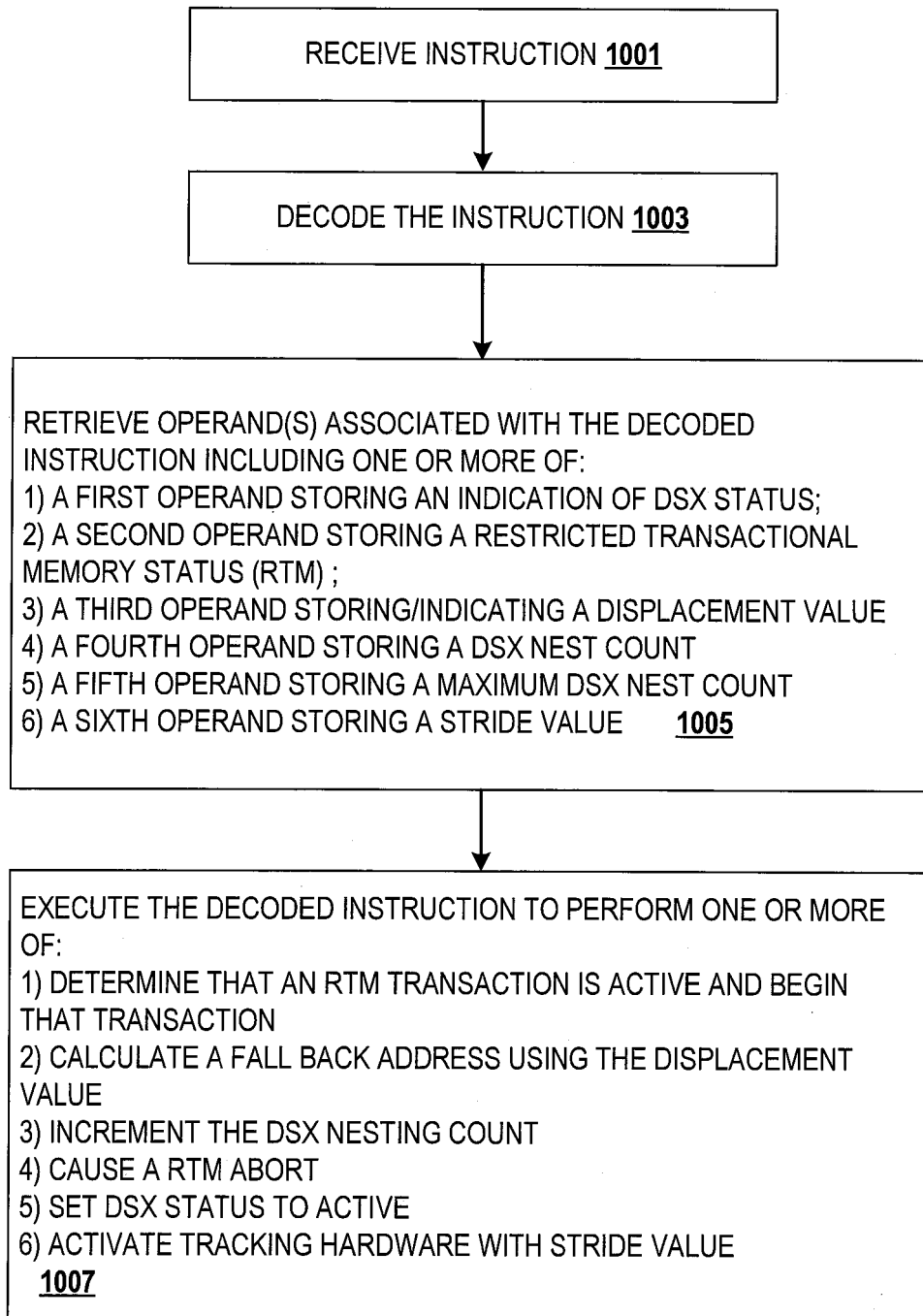


FIG. 10

12/41

OPCODE	EXPLICIT OPERAND(S)
1101 YBEGIN WITH STRIDE	DISPLACEMENT, STRIDE
1103 YBEGIN WITH STRIDE	DSX STATUS REGISTER, DISPLACEMENT, STRIDE
1105 YBEGIN WITH STRIDE	DSX NEST COUNT REGISTER, DISPLACEMENT, STRIDE
1107 YBEGIN WITH STRIDE	DSX STATUS REGISTER, DSX NEXT COUNT REGISTER, DISPLACEMENT, STRIDE
1109 YBEGIN WITH STRIDE	DSX STATUS REGISTER, DSX NEST COUNT REGISTER, RTM STATUS REGISTER, DISPLACEMENT, STRIDE

FIG. 11

13/41

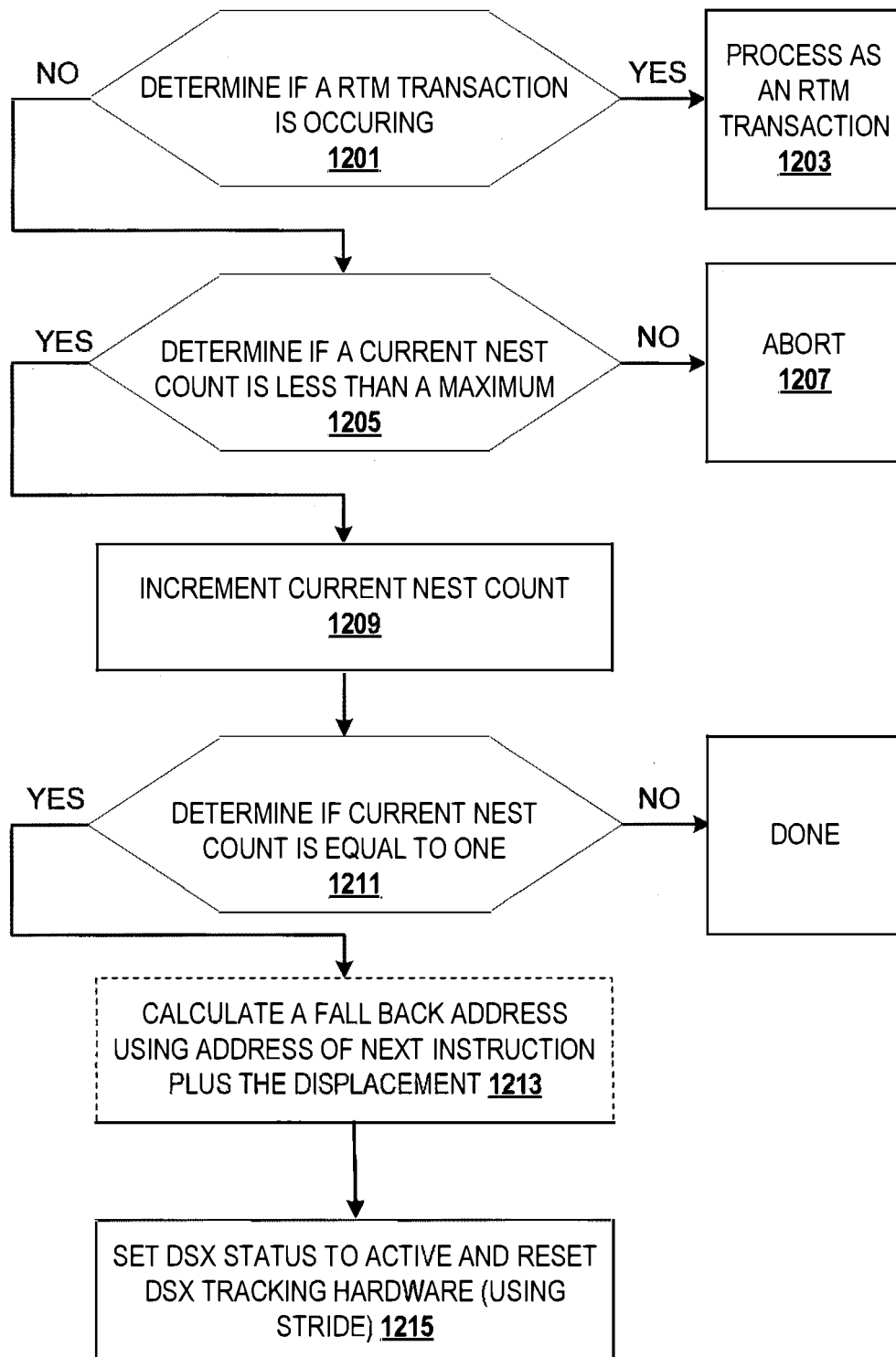


FIG. 12

14/41

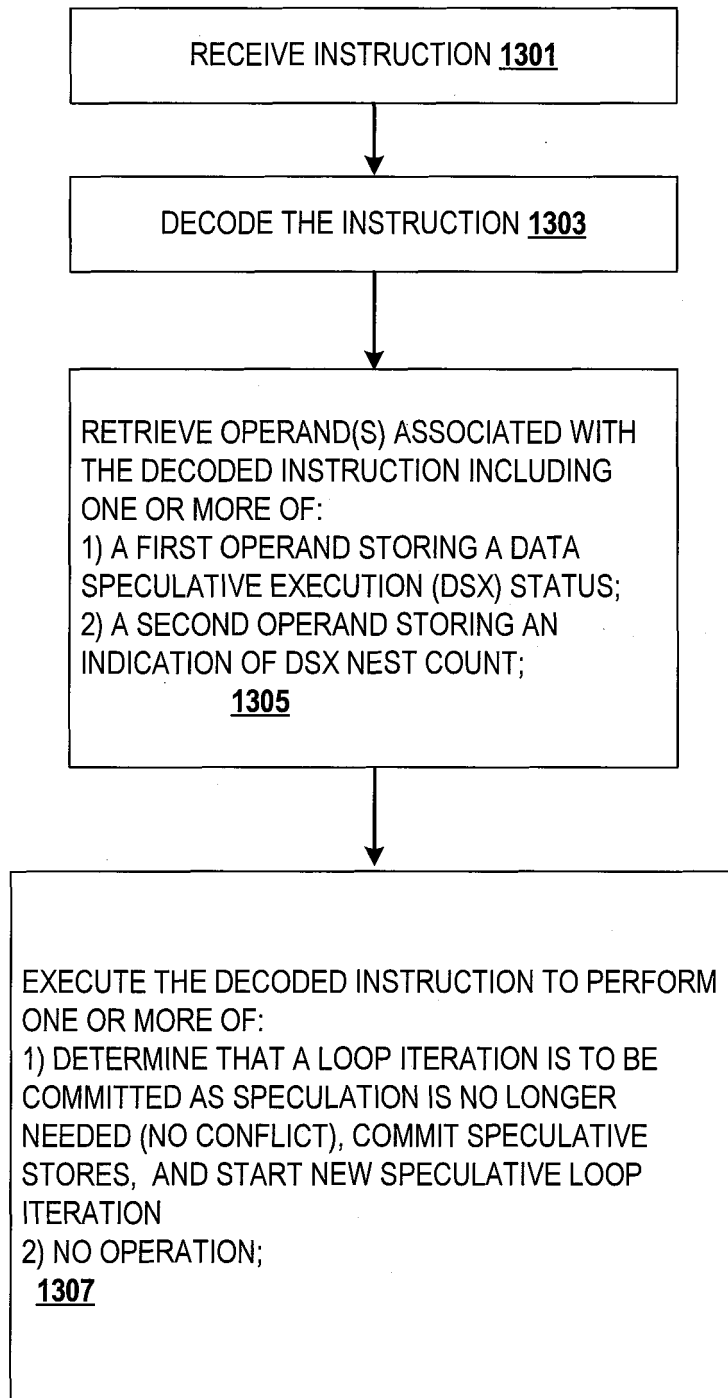


FIG. 13

15/41

<u>OPCODE</u>	<u>EXPLICIT OPERAND(S)</u>
1401 YCONTINUE	
1403 YCONTINUE	DSX STATUS REGISTER
1405 YCONTINUE	DSX NEST COUNT REGISTER
1407 YCONTINUE	DSX STATUS REGISTER, DSX NEXT COUNT REGISTER

FIG. 14

16/41

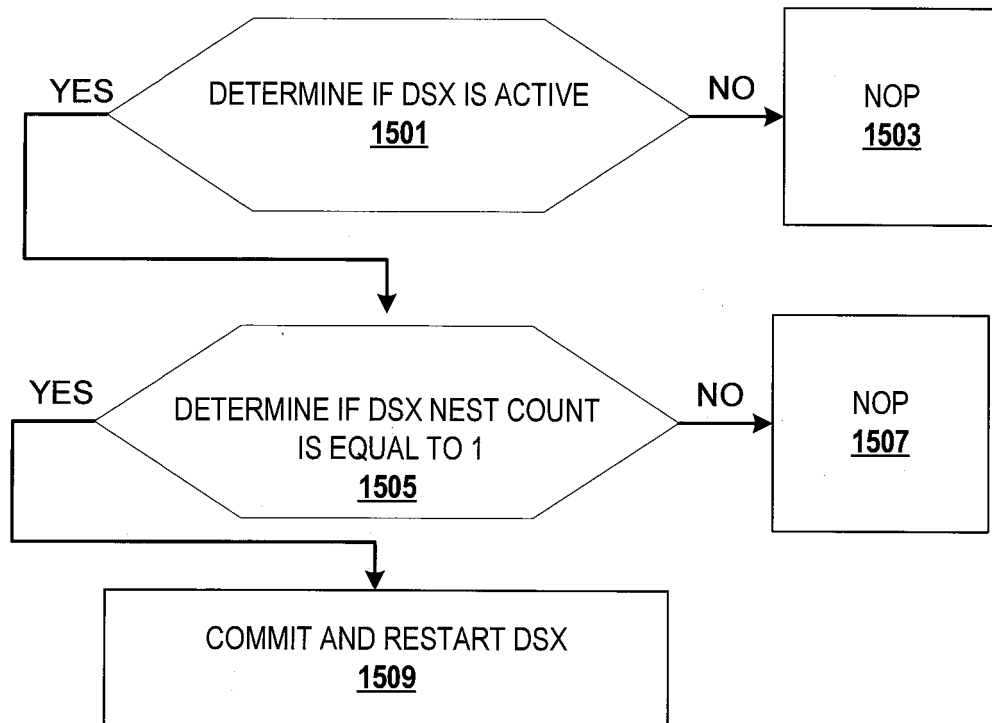


FIG. 15

17/41

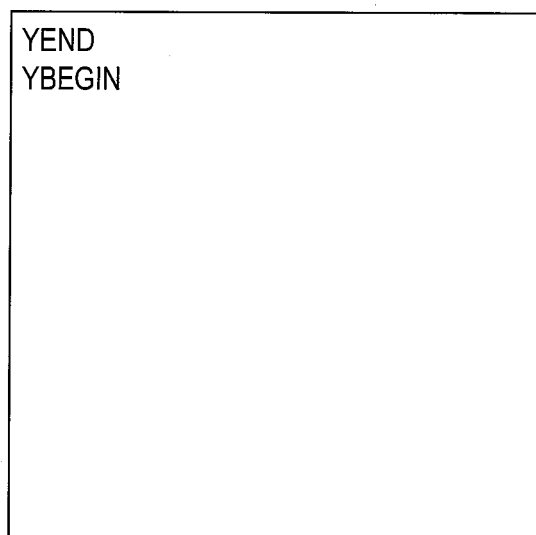
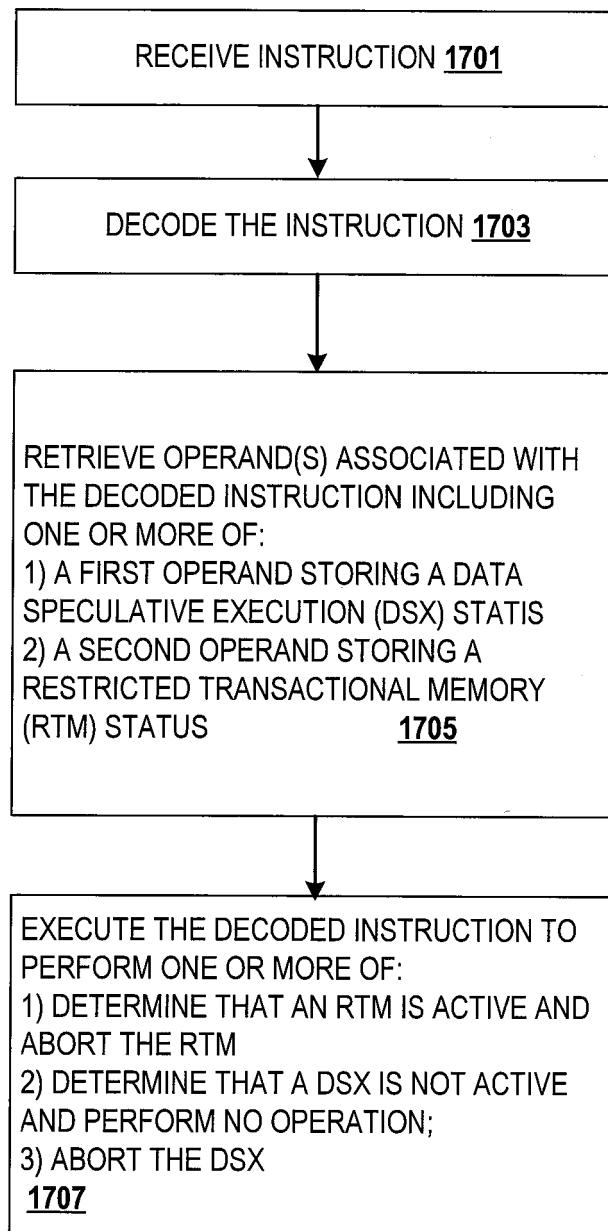


FIG. 16

18/41**FIG. 17**

19/41

<u>OPCODE</u>	<u>EXPLICIT OPERAND(S)</u>
1801 YABORT	
1803 YABORT	DSX STATUS REGISTER
1805 YABORT	DSX STATUS REGISTER, RTM STATUS REGISTER

FIG. 18

20/41

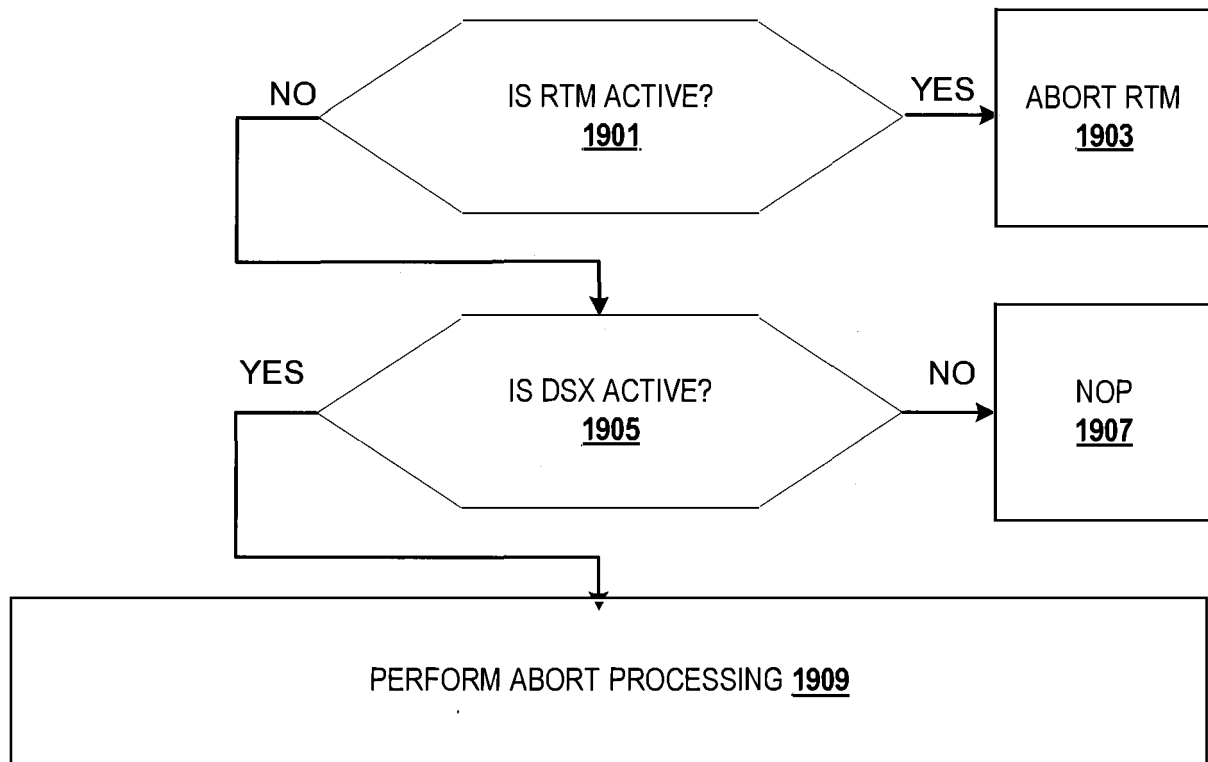
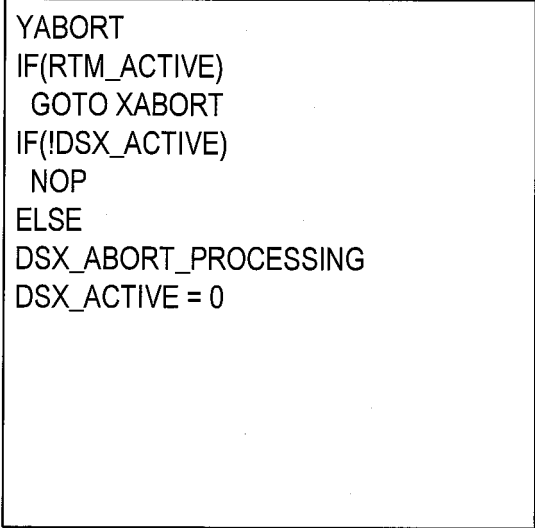


FIG. 19

21/41



```
YABORT  
IF(RTM_ACTIVE)  
  GOTO XABORT  
IF(!DSX_ACTIVE)  
  NOP  
ELSE  
  DSX_ABORT_PROCESSING  
  DSX_ACTIVE = 0
```

FIG. 20

22/41

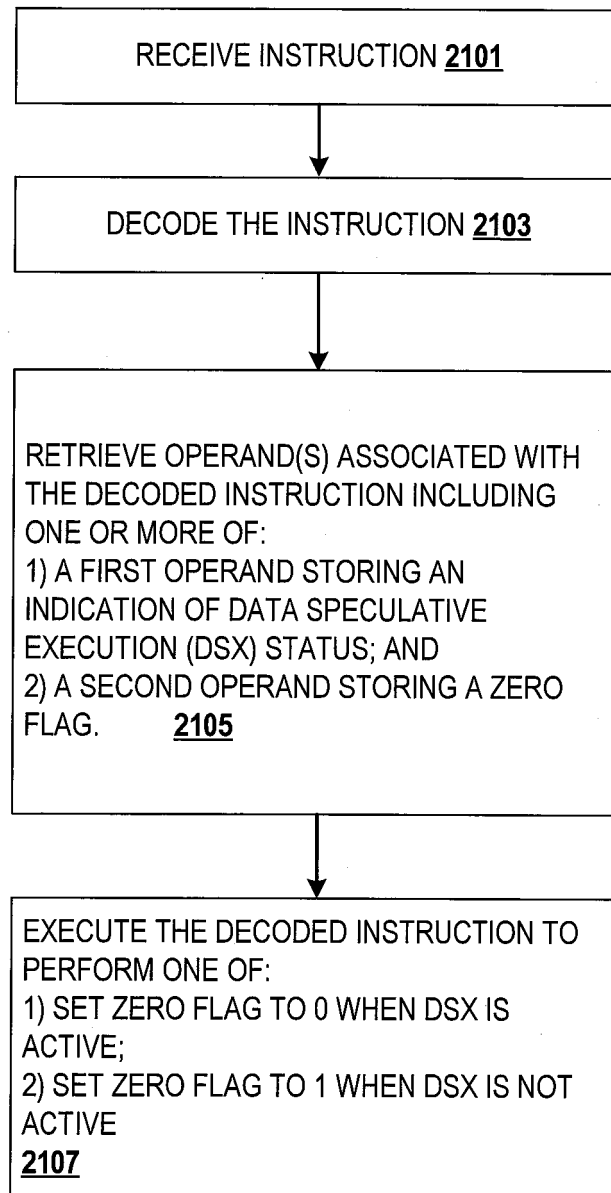


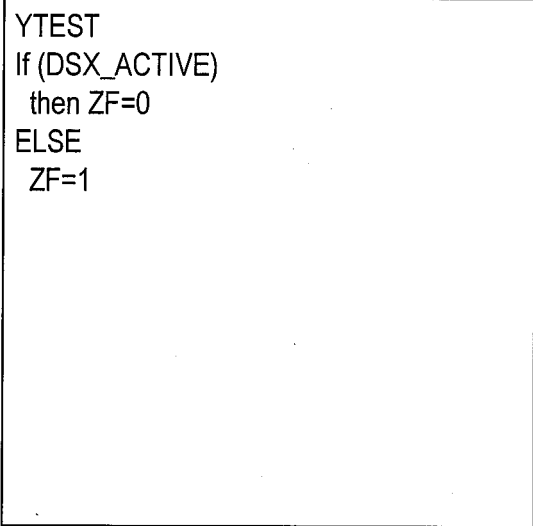
FIG. 21

23/41

<u>OPCODE</u>	<u>EXPLICIT OPERAND(S)</u>
2201 YTEST	
2203 YTEST	DSX STATUS REGISTER
2205 YTEST	FLAG REGISTER
2207 YTEST	DSX STATUS REGISTER, FLAG REGISTER

FIG. 22

24/41



```
YTEST  
If (DSX_ACTIVE)  
  then ZF=0  
ELSE  
  ZF=1
```

FIG. 23

25/41

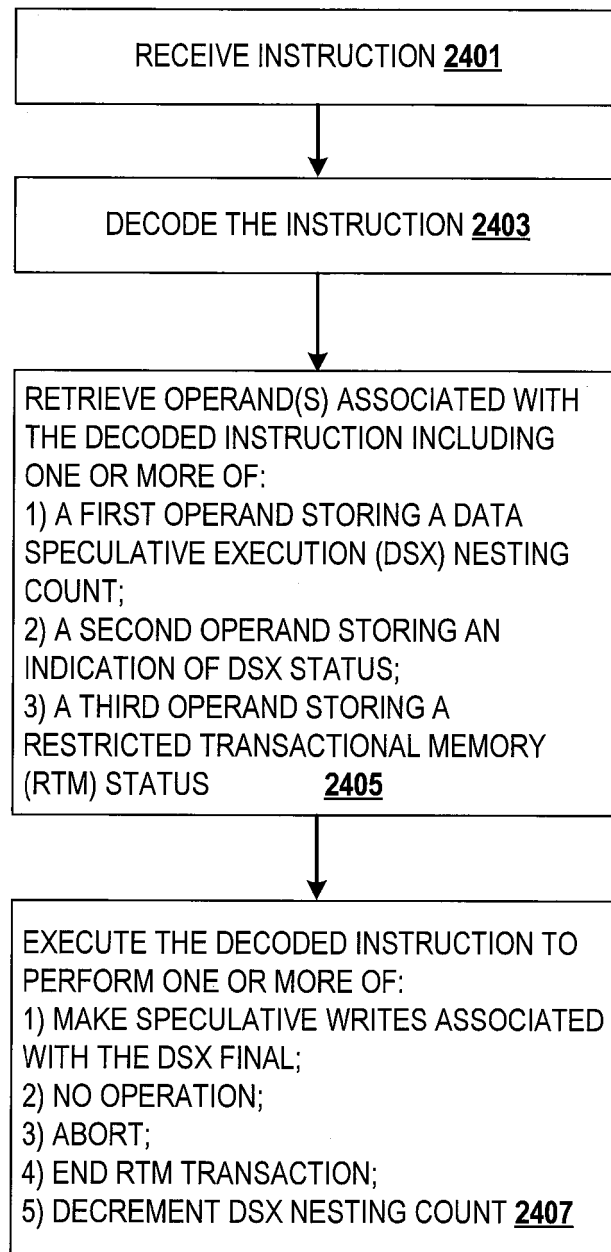


FIG. 24

26/41

<u>OPCODE</u>		<u>EXPLICIT OPERAND(S)</u>
2501	YEND	
2503	YEND	DSX STATUS REGISTER
2505	YEND	DSX NEST COUNT REGISTER
2507	YEND	DSX STATUS REGISTER, DSX NEXT COUNT REGISTER
2509	YEND	DSX STATUS REGISTER, DSX NEST COUNT REGISTER, RTM STATUS REGISTER

FIG. 25

27/41

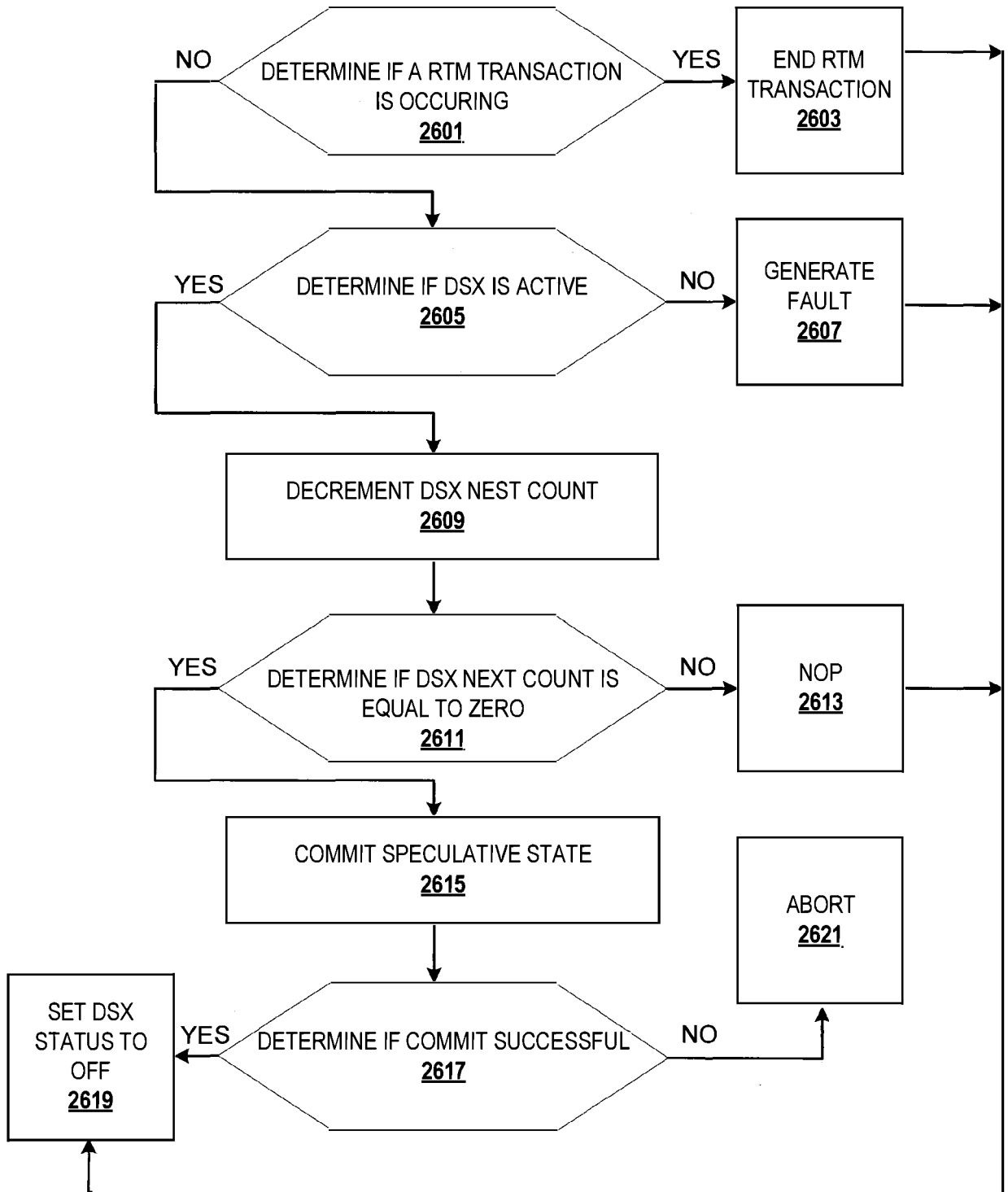


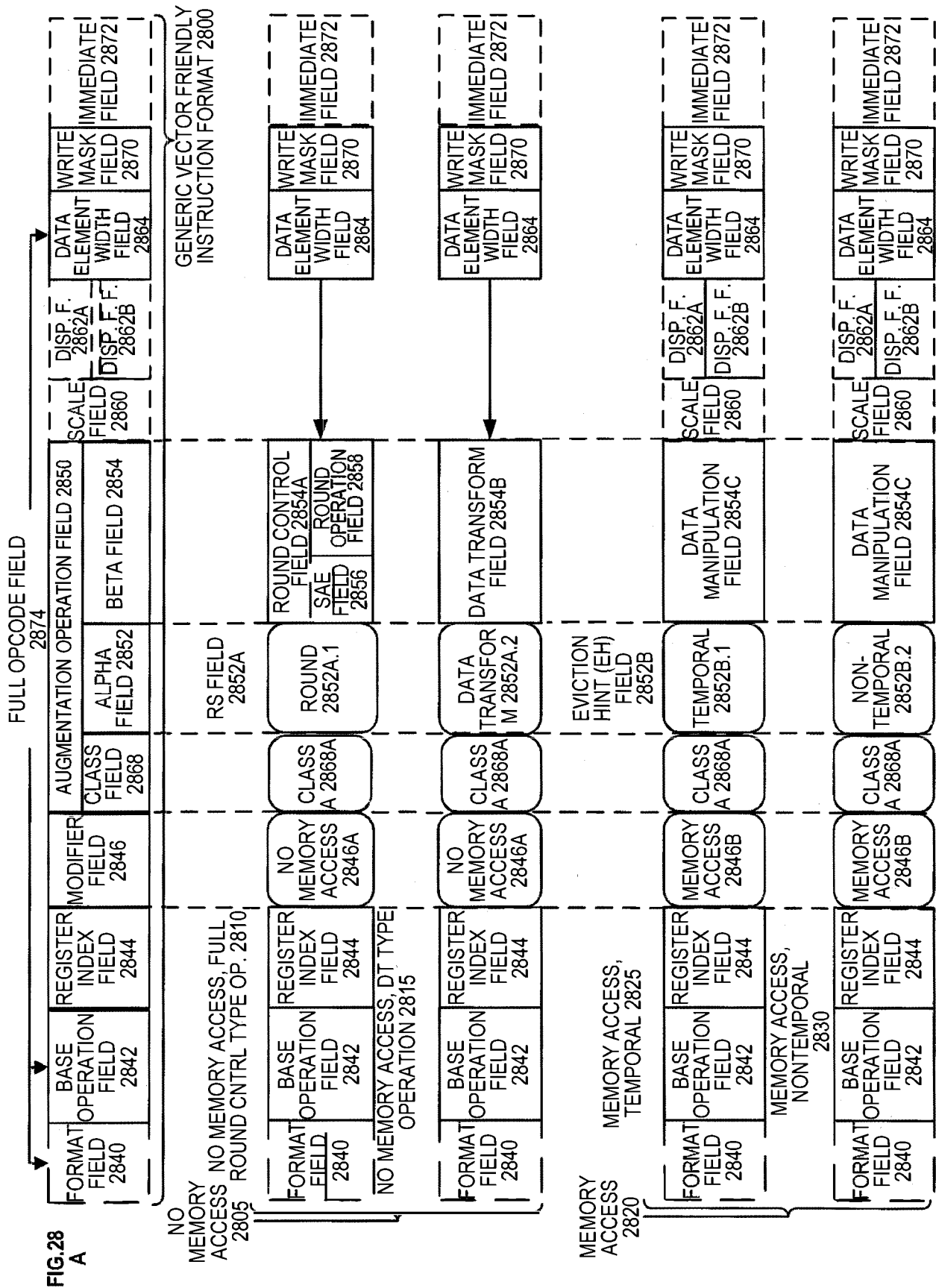
FIG. 26

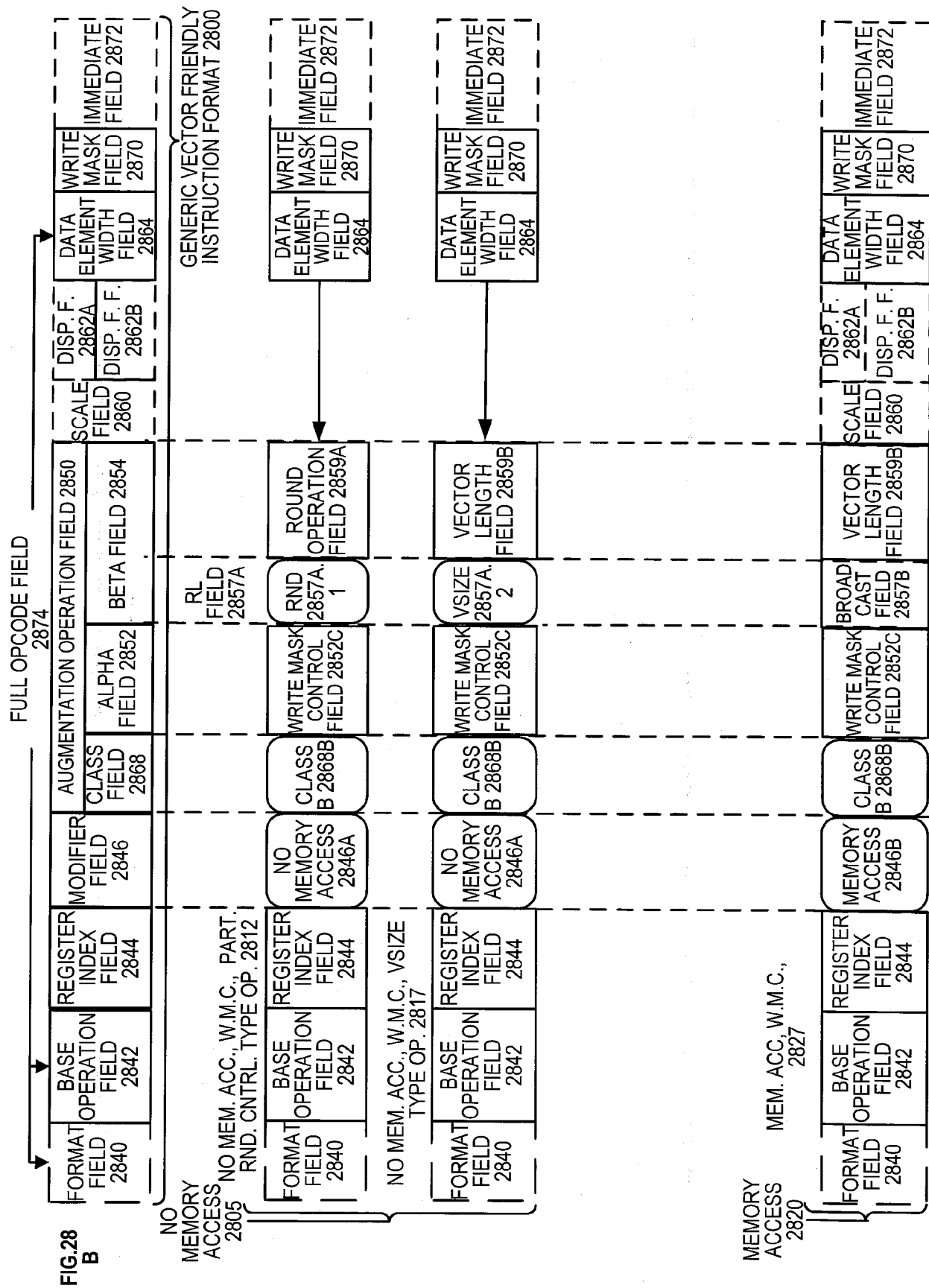
28/41

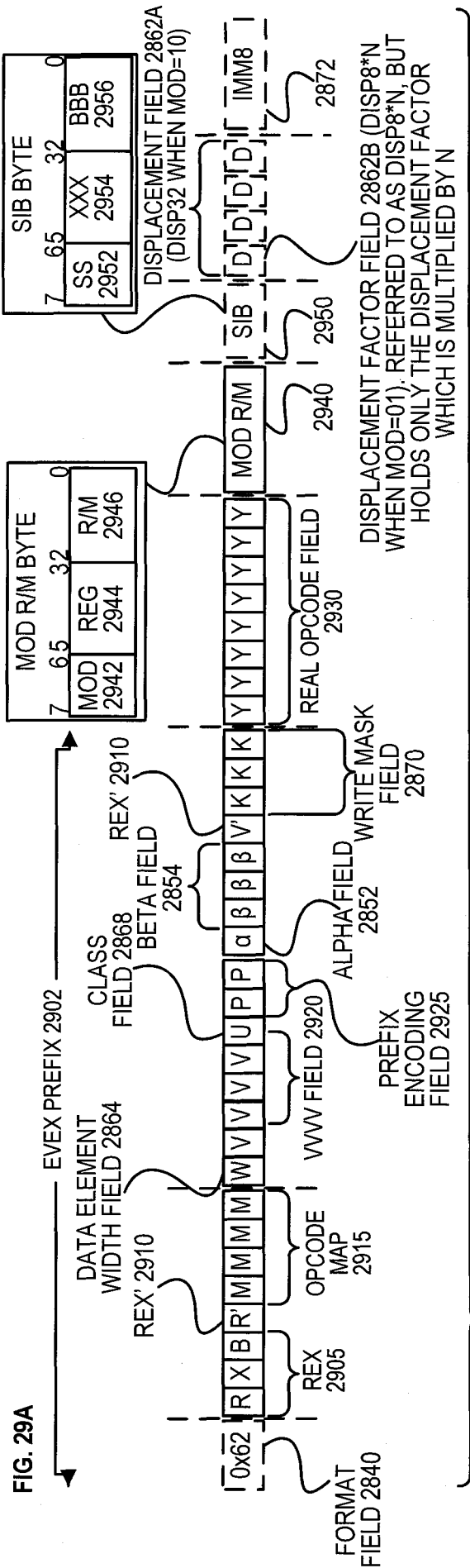
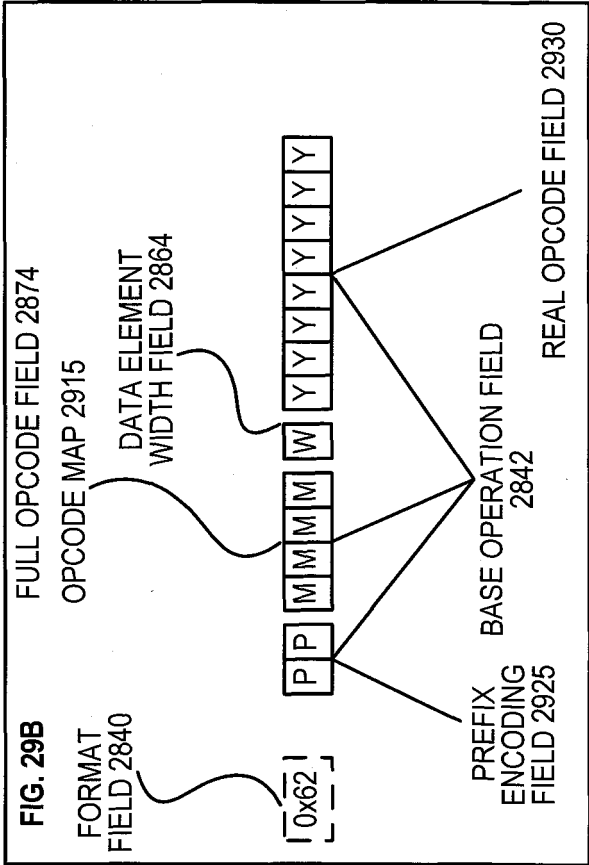
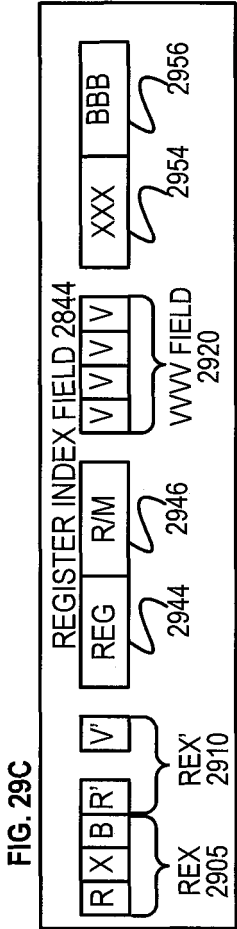
```
YEND
IF (RTM_ACTIVE)
GOTO XEND
IF (!DSX_ACTIVE)
#GP
ELSE
DSX_NEST_COUNT --
IF (DSX_NEST_COUNT == 0)
TRY TO COMMIT TRANSACTION
IF (FAIL)
GOTO RTM_ABORT
ELSE
DSX_ACTIVE = 0
```

FIG. 27

29/41

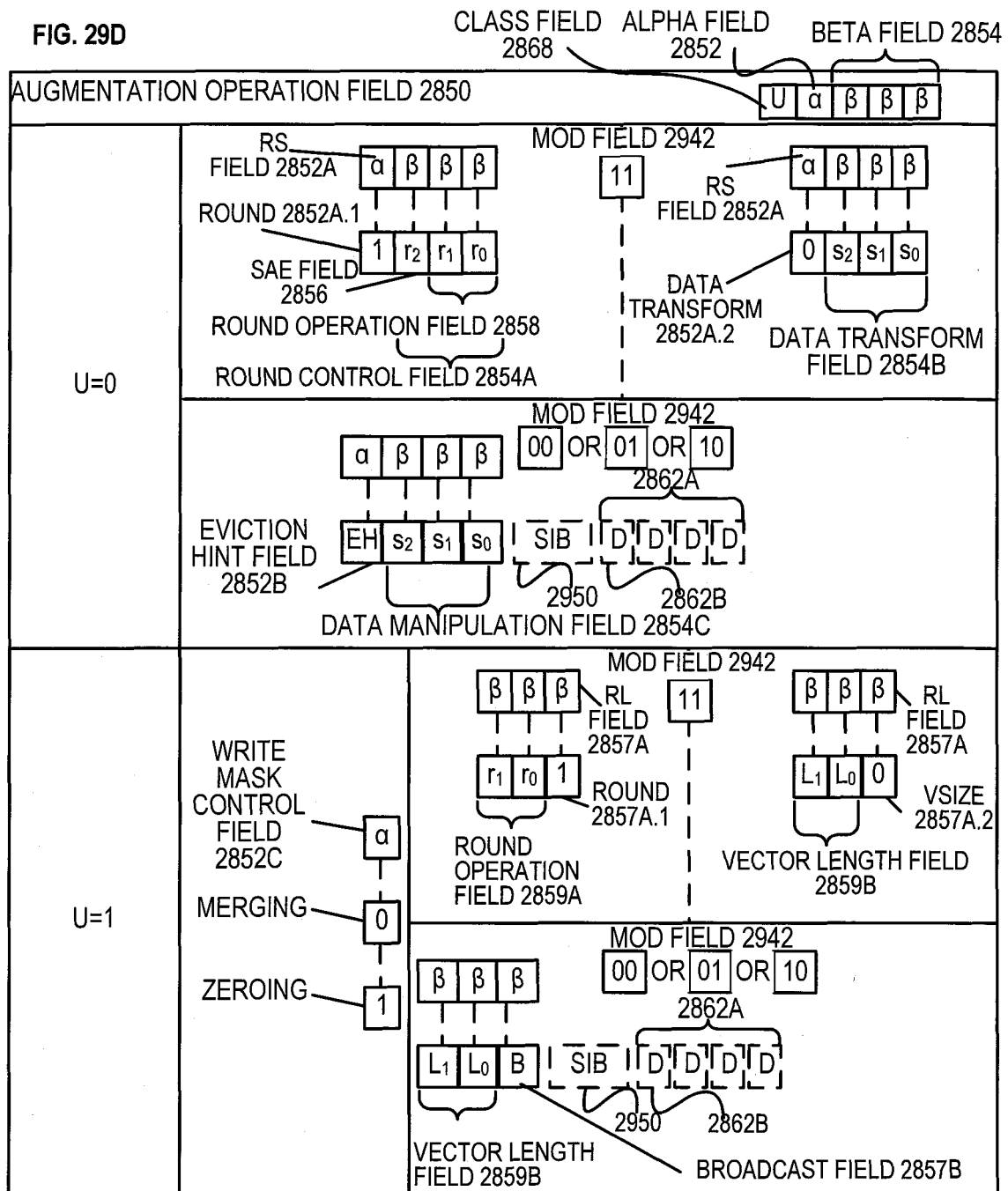


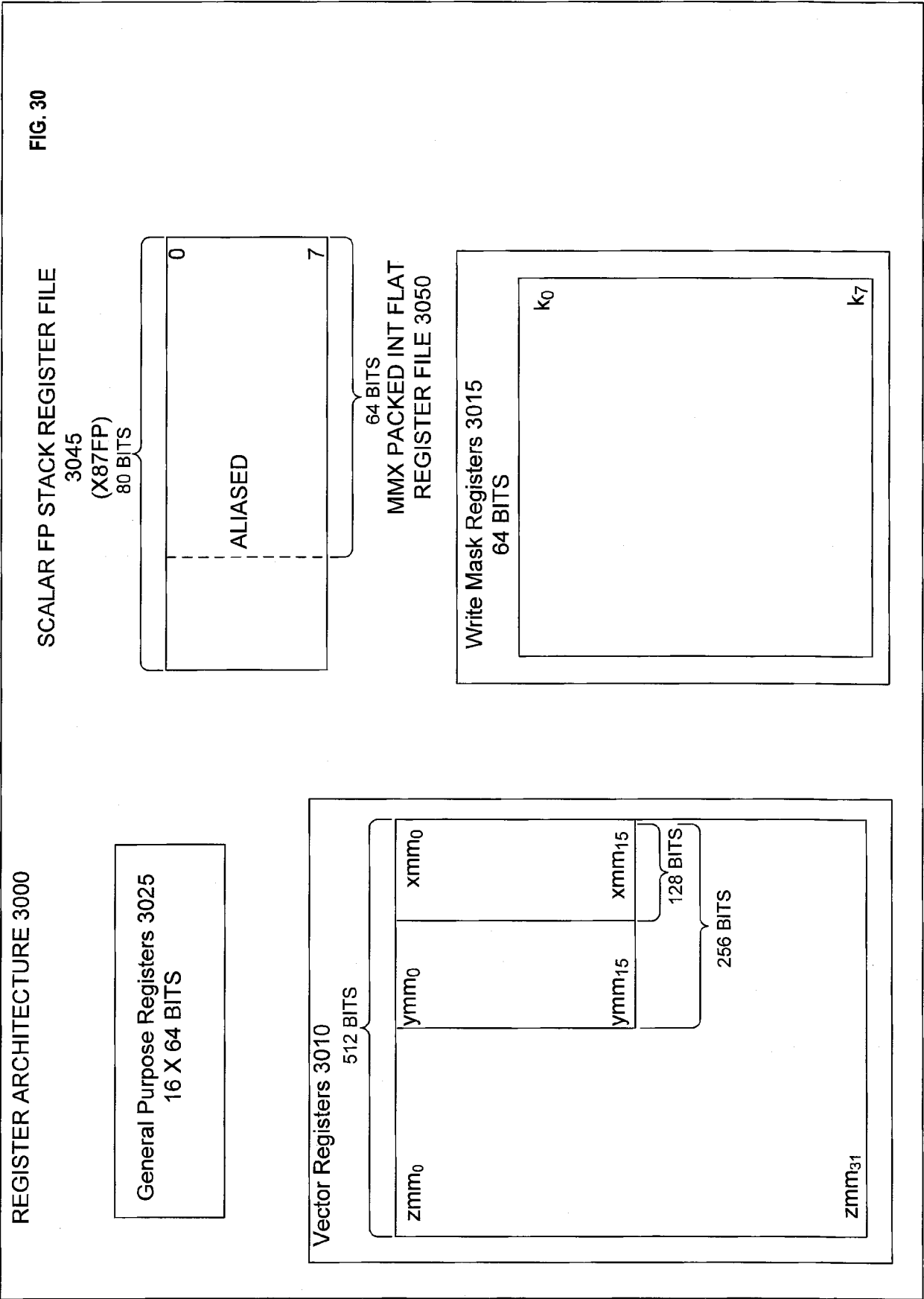


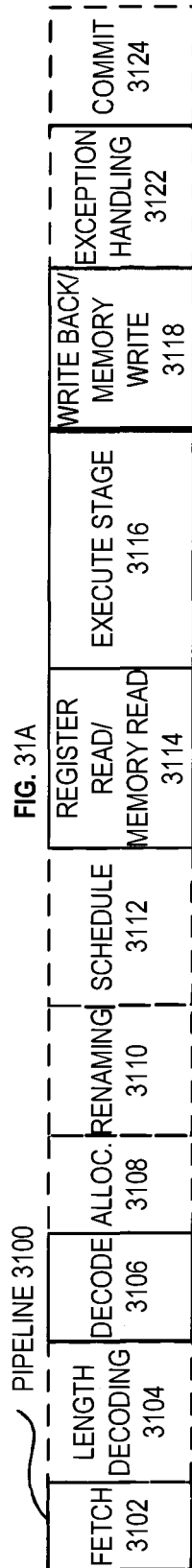
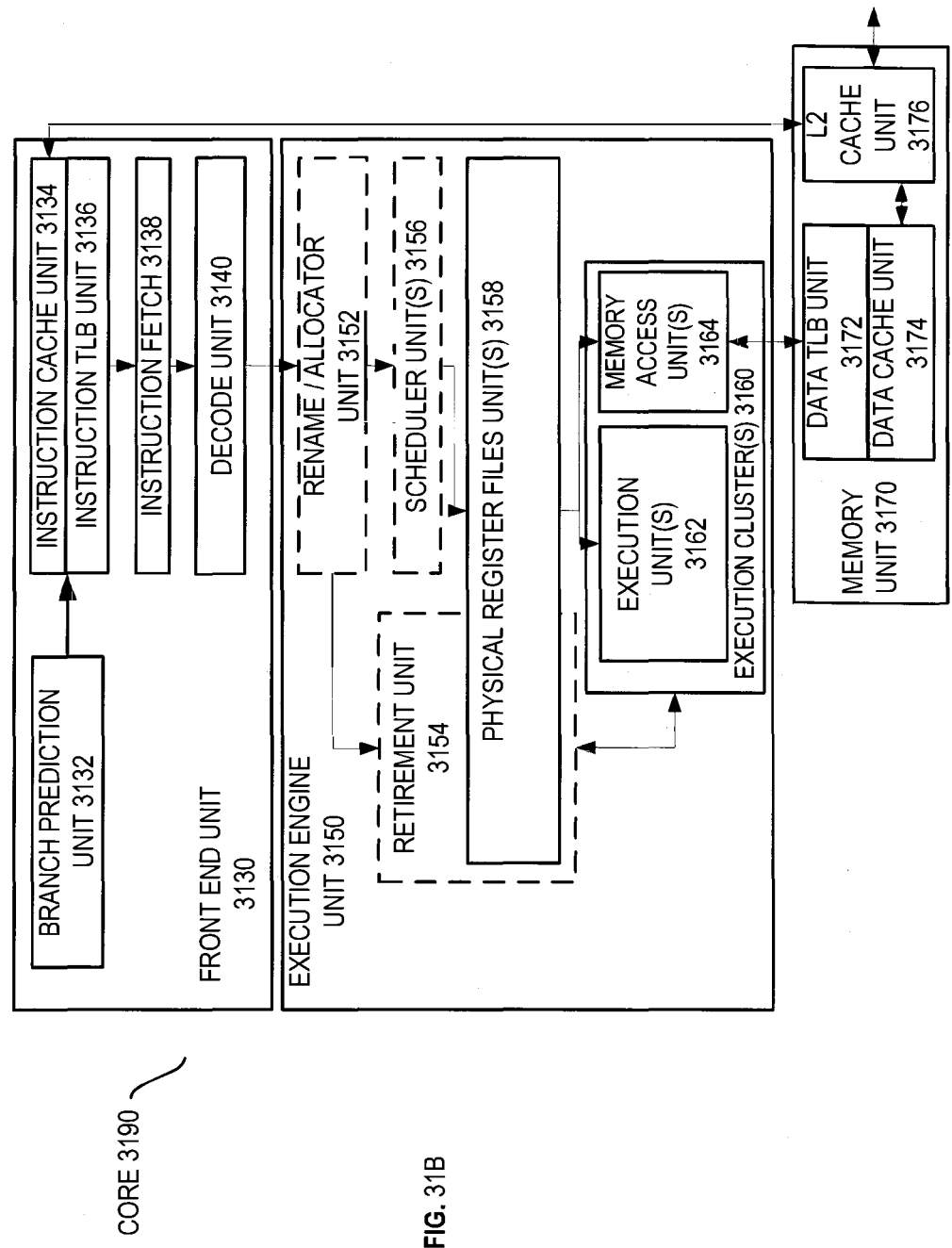


32/41

FIG. 29D







35/41

FIG. 32A

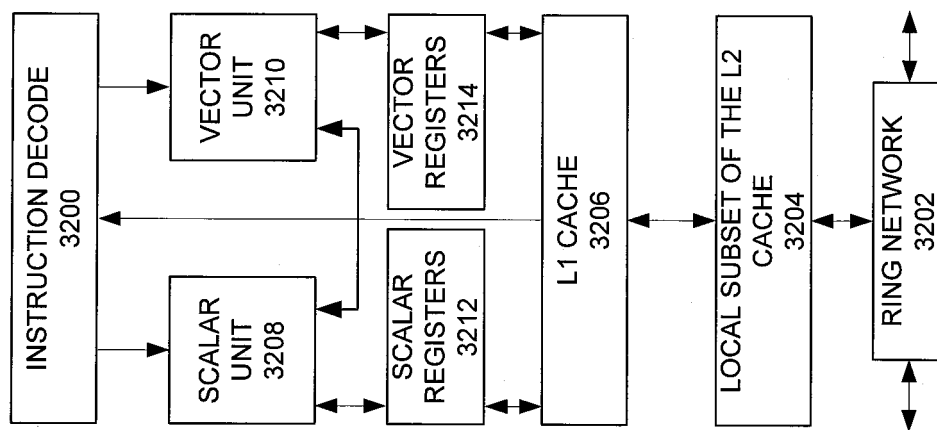
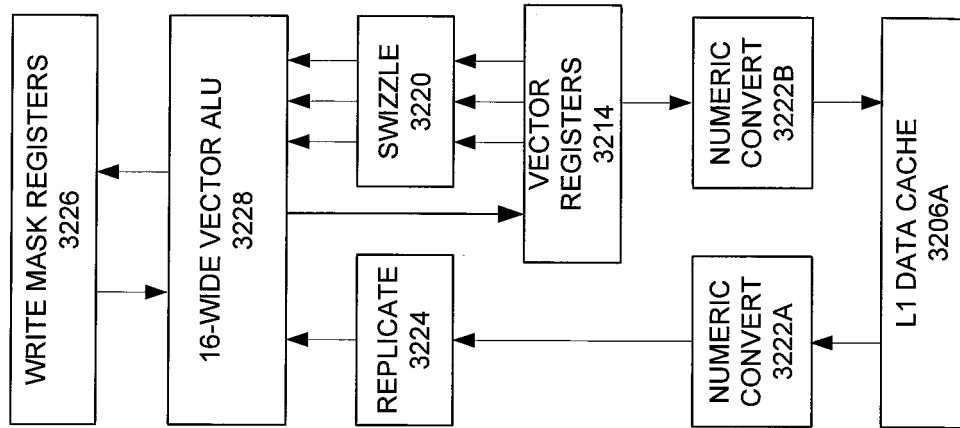
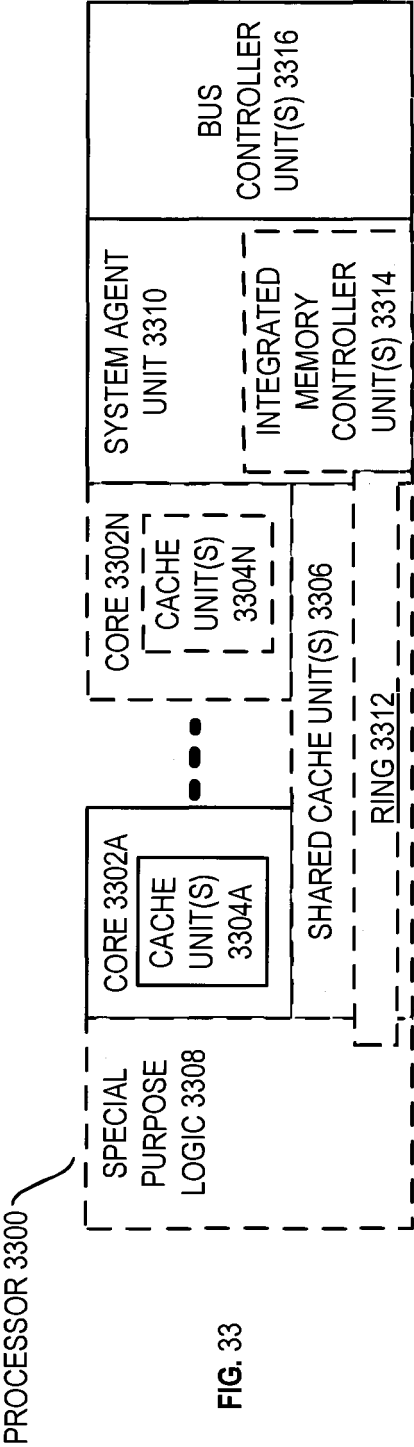


FIG. 32B





37/41

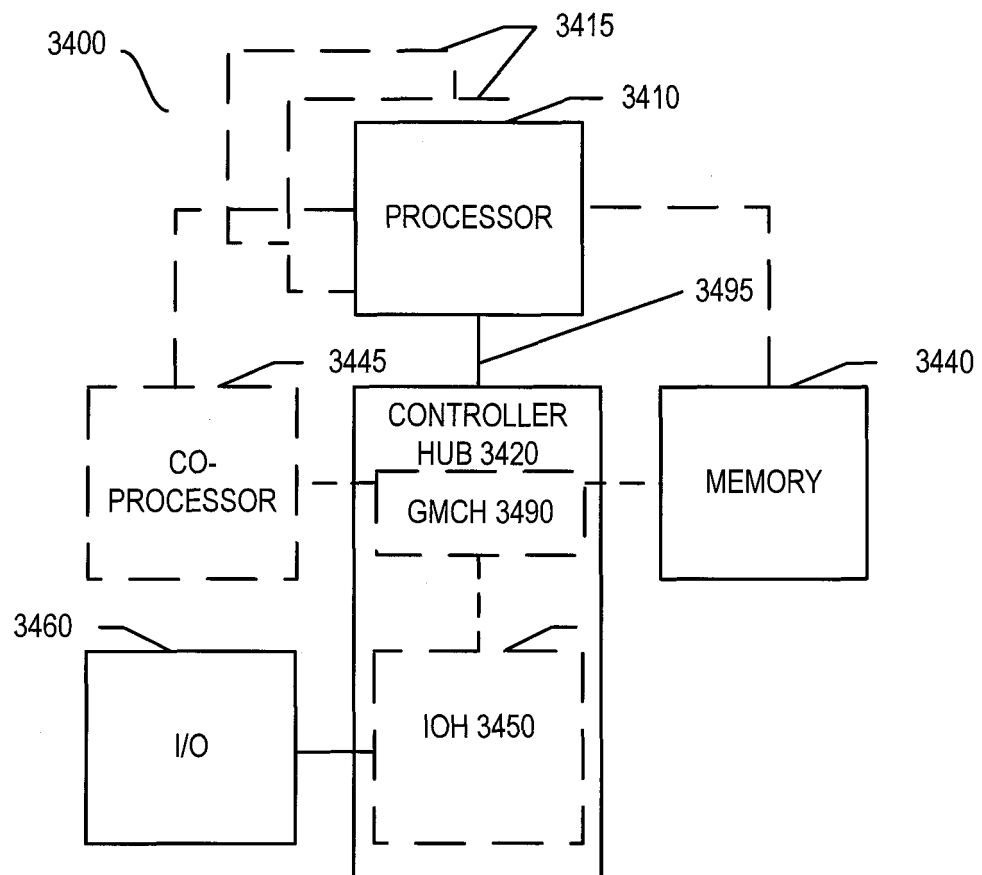


FIG. 34

38/41

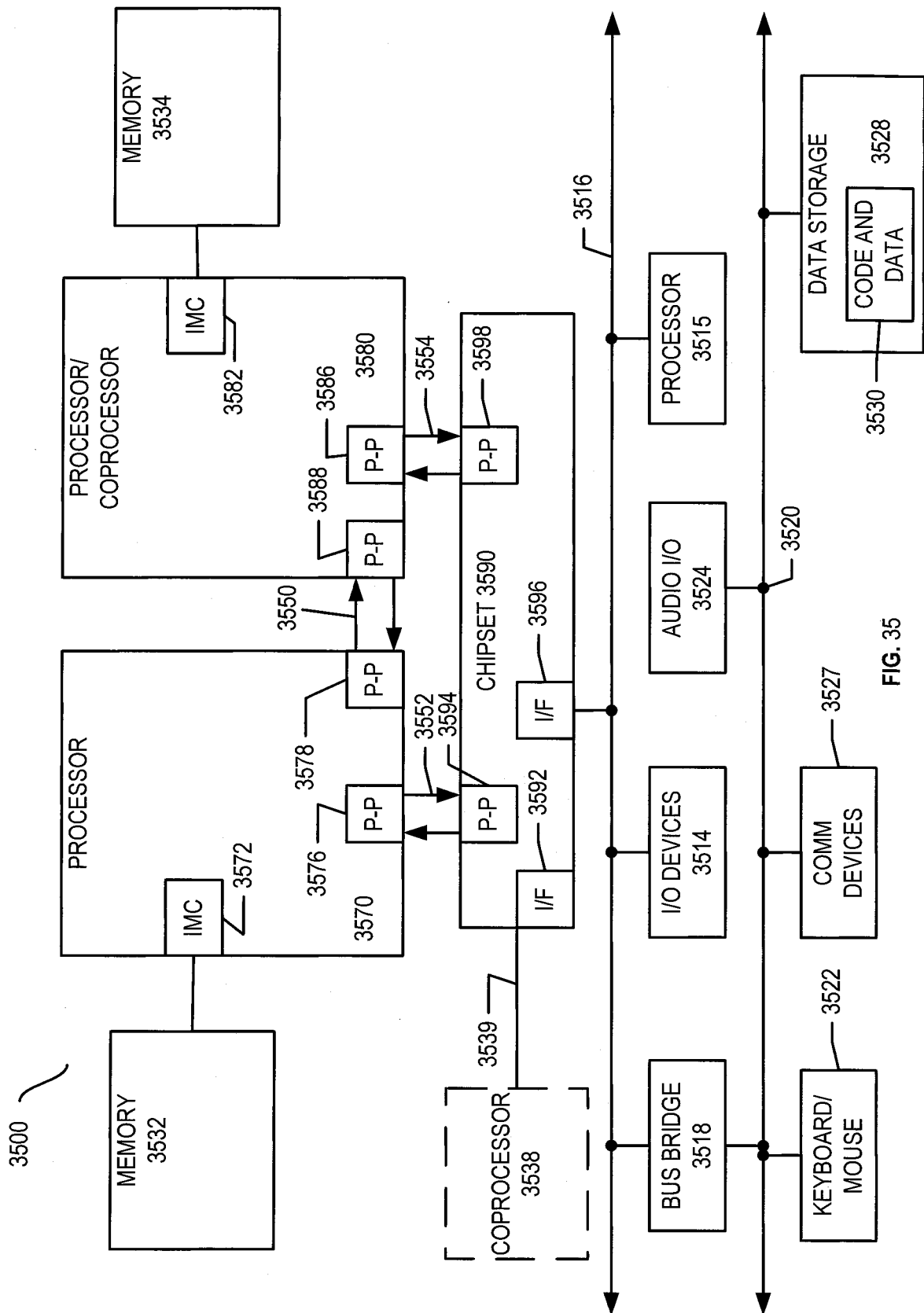


FIG. 35

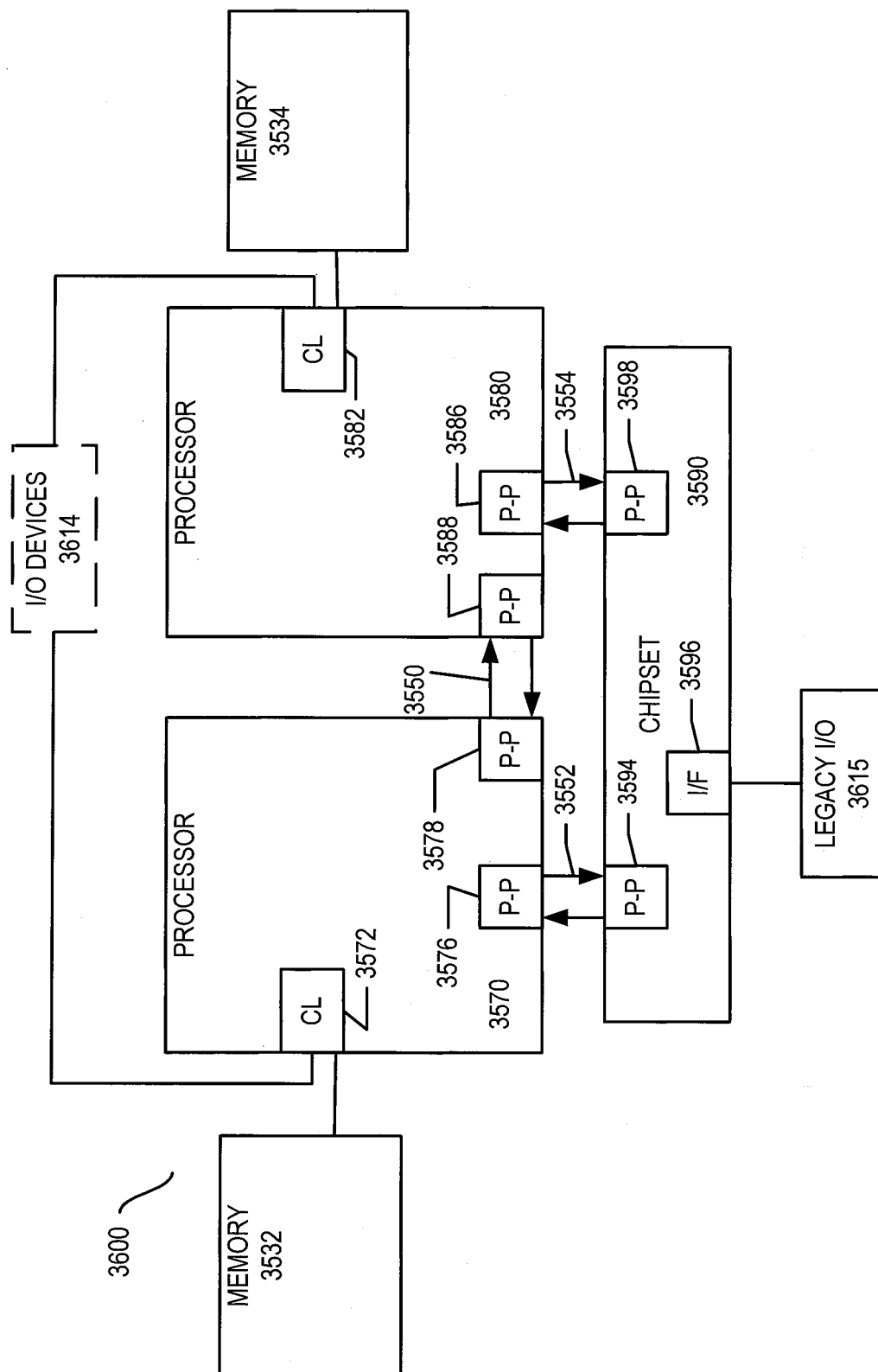


FIG. 36

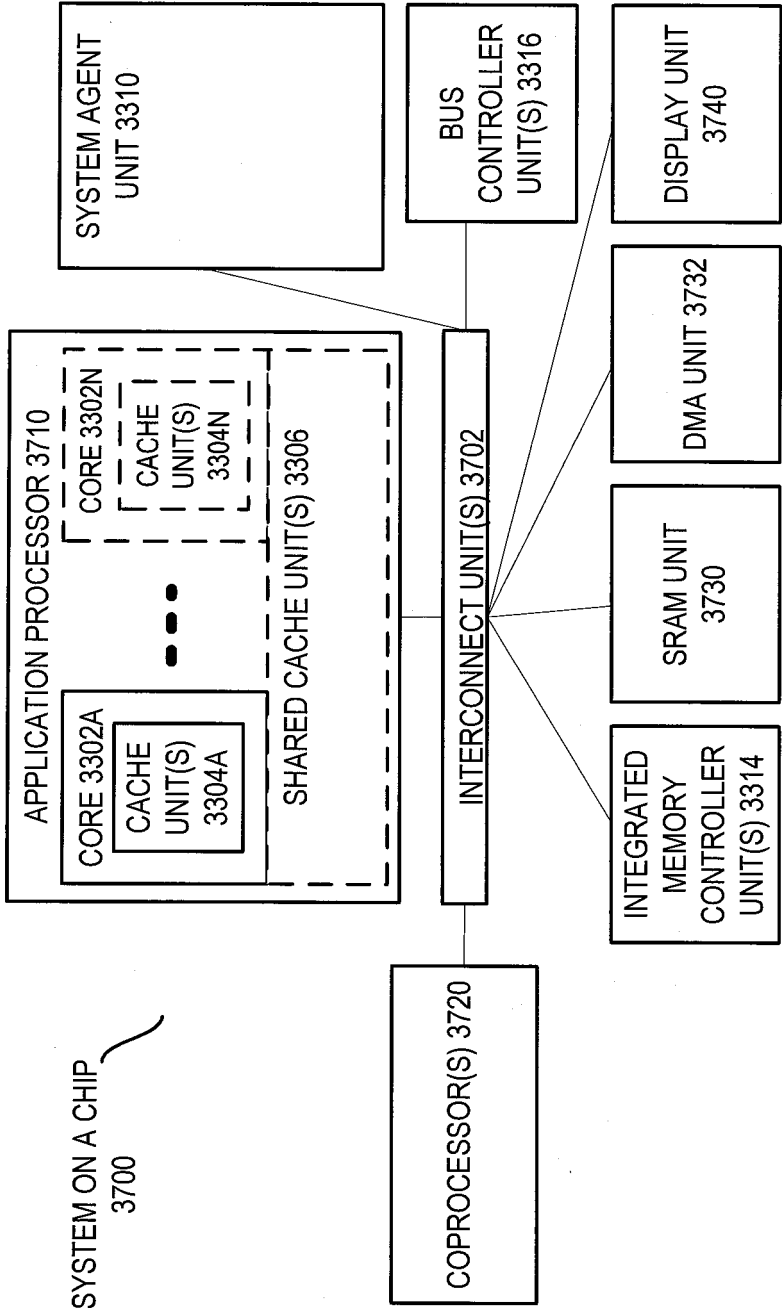


FIG. 37

