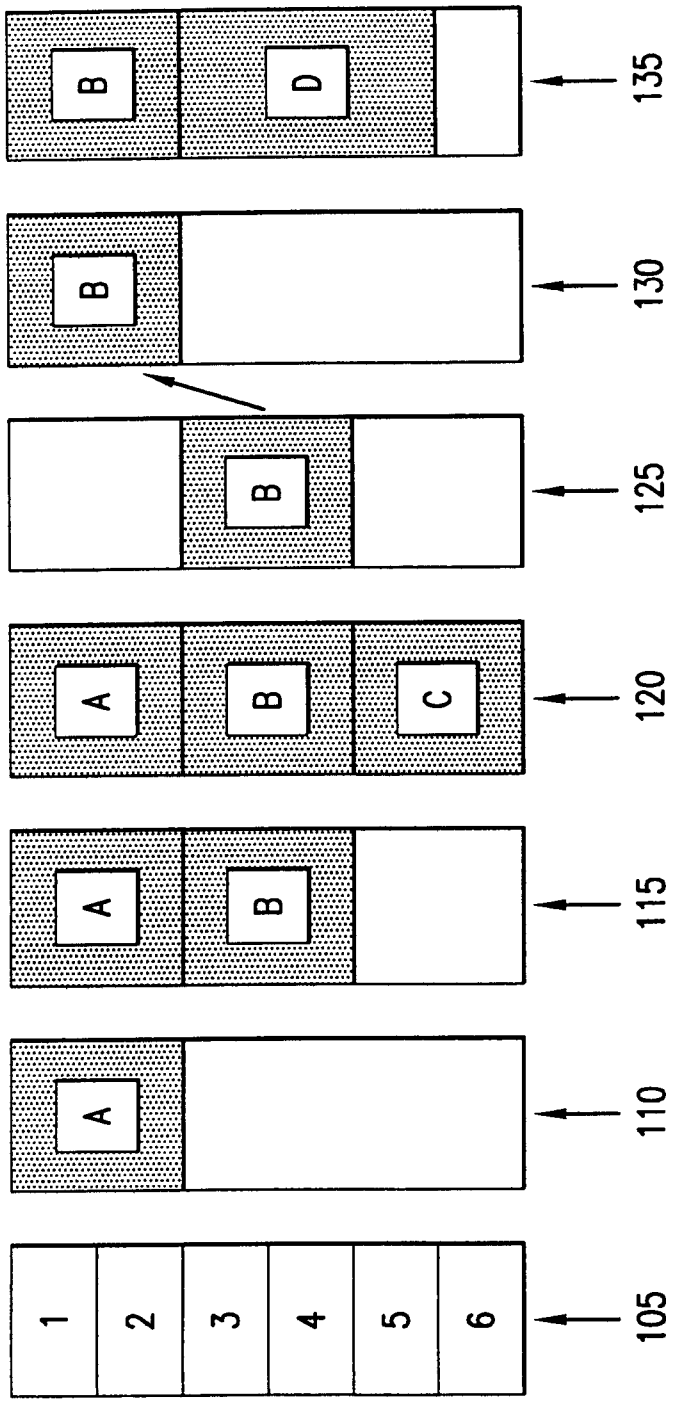


FIG. 1

-- RELATED ART --

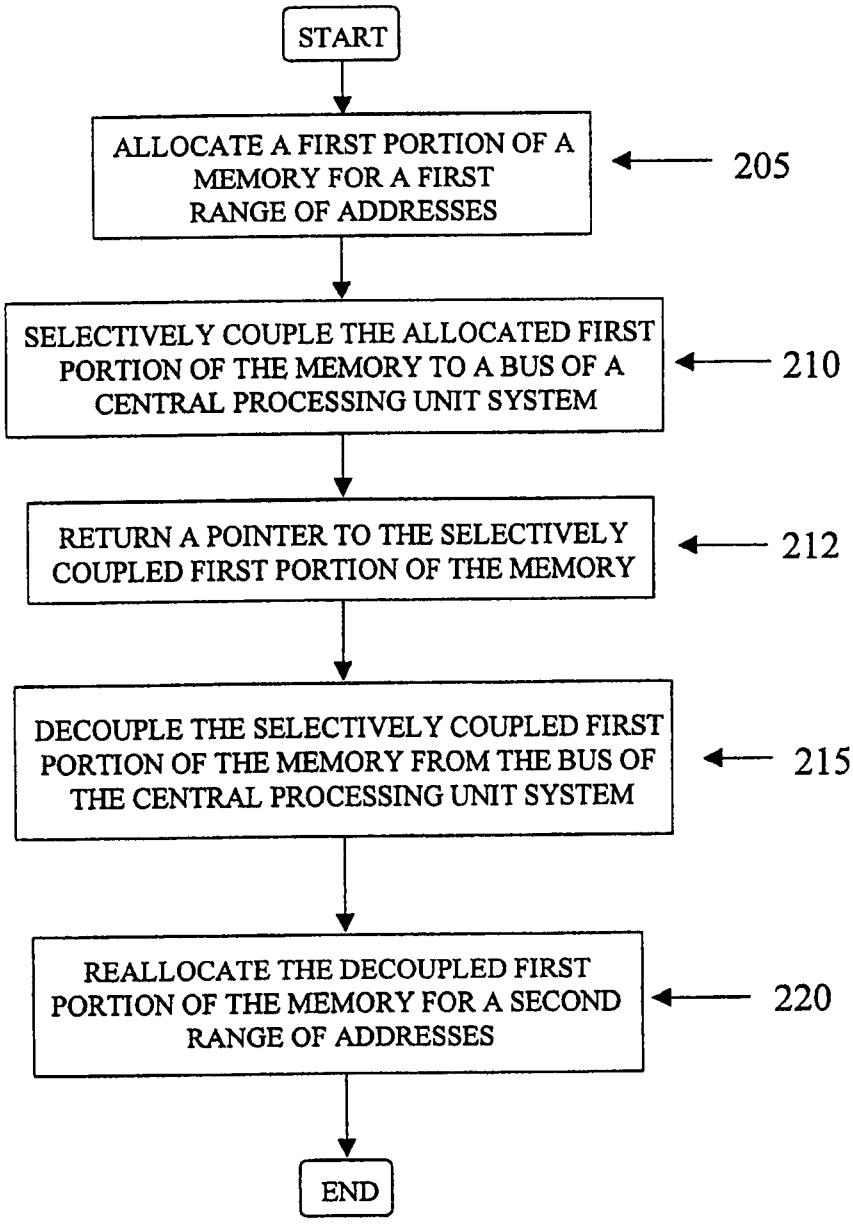

START
ALLOCATE A FIRST PORTION OF A MEMORY FOR A FIRST RANGE OF ADDRESSES
205
SELECTIVELY COUPLE THE ALLOCATED FIRST PORTION OF THE MEMORY TO A BUS OF A CENTRAL PROCESSING UNIT SYSTEM
210
RETURN A POINTER TO THE SELECTIVELY COUPLED FIRST PORTION OF THE MEMORY
212
DECOUPLE THE SELECTIVELY COUPLED FIRST PORTION OF THE MEMORY FROM THE BUS OF THE CENTRAL PROCESSING UNIT SYSTEM
215
REALLOCATE THE DECOUPLED FIRST PORTION OF THE MEMORY FOR A SECOND RANGE OF ADDRESSES
220
END

FIG. 2

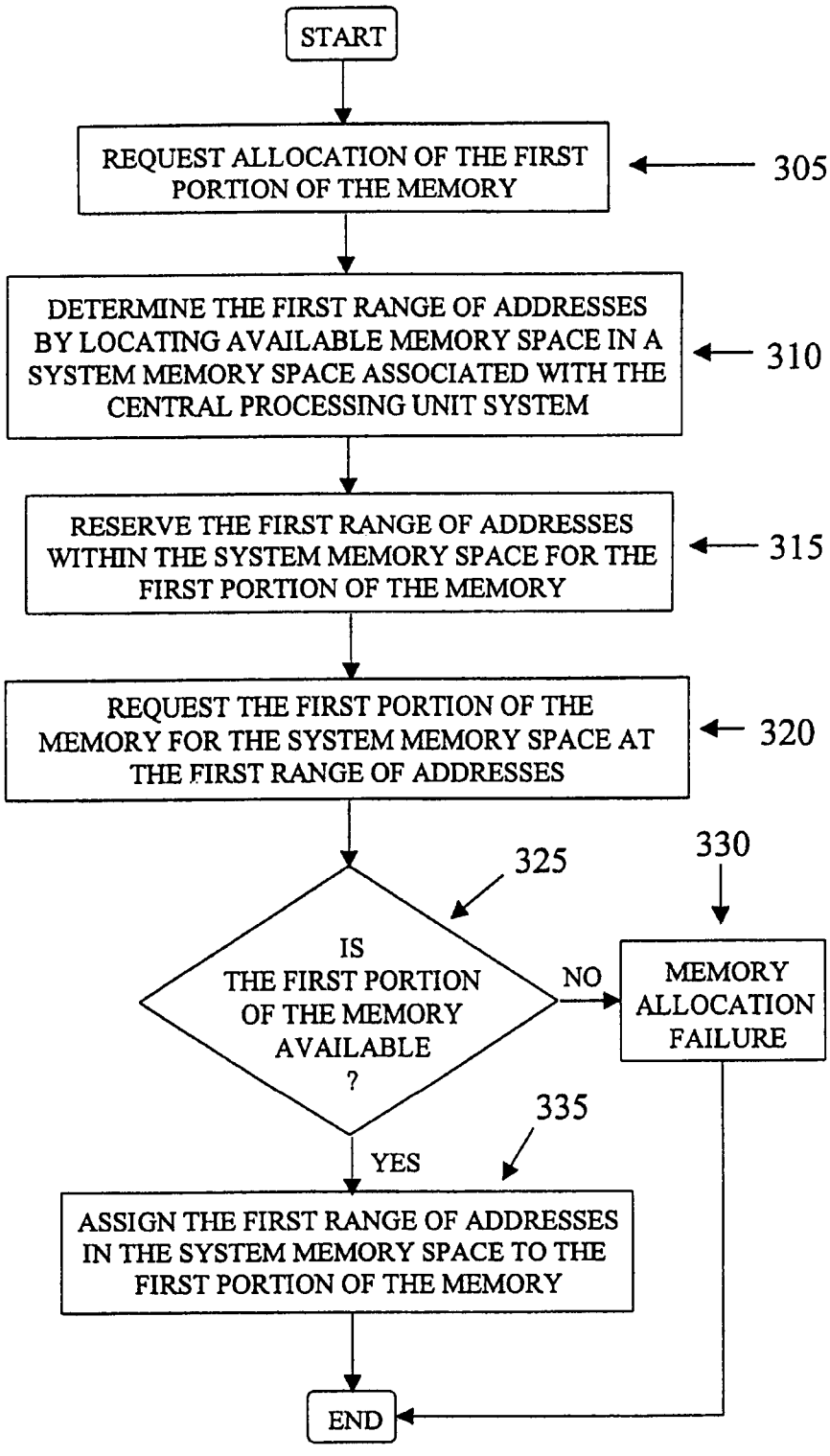

START
REQUEST ALLOCATION OF THE FIRST PORTION OF THE MEMORY
305
DETERMINE THE FIRST RANGE OF ADDRESSES BY LOCATING AVAILABLE MEMORY SPACE IN A SYSTEM MEMORY SPACE ASSOCIATED WITH THE CENTRAL PROCESSING UNIT SYSTEM
310
RESERVE THE FIRST RANGE OF ADDRESSES WITHIN THE SYSTEM MEMORY SPACE FOR THE FIRST PORTION OF THE MEMORY
315
REQUEST THE FIRST PORTION OF THE MEMORY FOR THE SYSTEM MEMORY SPACE AT THE FIRST RANGE OF ADDRESSES
320
325
330
IS THE FIRST PORTION OF THE MEMORY AVAILABLE ?
NO
MEMORY ALLOCATION FAILURE
335
YES
ASSIGN THE FIRST RANGE OF ADDRESSES IN THE SYSTEM MEMORY SPACE TO THE FIRST PORTION OF THE MEMORY
END

FIG. 3

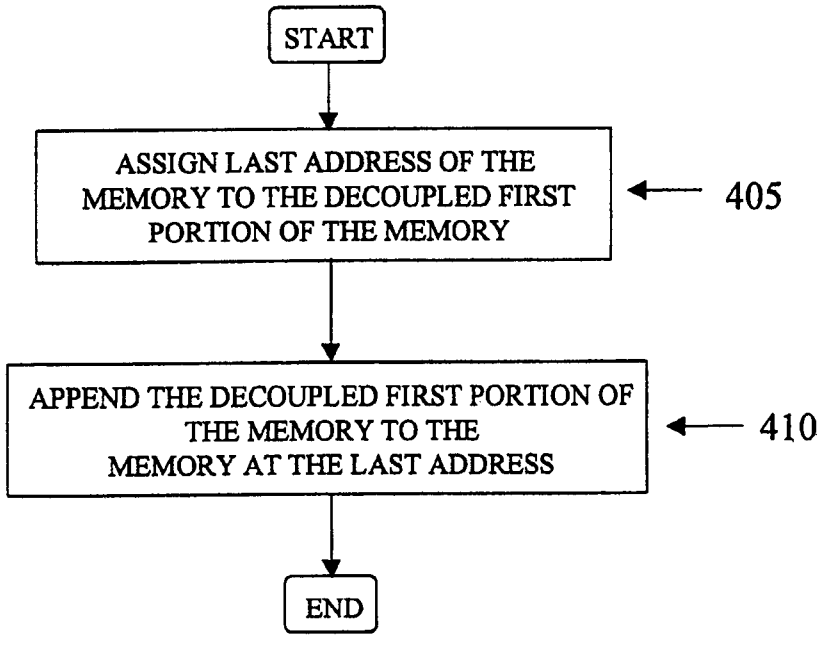

START
ASSIGN LAST ADDRESS OF THE MEMORY TO THE DECOUPLED FIRST PORTION OF THE MEMORY
405
APPEND THE DECOUPLED FIRST PORTION OF THE MEMORY TO THE MEMORY AT THE LAST ADDRESS
410
END

FIG. 4

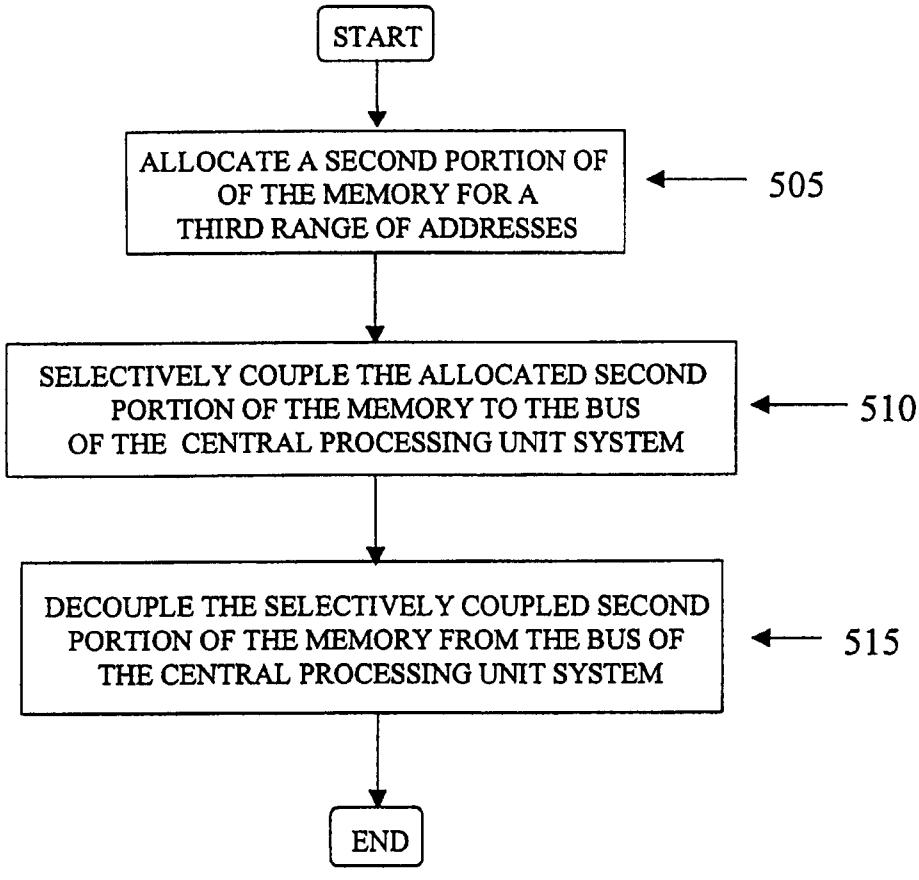

START
ALLOCATE A SECOND PORTION OF OF THE MEMORY FOR A THIRD RANGE OF ADDRESSES
505
SELECTIVELY COUPLE THE ALLOCATED SECOND PORTION OF THE MEMORY TO THE BUS OF THE CENTRAL PROCESSING UNIT SYSTEM
510
DECOUPLE THE SELECTIVELY COUPLED SECOND PORTION OF THE MEMORY FROM THE BUS OF THE CENTRAL PROCESSING UNIT SYSTEM
515
END

FIG. 5

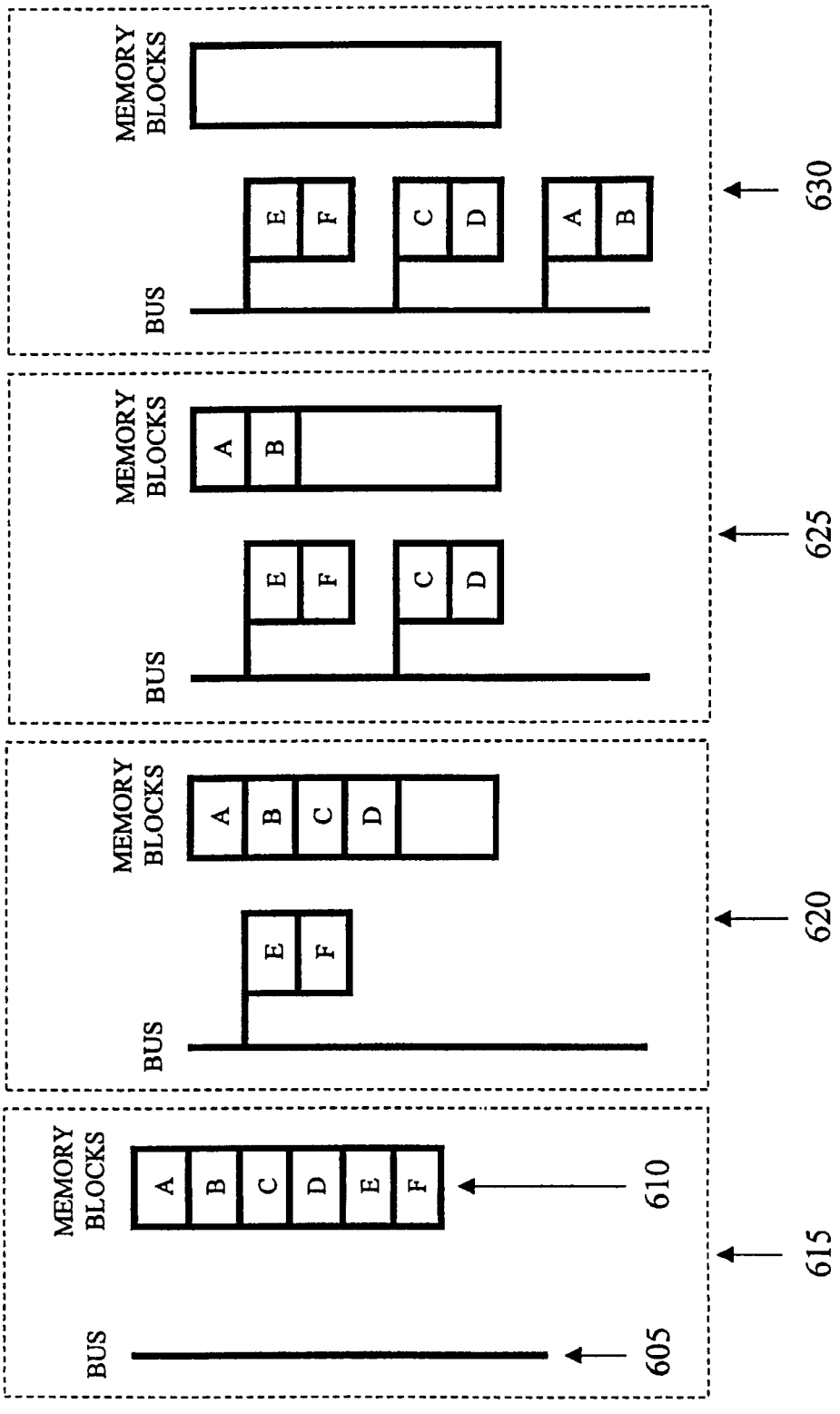


FIG. 6A

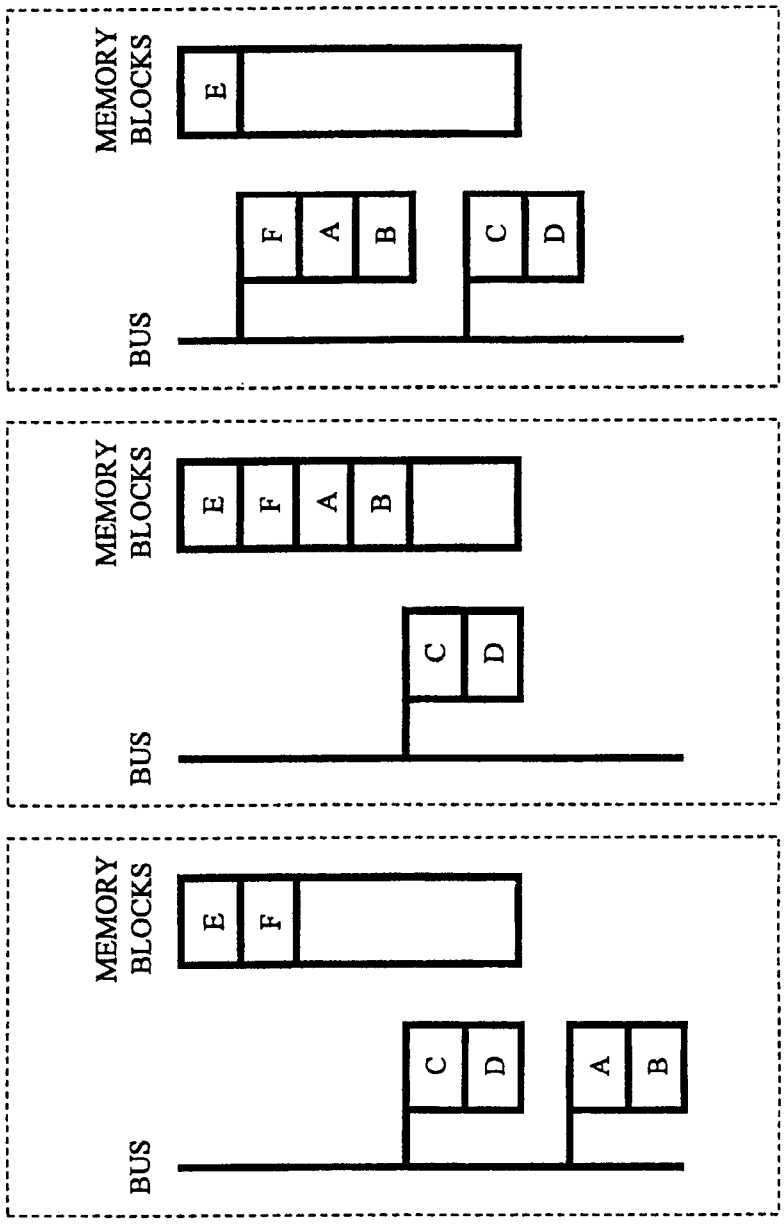


FIG. 6B

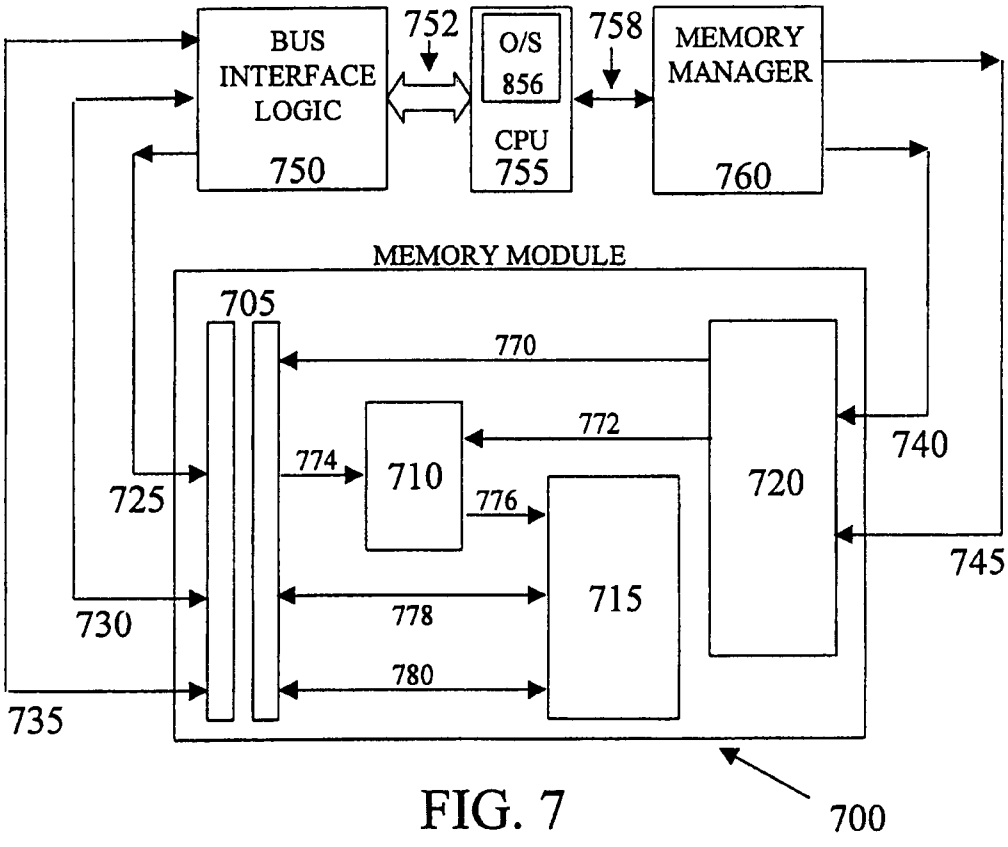

BUS
INTERFACE
LOGIC
750
752
O/S
856
CPU
755
758
MEMORY
MANAGER
760
MEMORY MODULE
705
770
772
774
710
776
720
740
725
745
730
778
715
780
735
700

FIG. 7

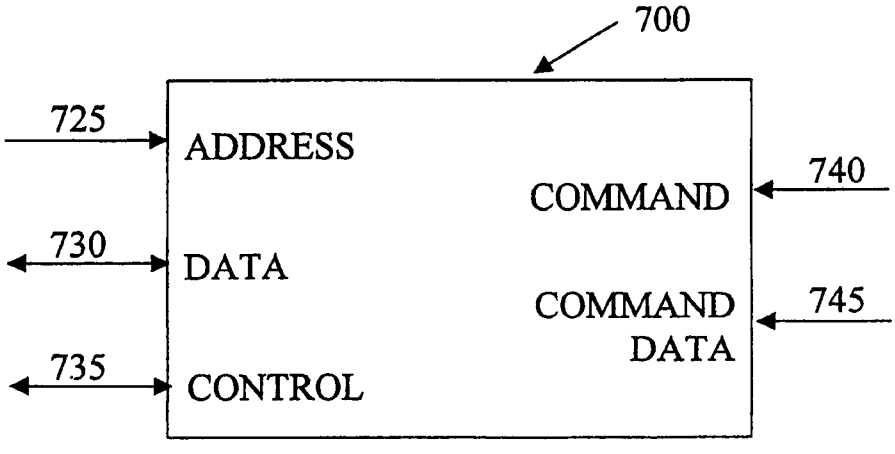

700
725
ADDRESS
740
COMMAND
730
DATA
COMMAND
DATA
745
735
CONTROL

FIG. 8