

FIG. 1

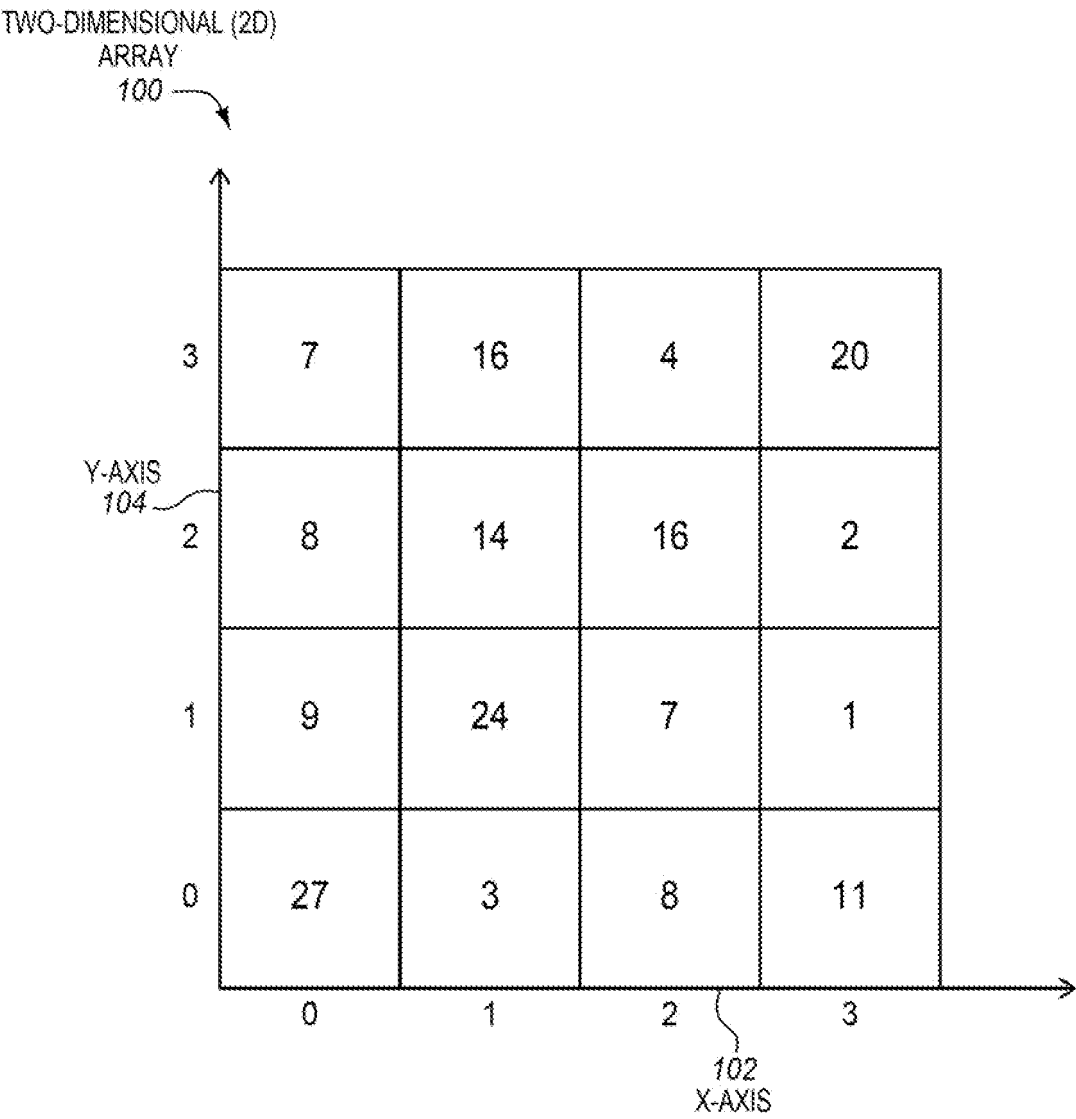


FIG. 2A

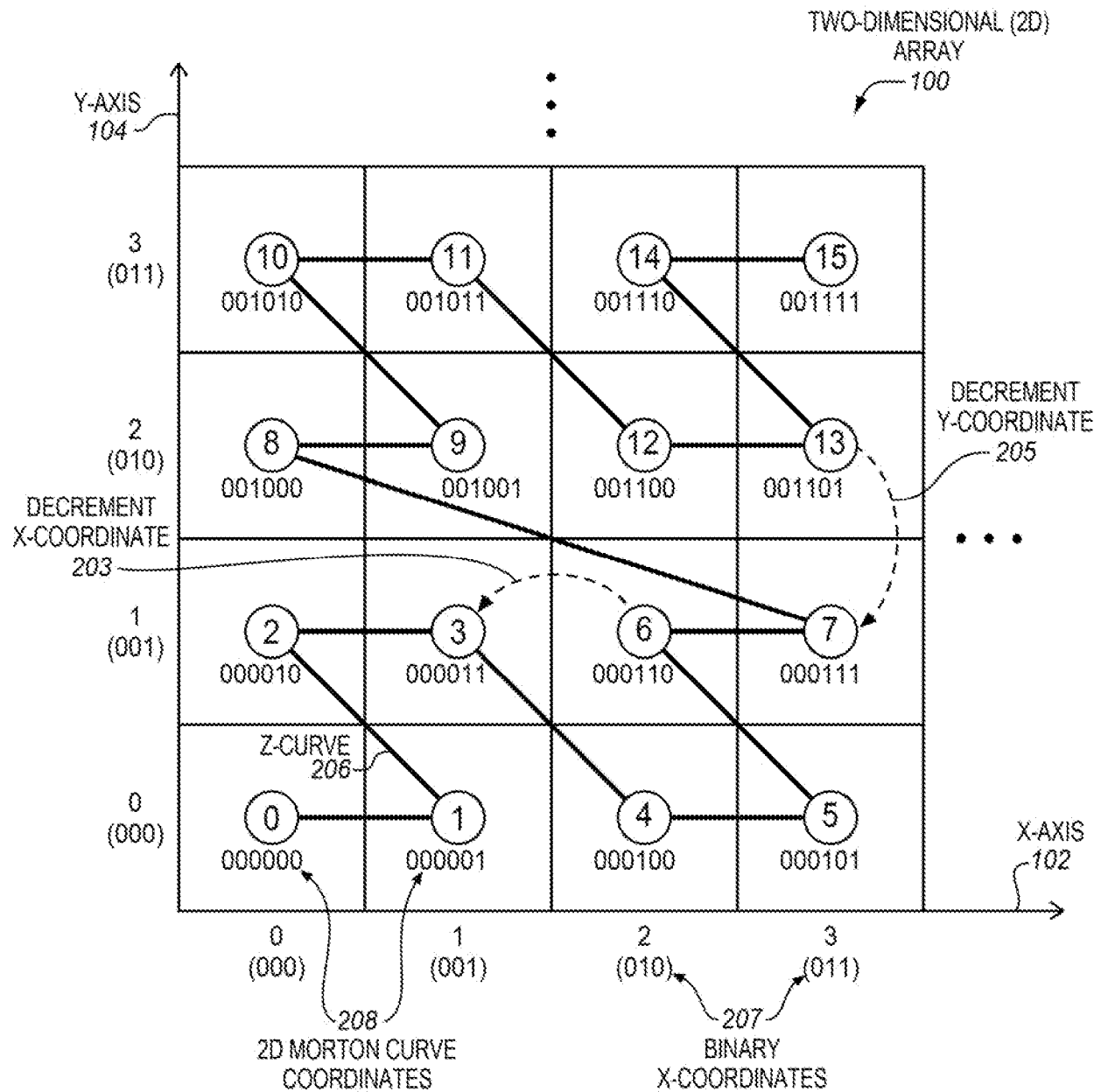
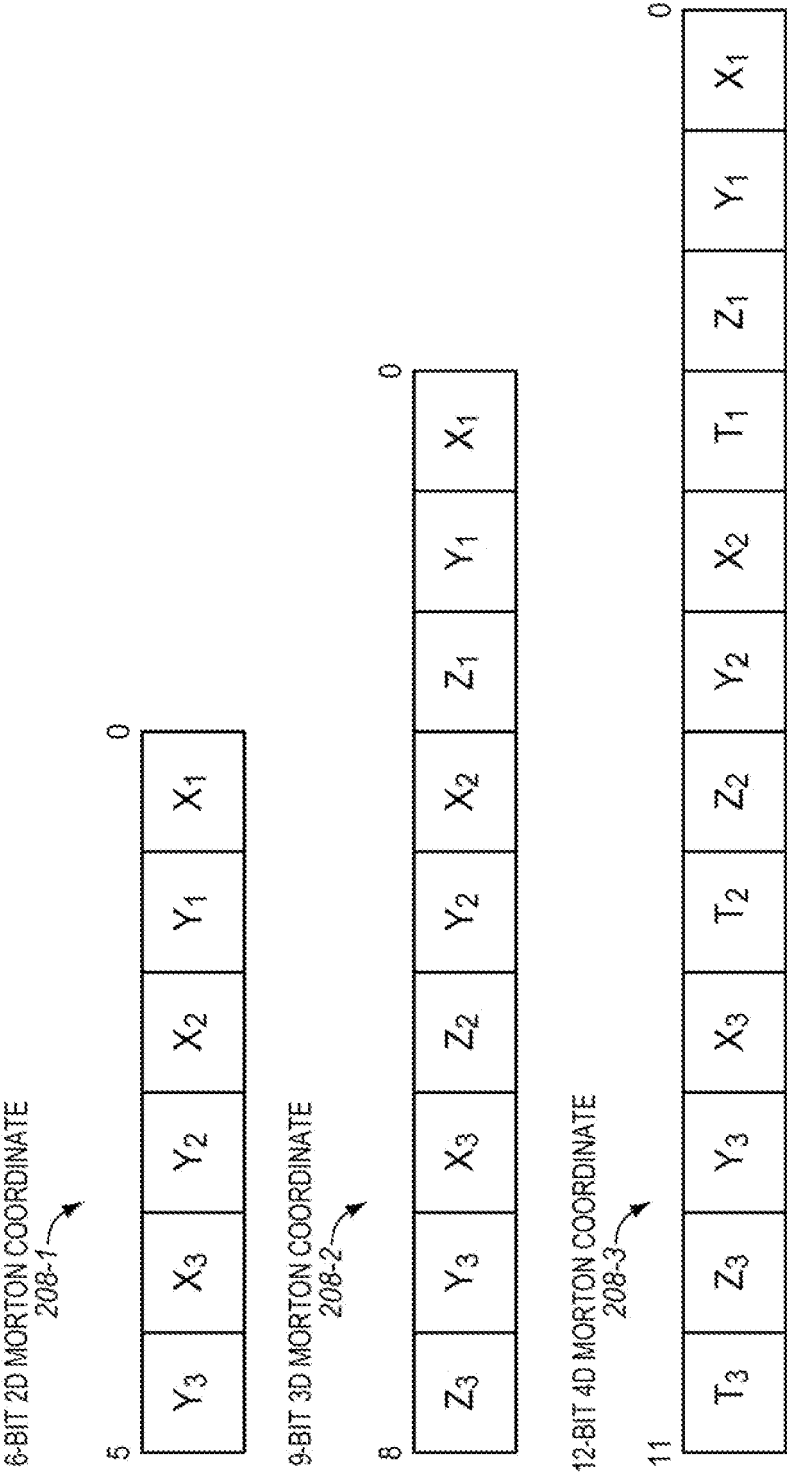


FIG. 2B



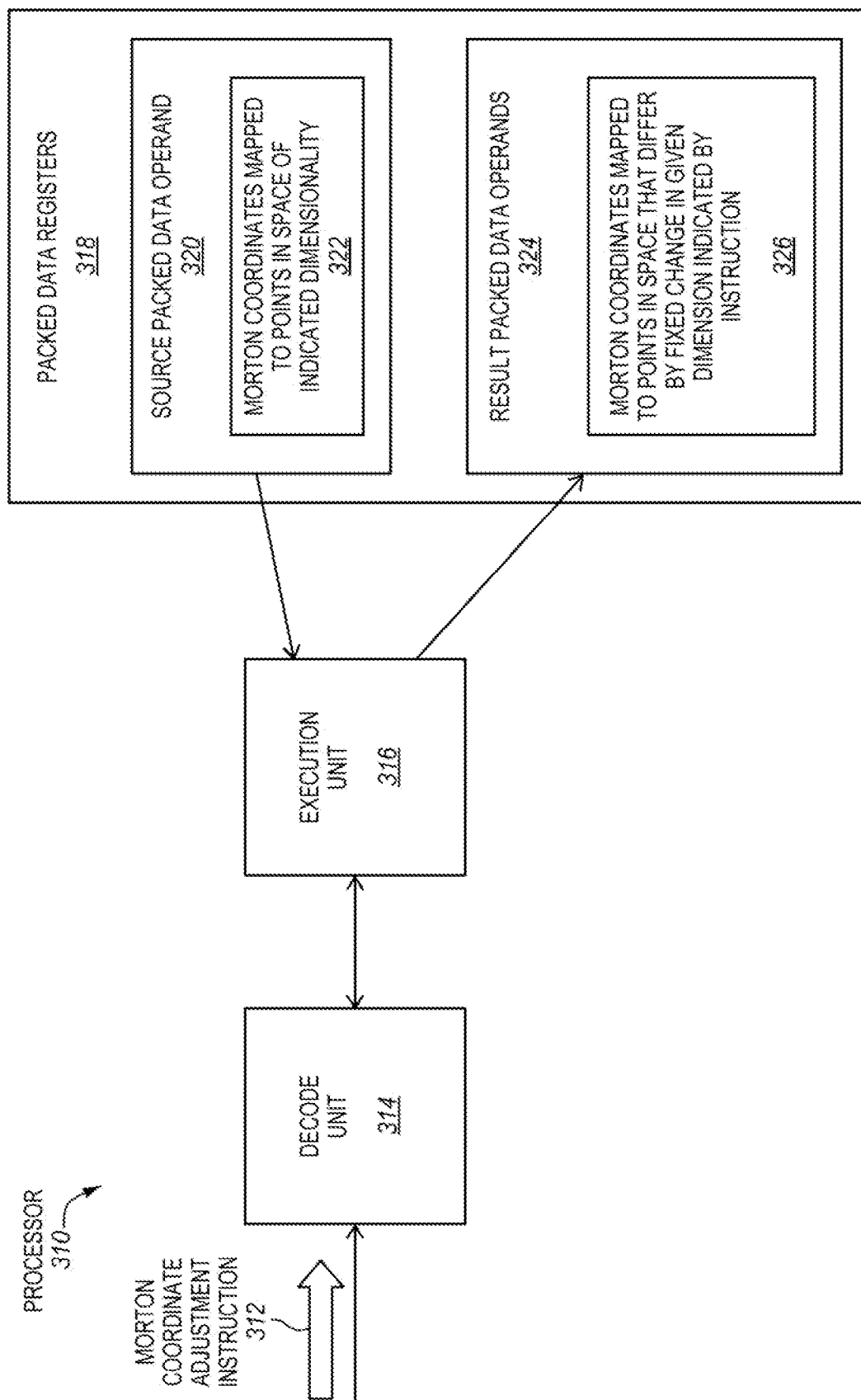


FIG. 3

FIG. 4

METHOD IN
PROCESSOR

430

RECEIVE INSTRUCTION INDICATING SOURCE PACKED DATA OPERAND
THAT INCLUDES MULTIPLE MORTON COORDINATES, DIMENSIONALITY OF
MULTI-DIMENSIONAL SPACE HAVING POINTS THAT MORTON COORDINATES
ARE MAPPED TO, GIVEN DIMENSION OF MULTI-DIMENSIONAL SPACE, AND
DESTINATION STORAGE LOCATION

~ 432

STORE RESULT PACKED DATA OPERAND IN DESTINATION STORAGE
LOCATION RESPONSIVE TO PERFORMING INSTRUCTION, RESULT
PACKED DATA OPERAND INCLUDING MULTIPLE MORTON COORDINATES
THAT EACH CORRESPOND TO DIFFERENT ONE OF MORTON COORDINATES
OF SOURCE PACKED DATA OPERAND, IN WHICH MORTON COORDINATES
OF RESULT PACKED DATA OPERAND ARE MAPPED TO POINTS IN
MULTI-DIMENSIONAL SPACE THAT DIFFER FROM POINTS THAT
CORRESPONDING MORTON COORDINATES OF SOURCE PACKED DATA
OPERAND ARE MAPPED TO BY FIXED CHANGE IN GIVEN DIMENSION
INDICATED BY INSTRUCTION

~ 434

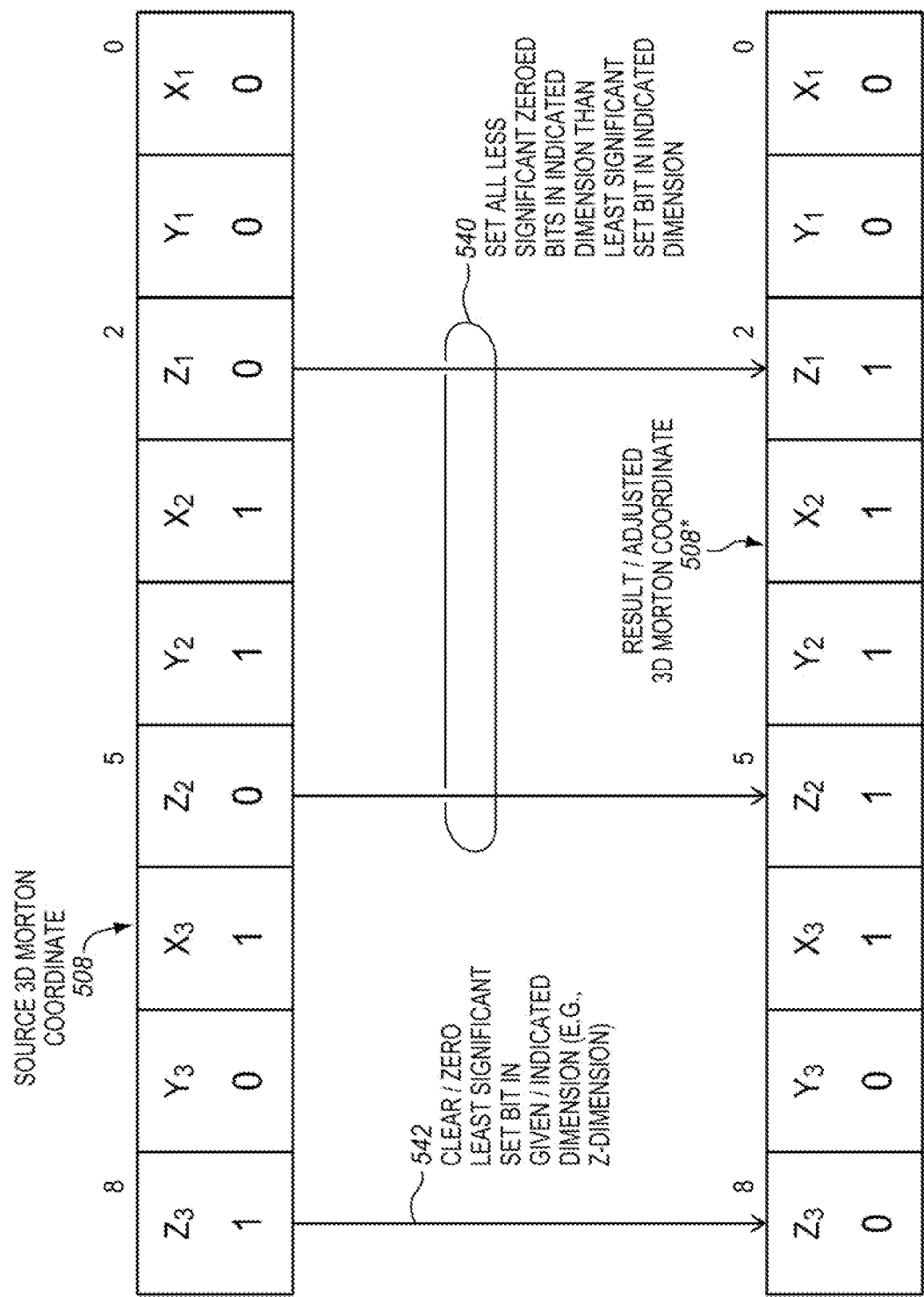


FIG. 5

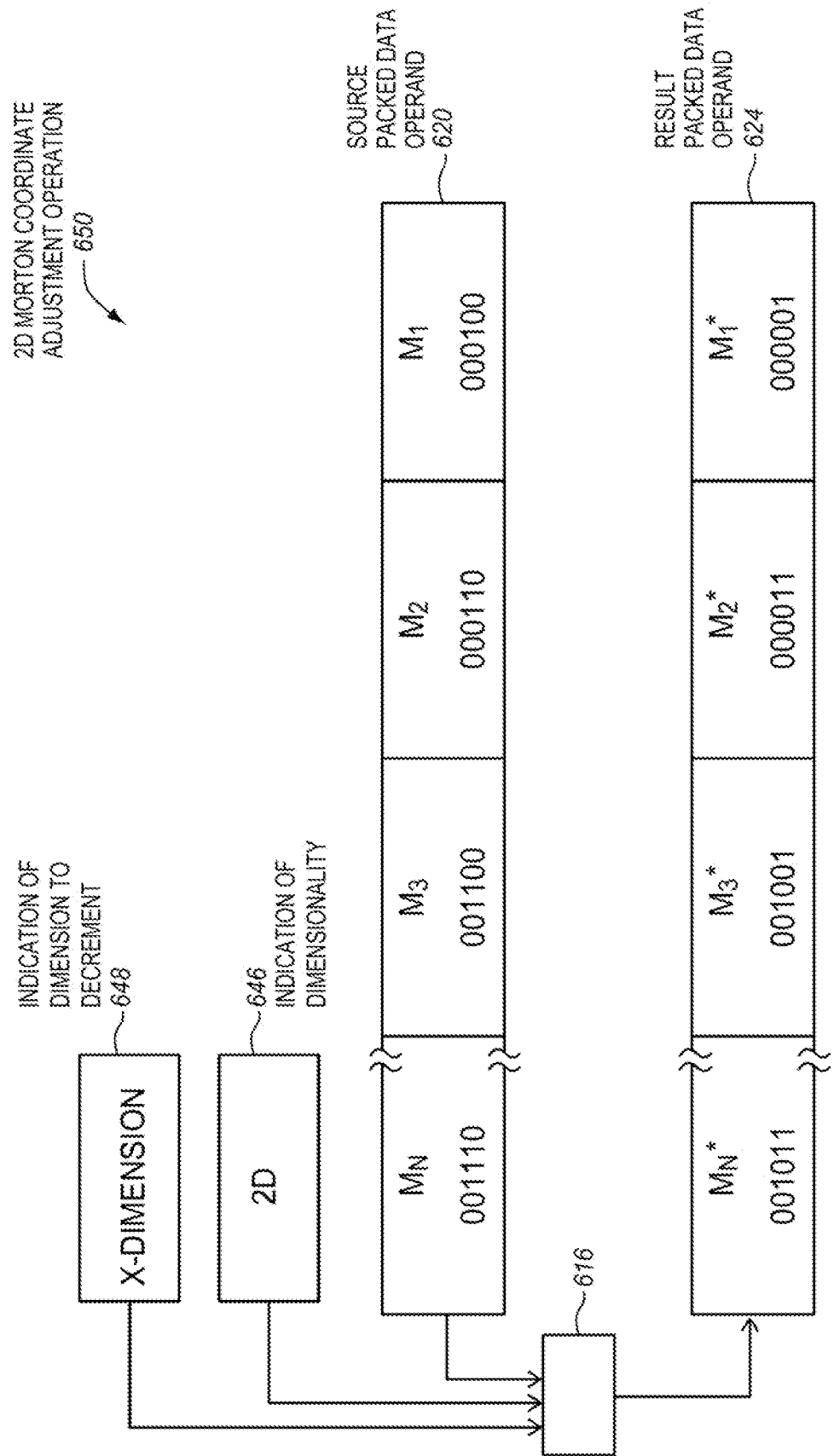


FIG. 6

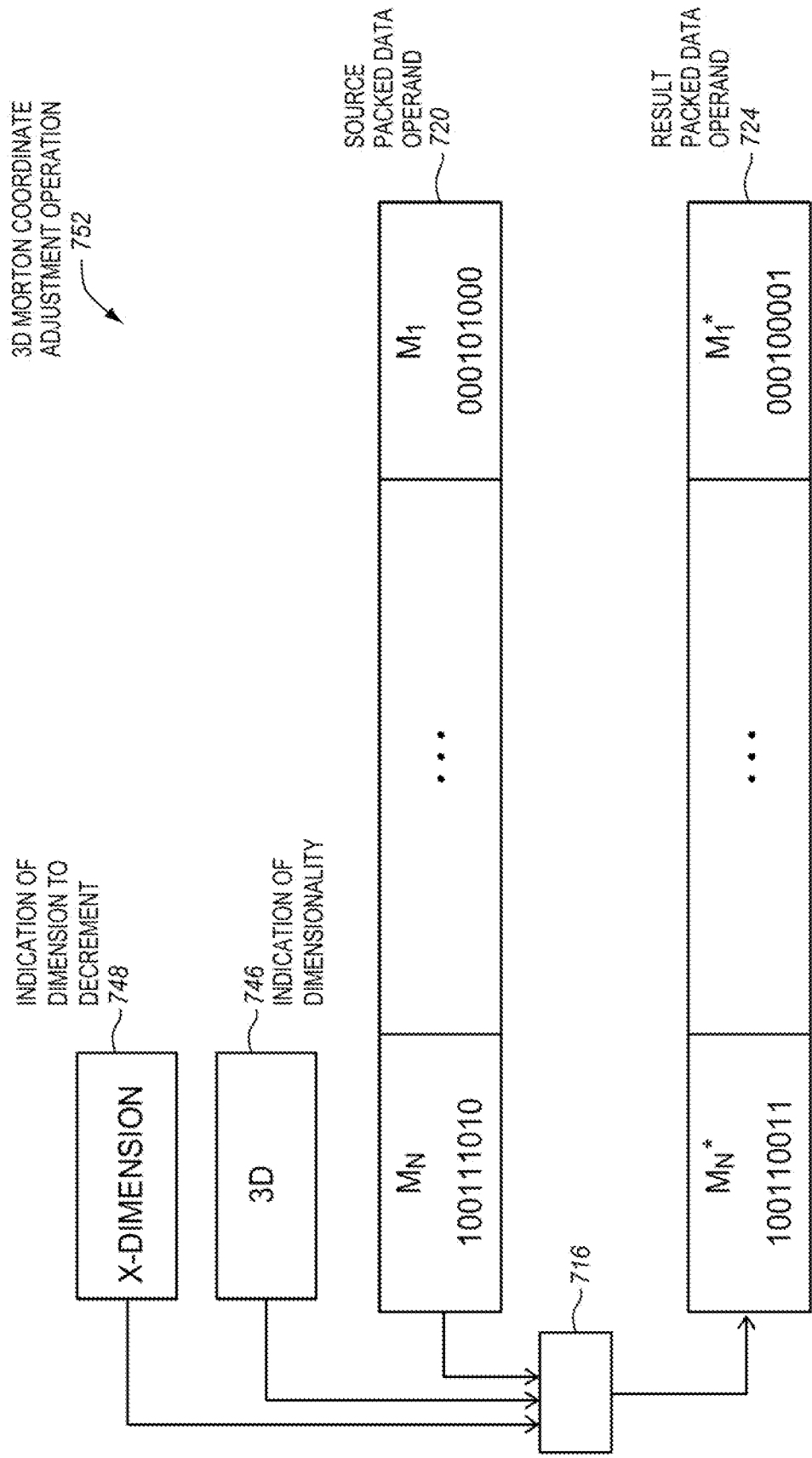


FIG. 7

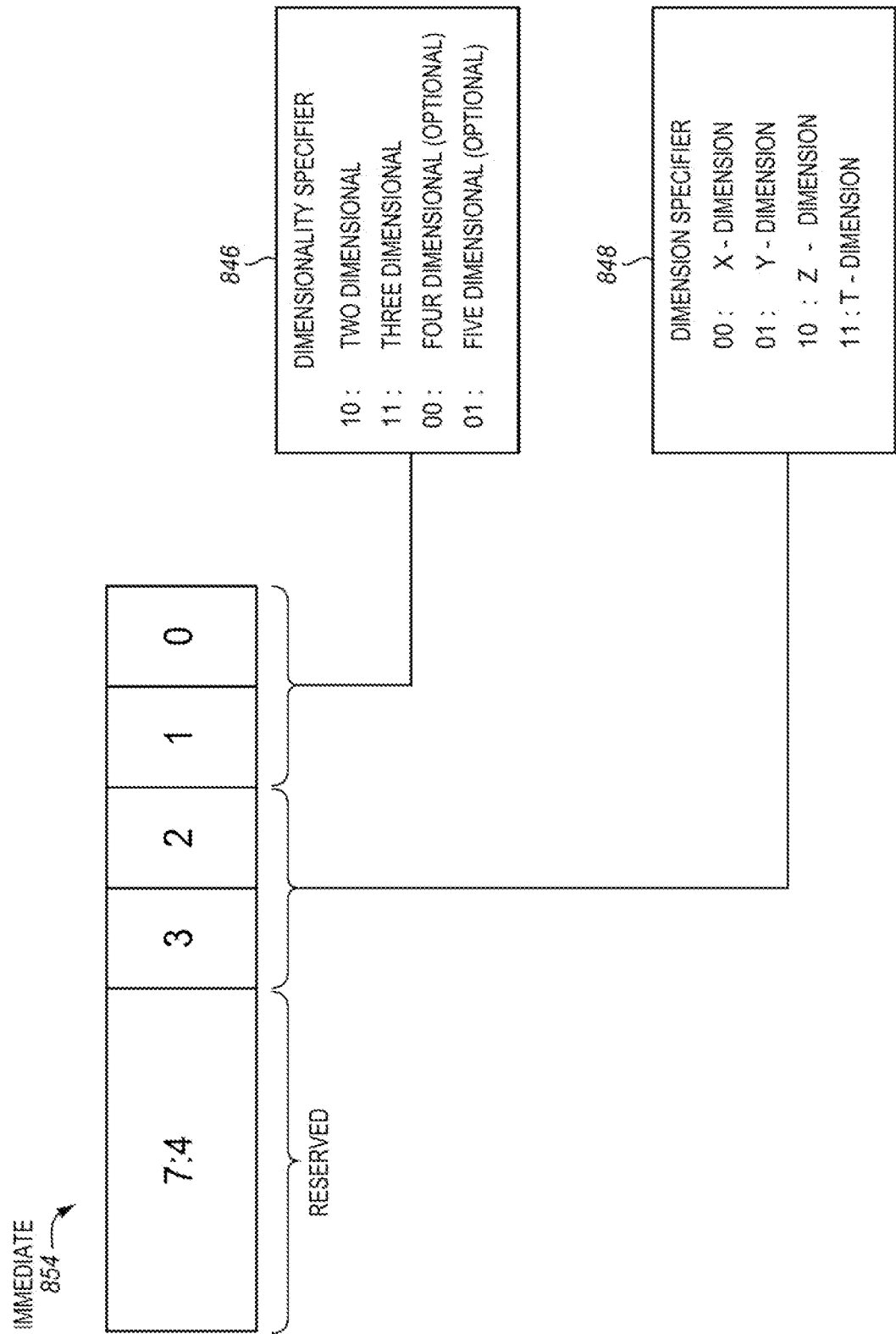


FIG. 8

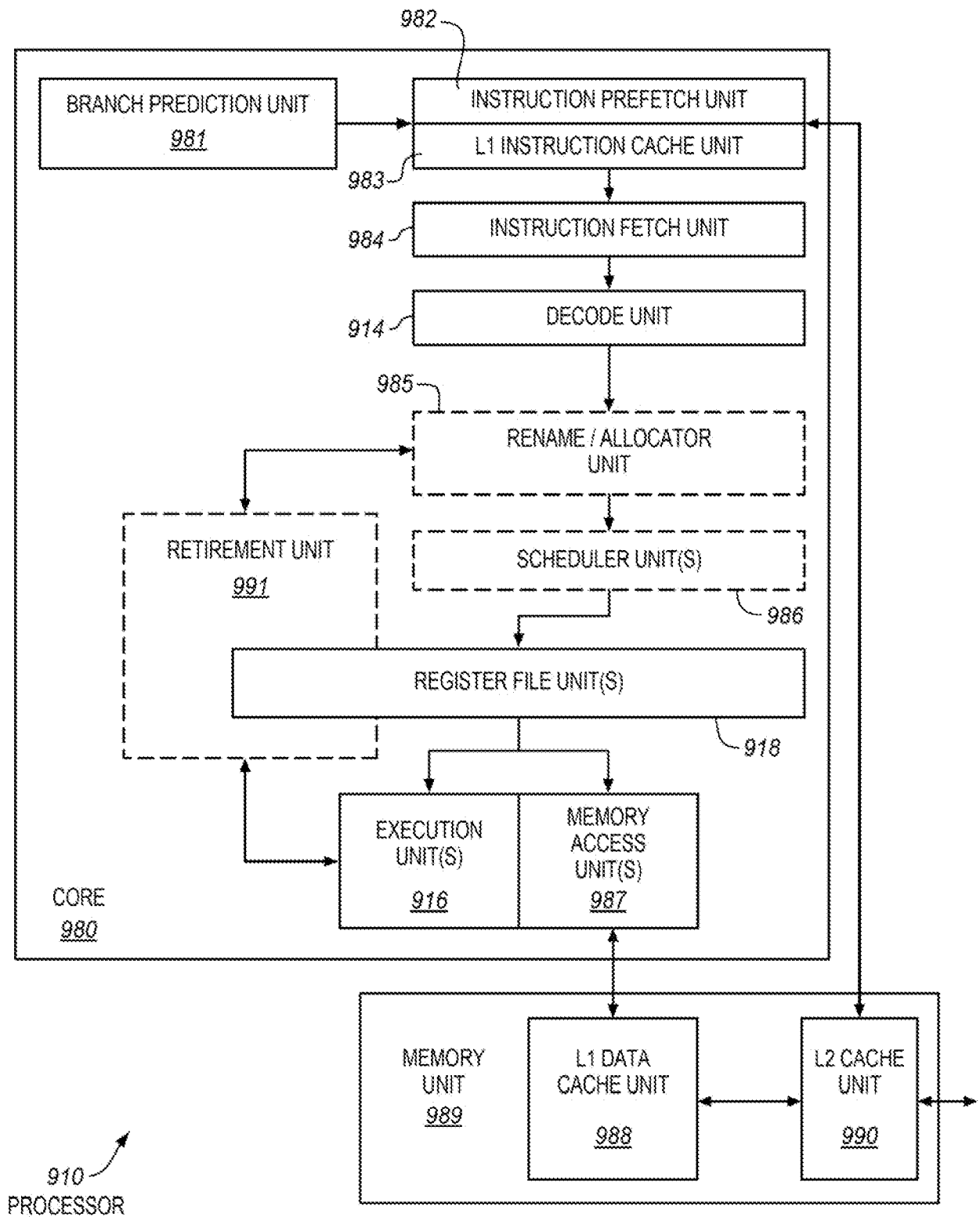
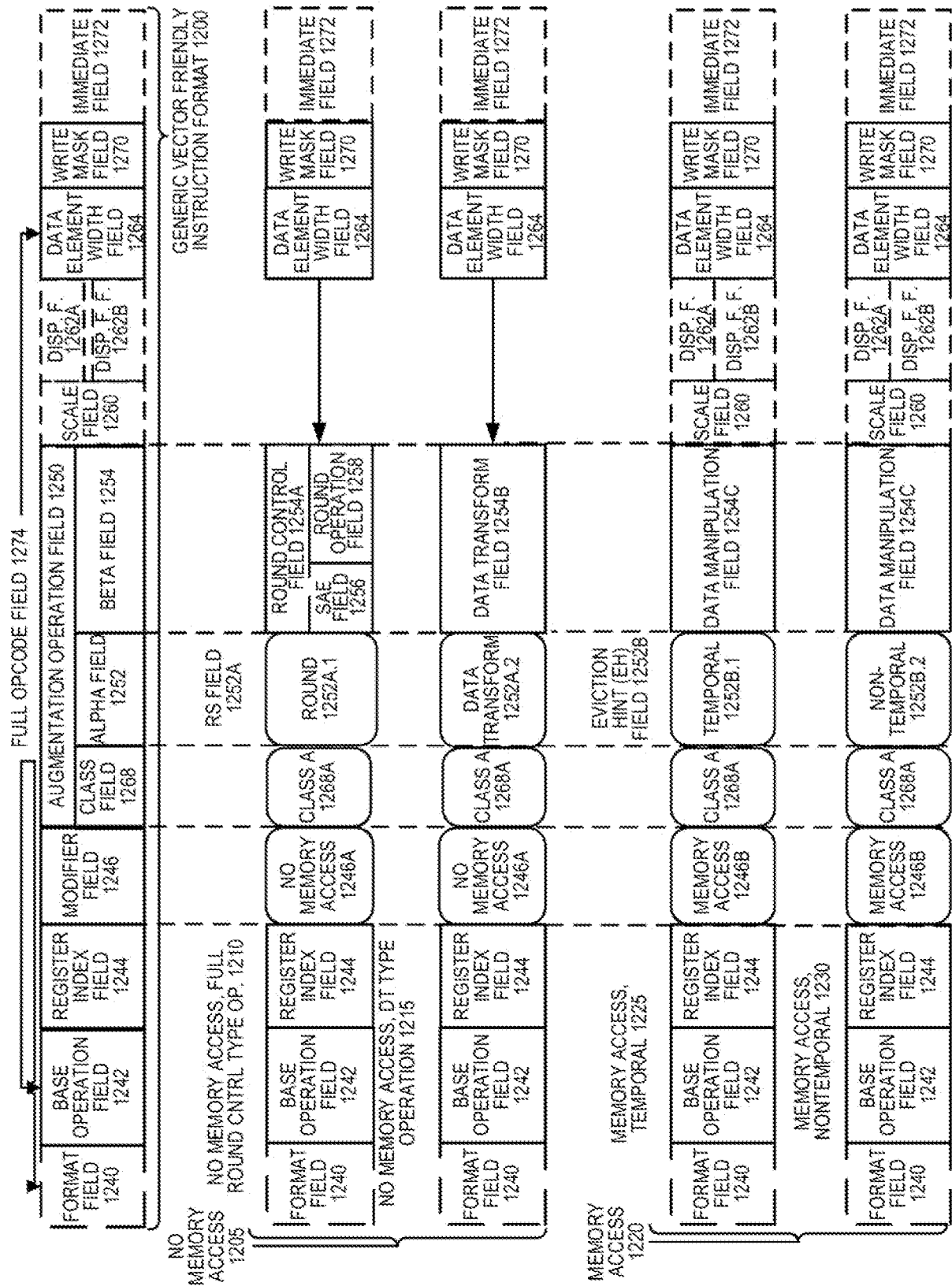
FIG. 9

FIG. 10

MORTON COORDINATE
ADJUSTMENT INSTRUCTION
1012

OPCODE	<u>1080</u>	SOURCE OPERAND SPECIFIER	DESTINATION SPECIFIER (OPTIONAL)	COORDINATE SPECIFIER (OPTIONAL)	DIMENSIONALITY SPECIFIER (OPTIONAL)
		<u>1082</u>	<u>1084</u>	<u>1086</u>	<u>1088</u>



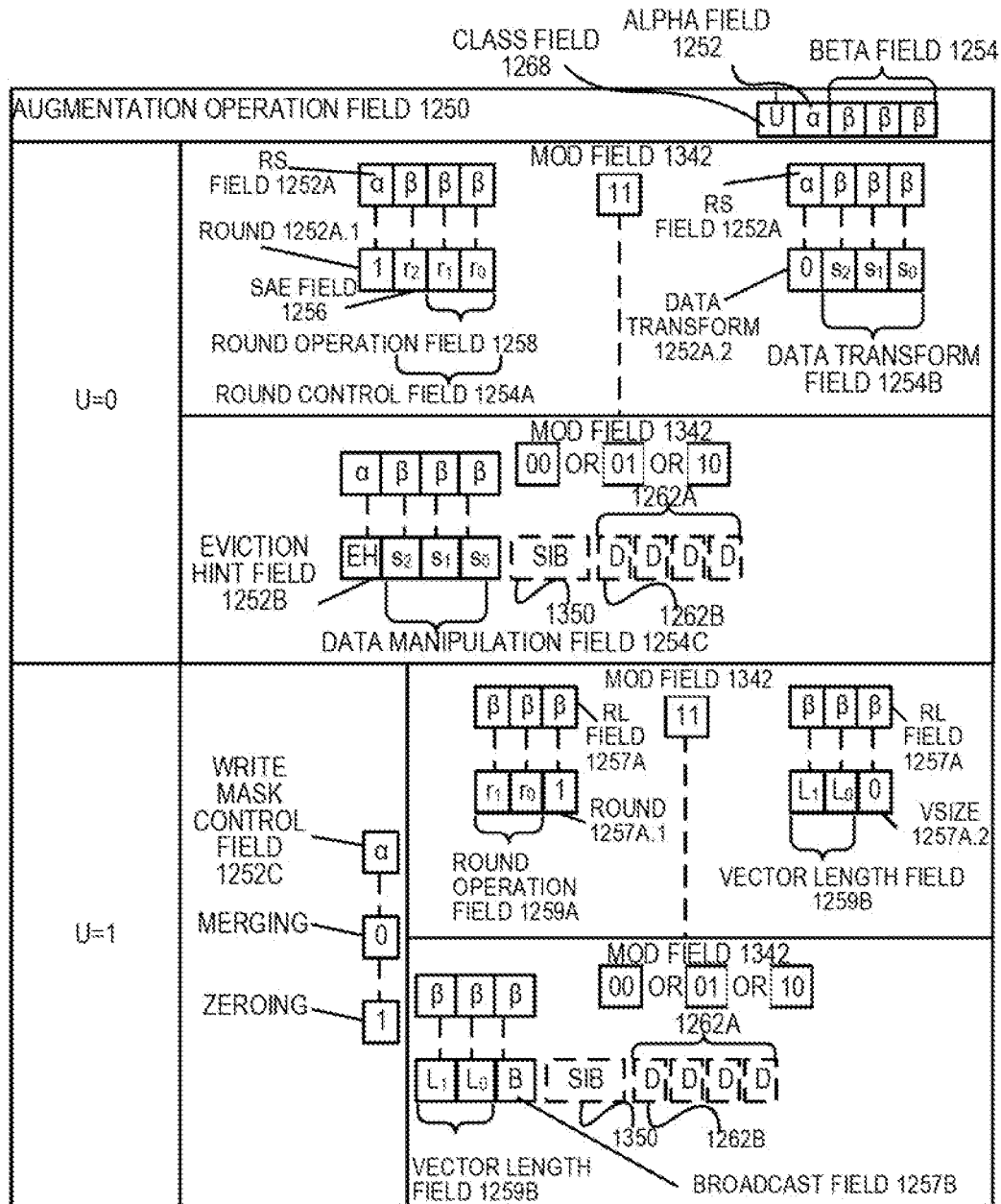


FIG. 13D

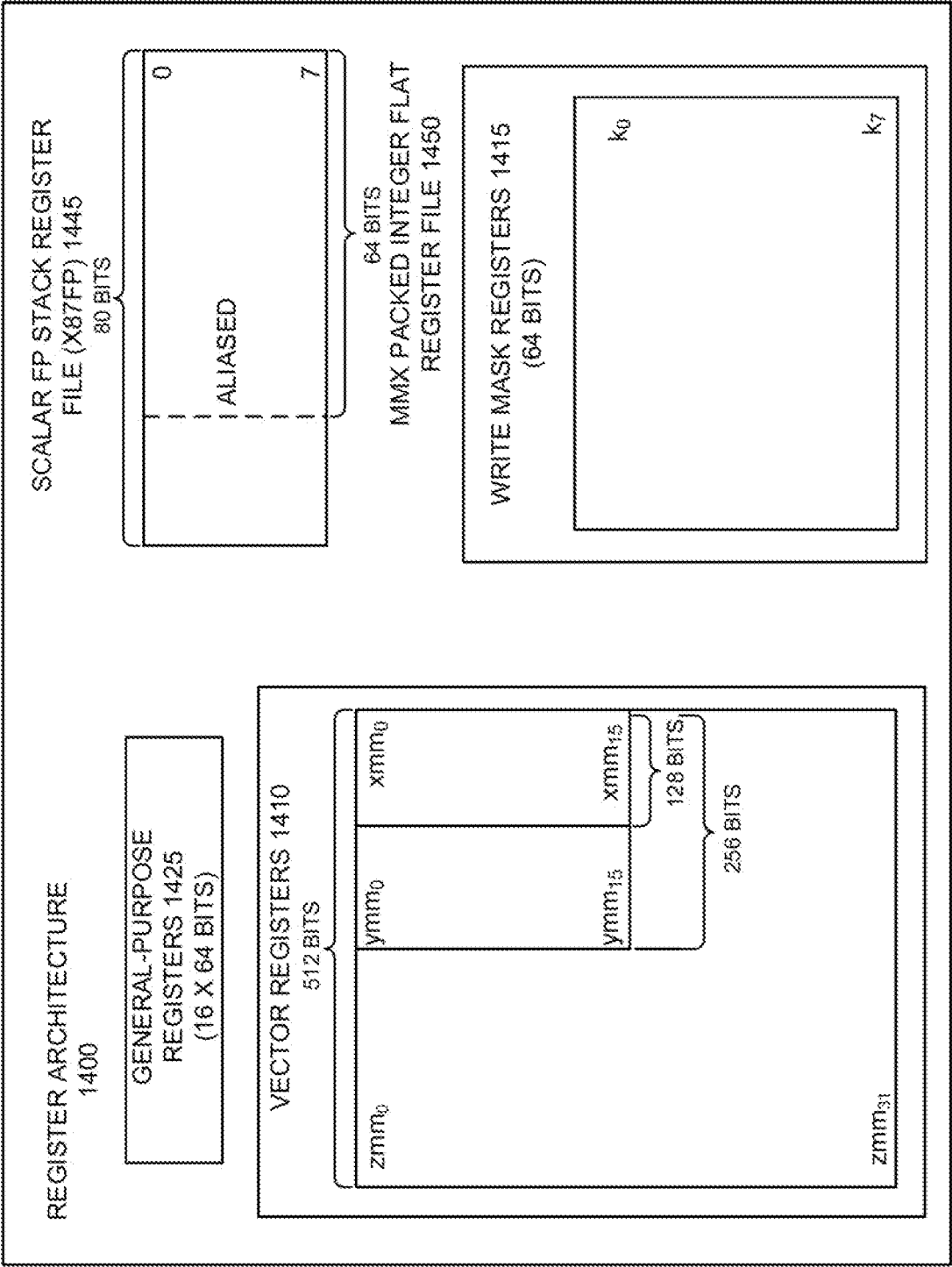
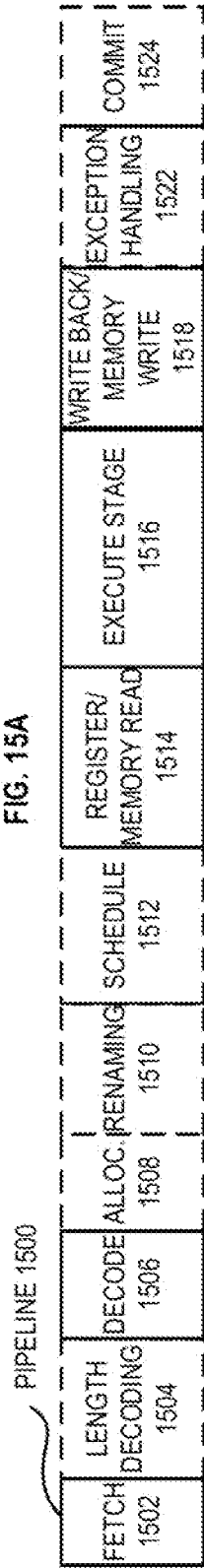


FIG. 14

FIG. 15A



CORE 1590

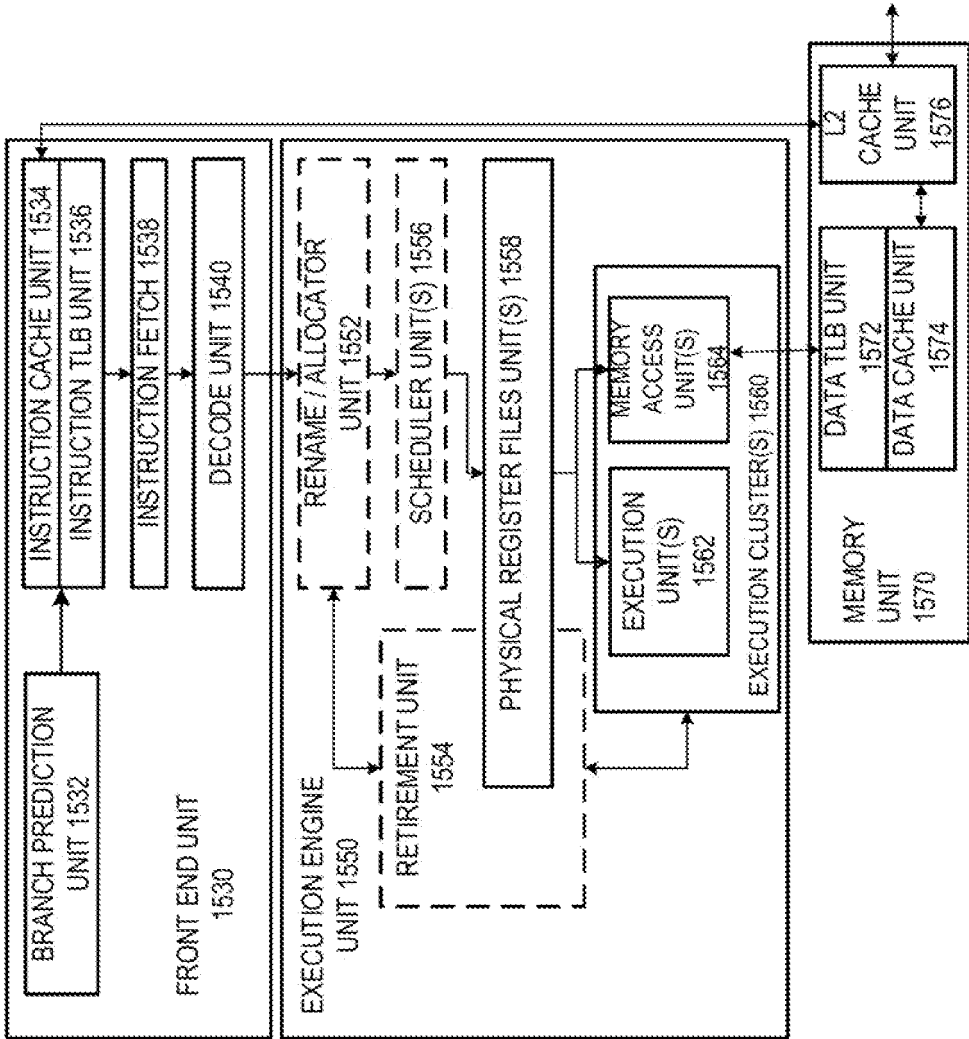


FIG. 15B

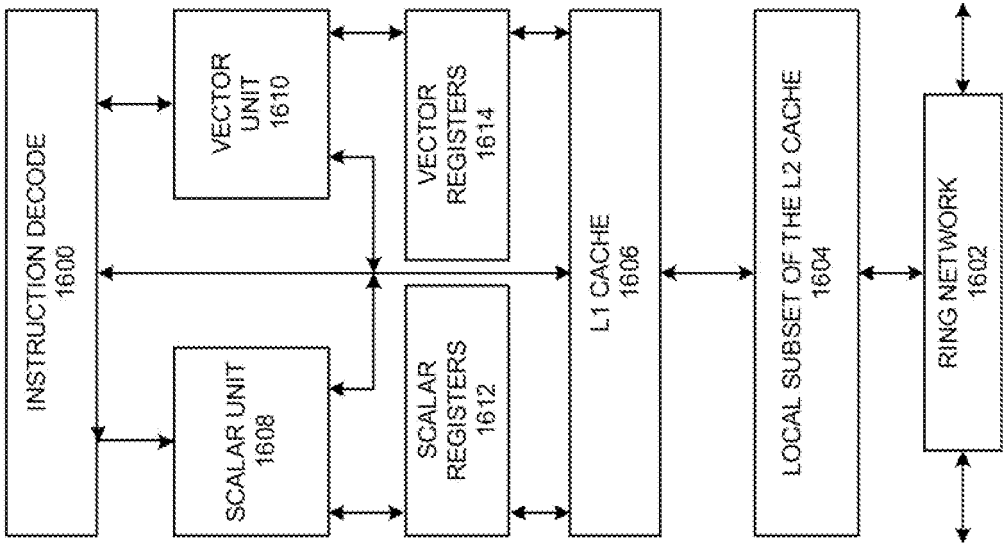


FIG. 16A

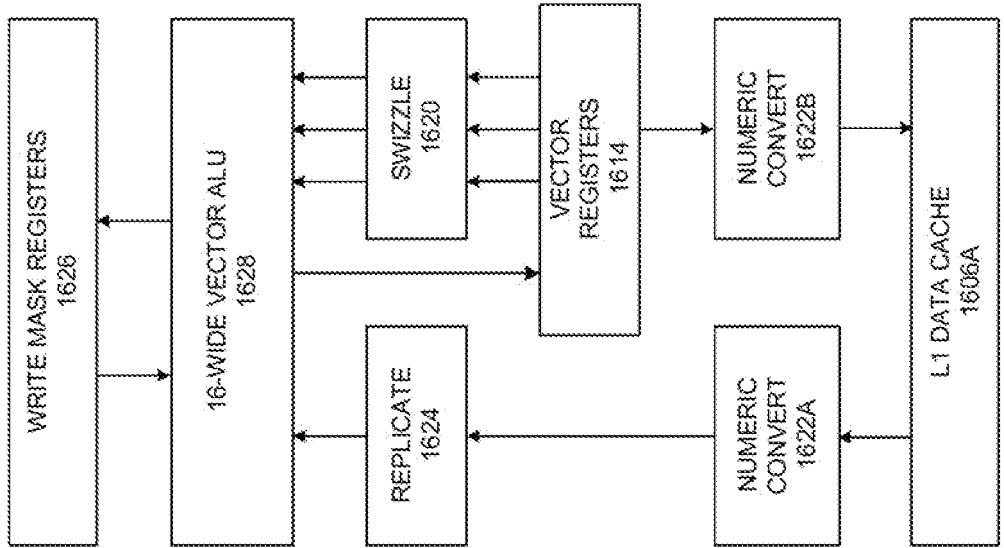


FIG. 16B

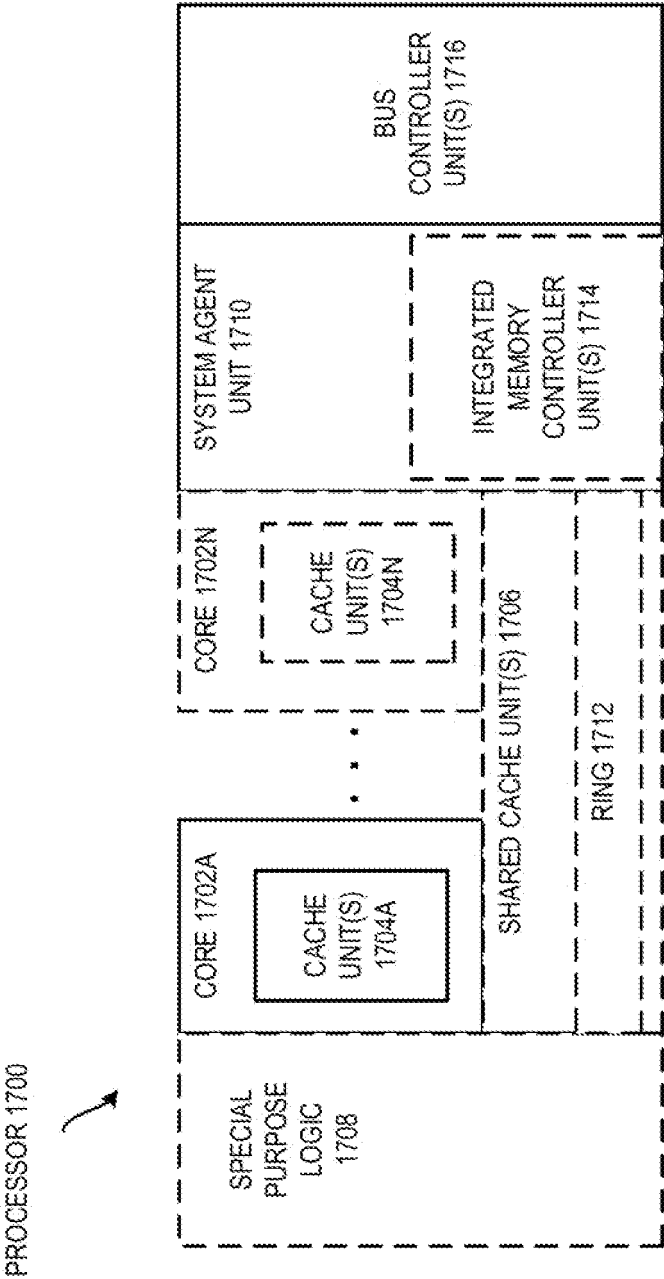


FIG. 17

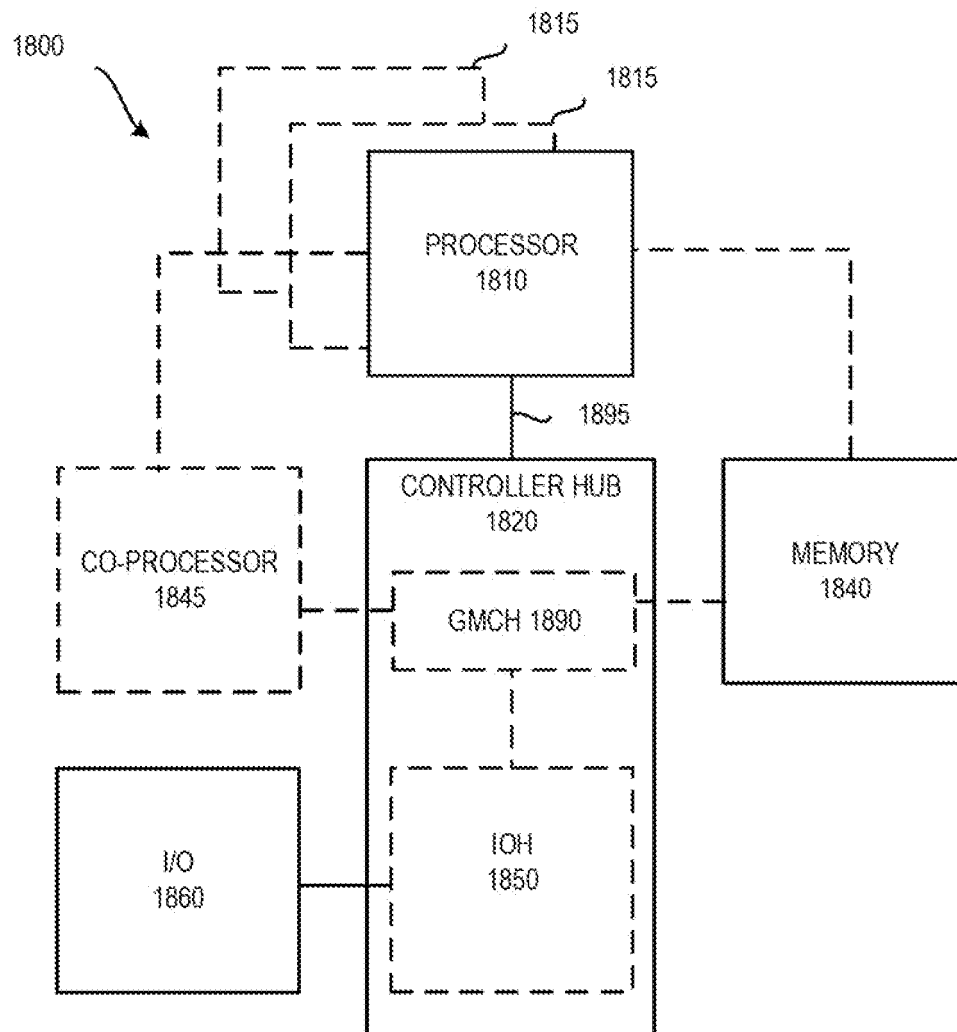


FIG. 18

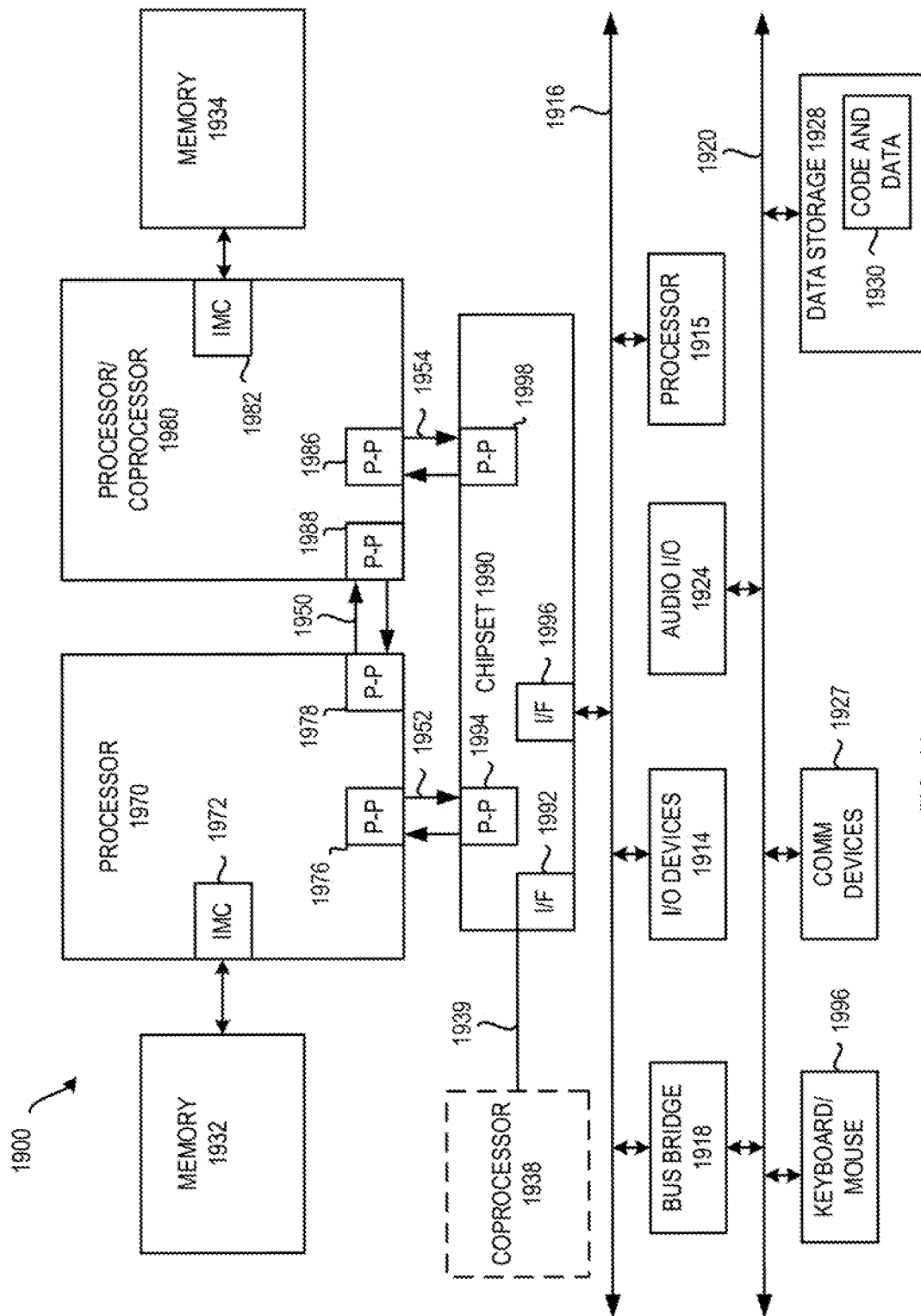


FIG. 19

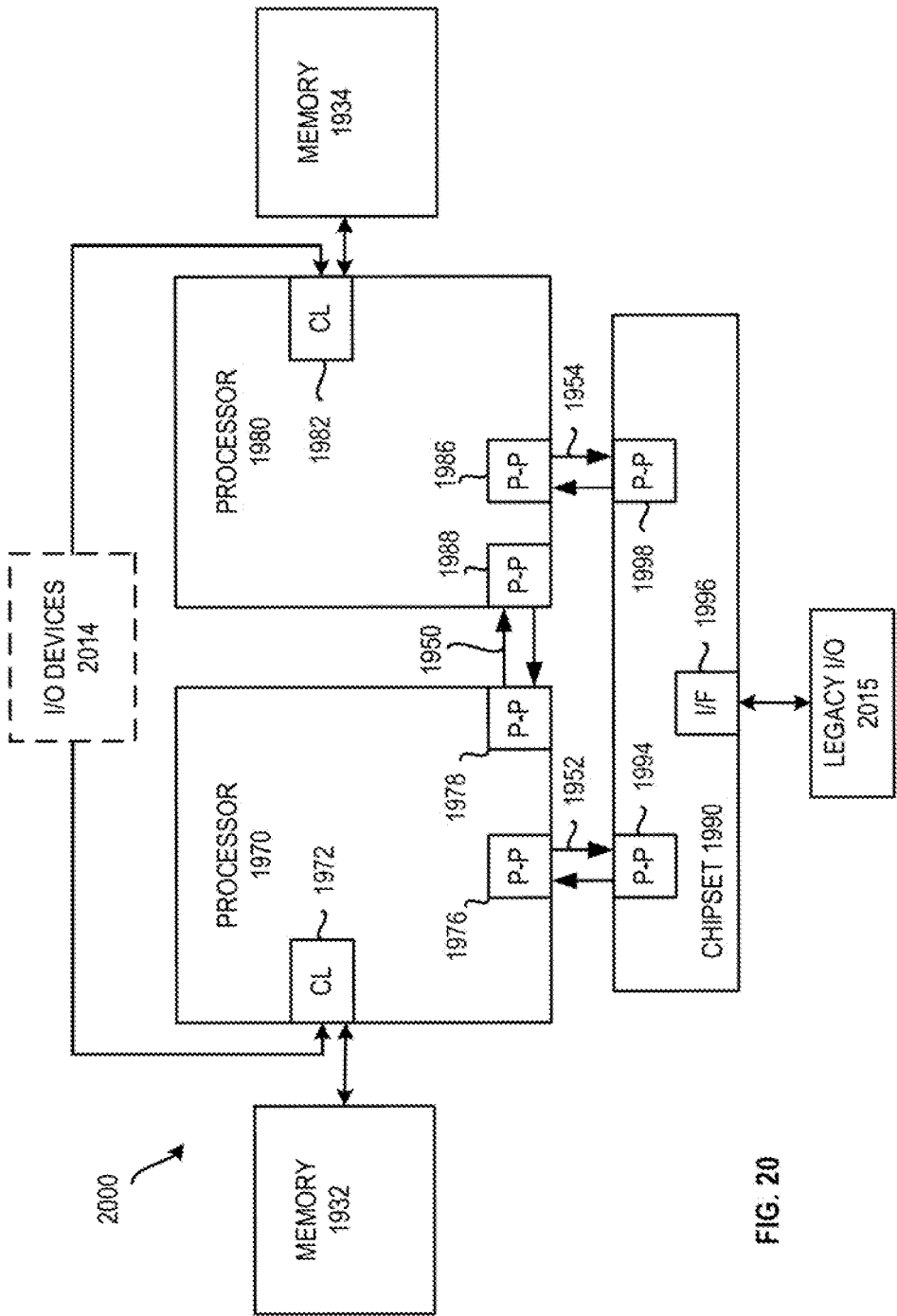


FIG. 20

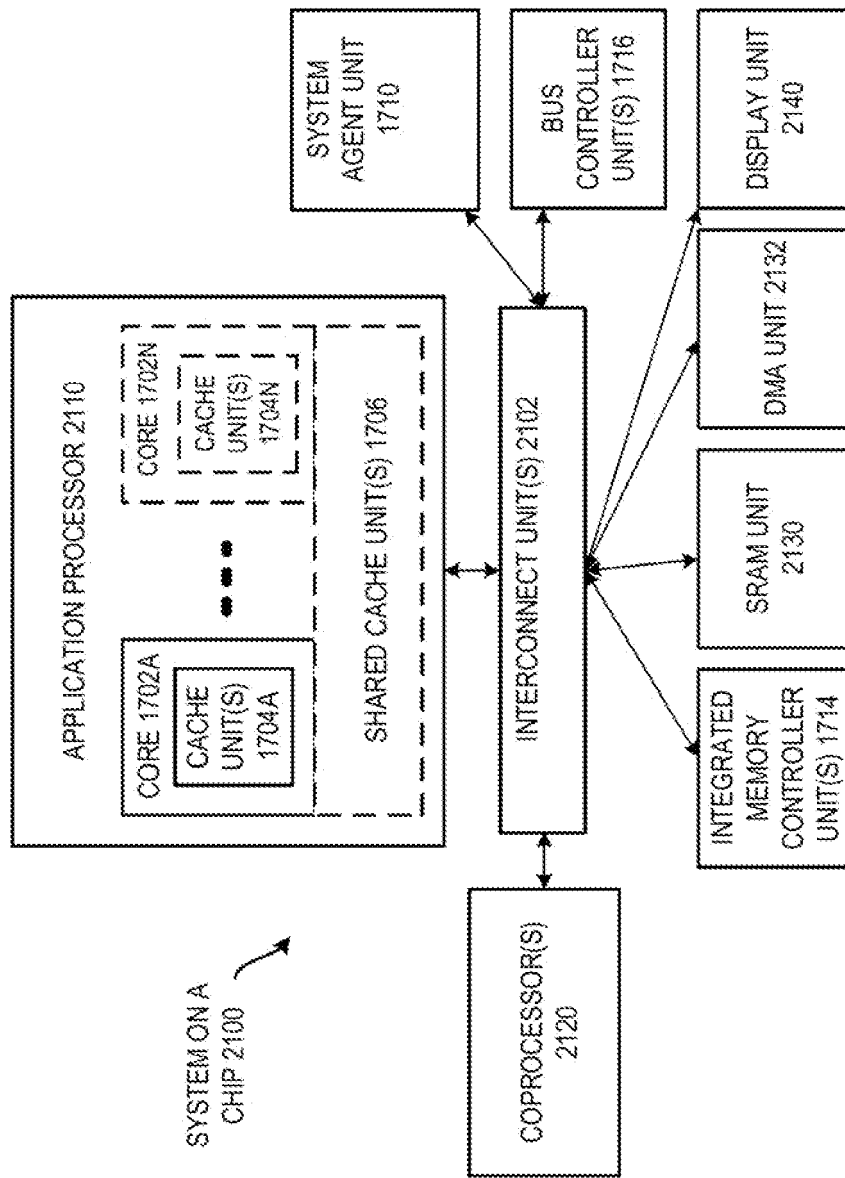


FIG. 21

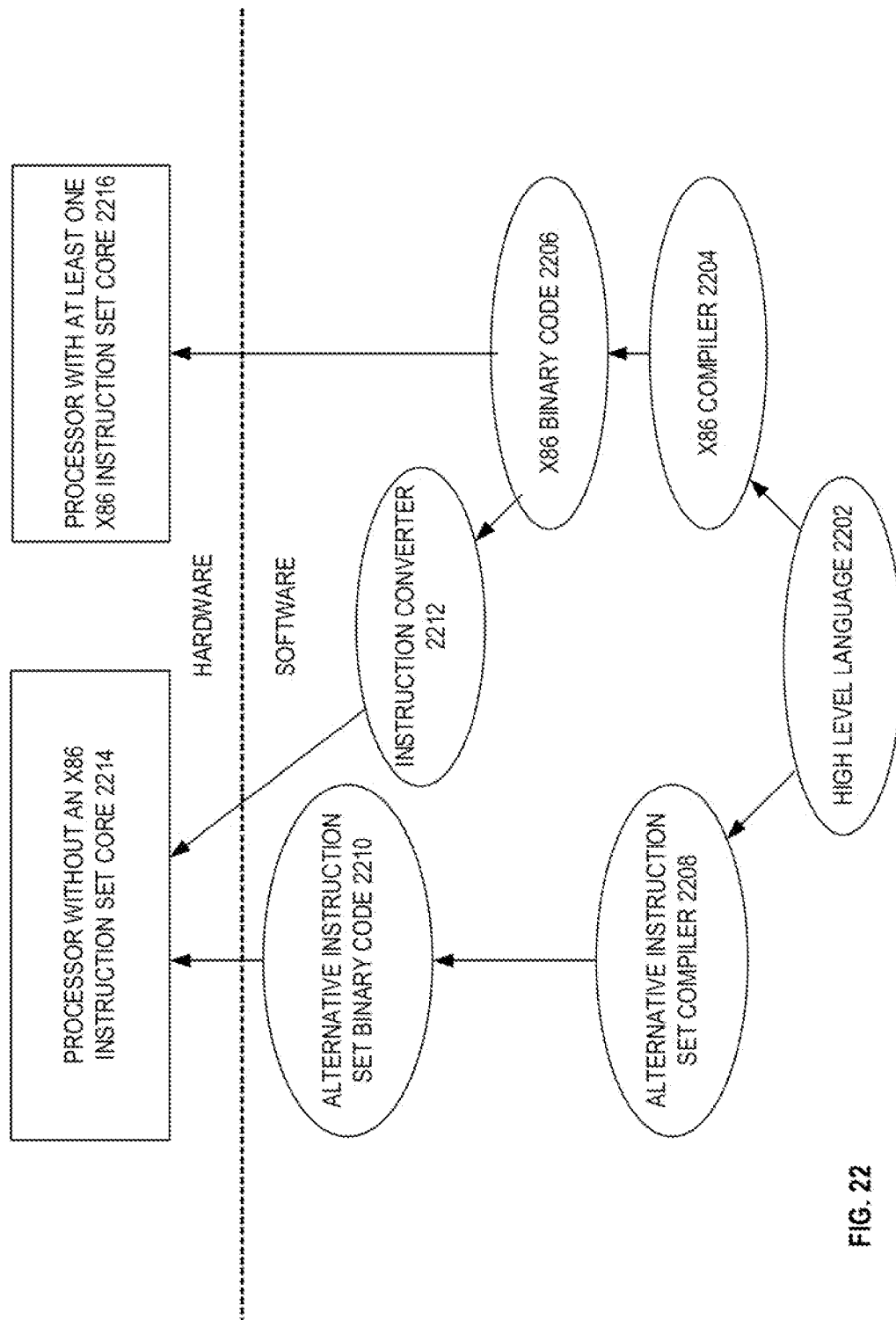


FIG. 22