

F I G. 2 A
STRUCTURAL EXAMPLES OF IMAGE PROCESSING SECTION

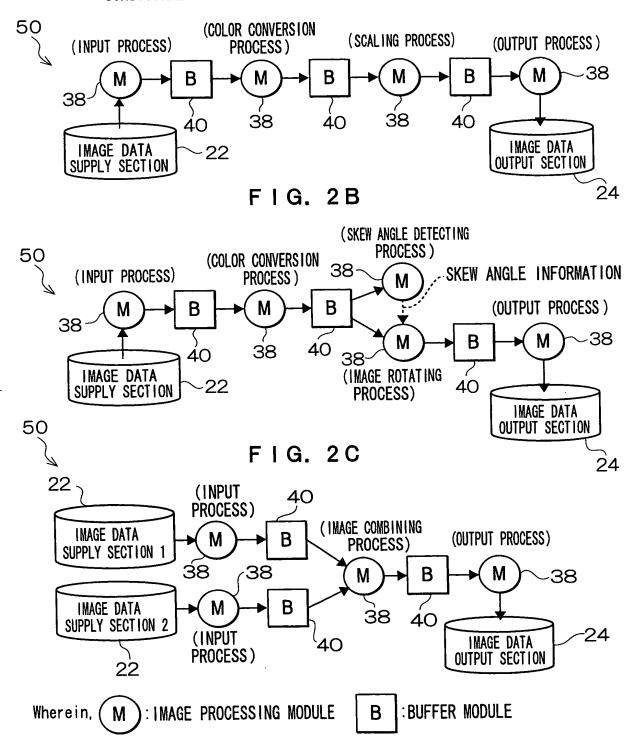


FIG. 3A

SCHEMATIC STRUCTURE AND PROCESS OF IMAGE PROCESSING MODULE

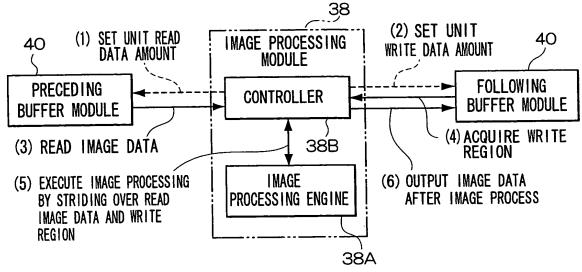
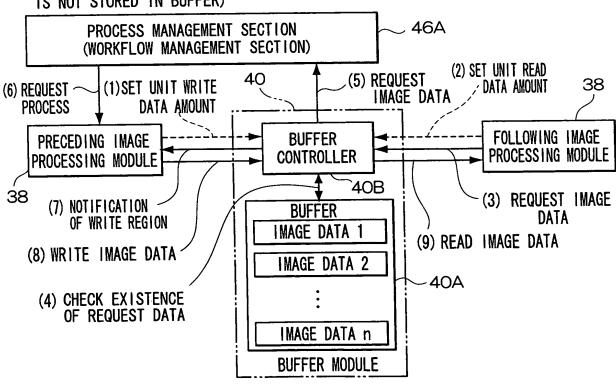
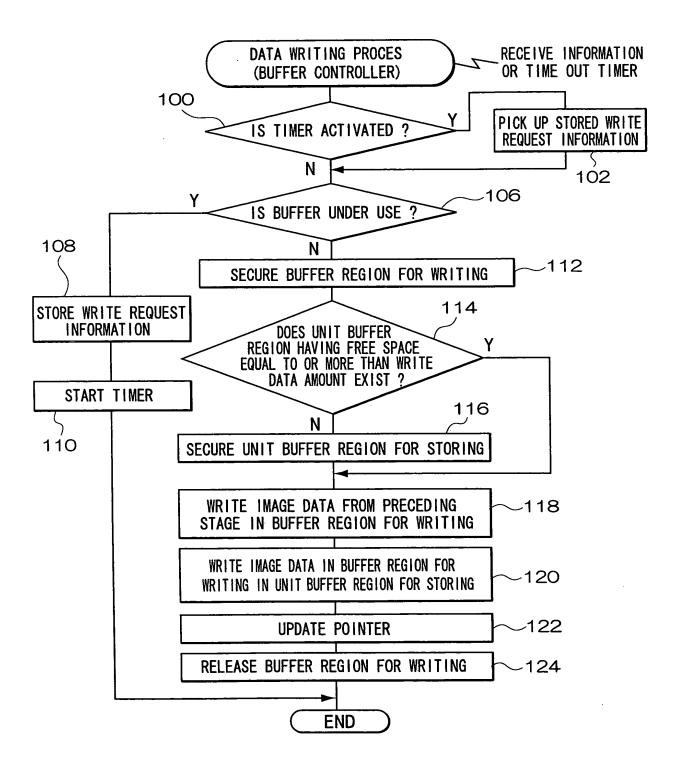


FIG. 3B

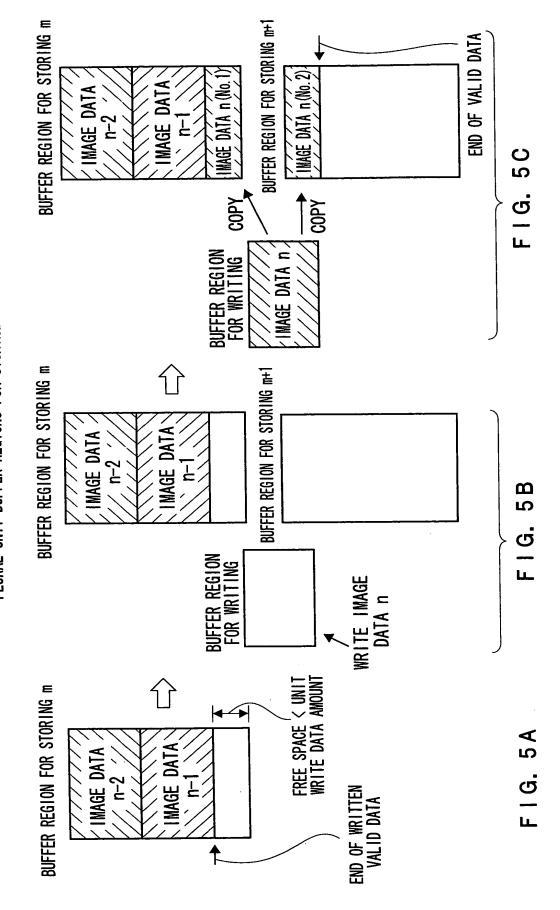
SCHEMATIC STRUCTURE AND PROCESS OF BUFFER MODULE (CASE THAT IMAGE DATA REQUESTED FROM FOLLOWING STAGE IS NOT STORED IN BUFFER)

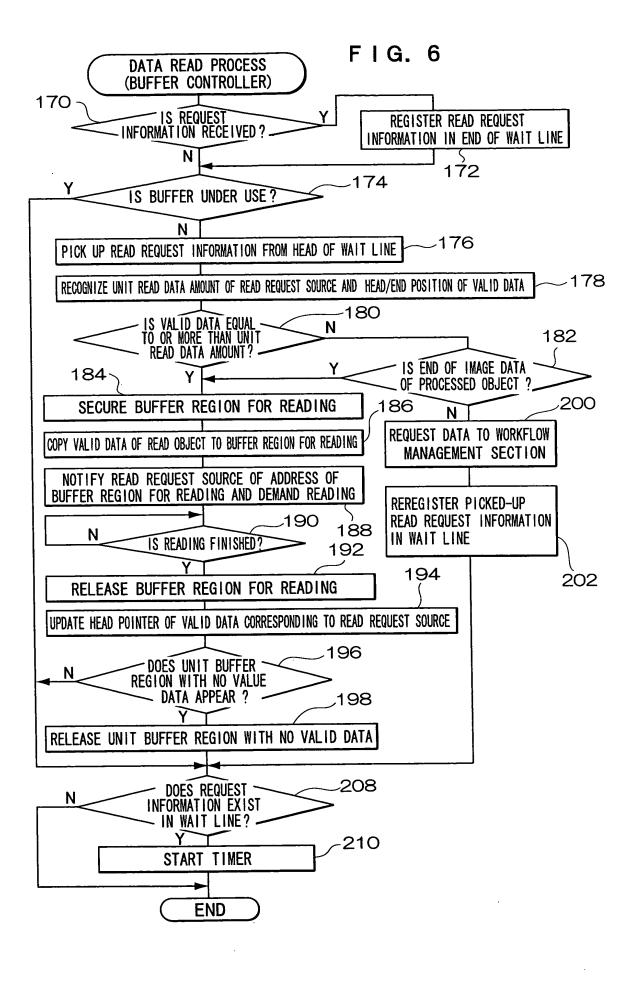


F I G. 4

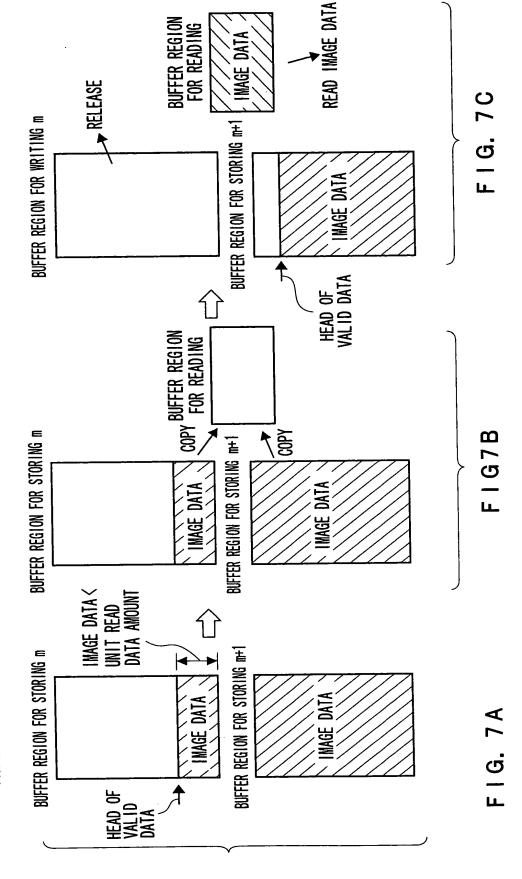


PROCESS IN CASE THAT IMAGE DATA OF WRITTEN OBJECT STRIDES OVER PLURAL UNIT BUFFER REGIONS FOR STORING





PROCESS IN CASE THAT IMAGE DATA OF READ OBJECT STRIDES OVER PLURAL UNIT BUFFER REGIONS FOR STORING



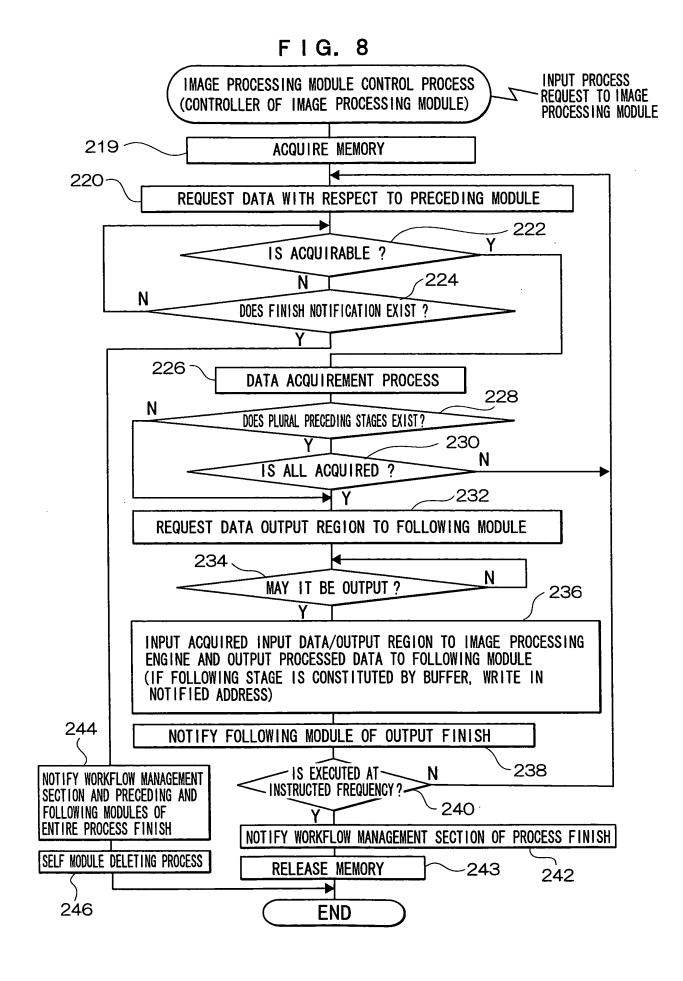


FIG. 9A PARALLEL CONTROL PROCESS 1 INSTRUCT EXECUTION (WORKFLOW MANAGEMENT SECTION) OF IMAGE PROCESSING 500 DETERMINE EXECUTION FREQUENCY OF UNIT PROCESS BY ONE PROCESS REQUEST PER EACH OF IMAGE PROCESSING MODULES 504 INPUT PROCESS REQUEST TO IMAGE PROCESSING MODULE IN FINAL STAGE F I G. 9B REQUEST DATA **END** PARALLEL CONTROL PROCESS 2 FROM BUFFER (WORKFLOW MANAGEMENT SECTION) MODULE INPUT PROCESS REQUEST TO PRECEDING 510 IMAGE PROCESSING MODULE OF BUFFER MODULE IN REQUEST SOURCE **END** FIG. 90 NOTIFY PROCESS FINISH FROM PARALLEL CONTROL PROCESS 3 IMAGE PROCESSING MODULE (WORKFLOW MANAGEMENT SECTION) 520 INPUT PROCESS REQUEST TO IMAGE PROCESSING MODULE IN PROCESS FINISH NOTIFYING SOURCE END FIG. 9D NOTIFY ENTIRE PROCESS FINISH PARALLEL CONTROL PROCESS 4 FROM IMAGE (WORKFLOW MANAGEMENT SECTION) **PROCESSING** 540 MODULE IS NOTIFYING SOURCE FINAL STAGE MODULE ? -542 NOTIFY APPLICATION OF PROCESS FINISH **END**

FIG. 10

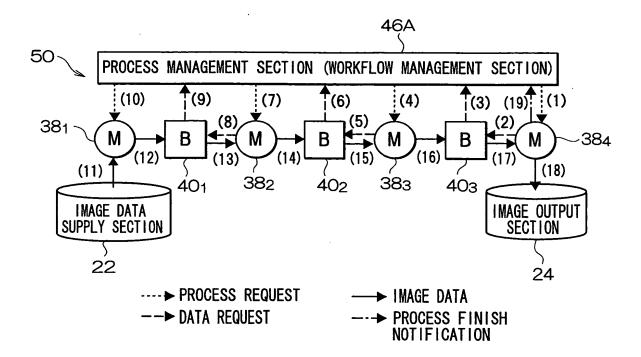
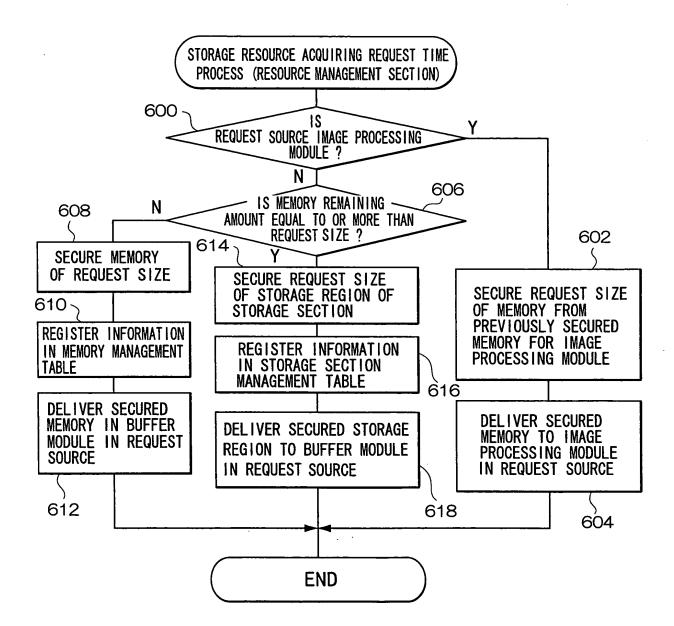
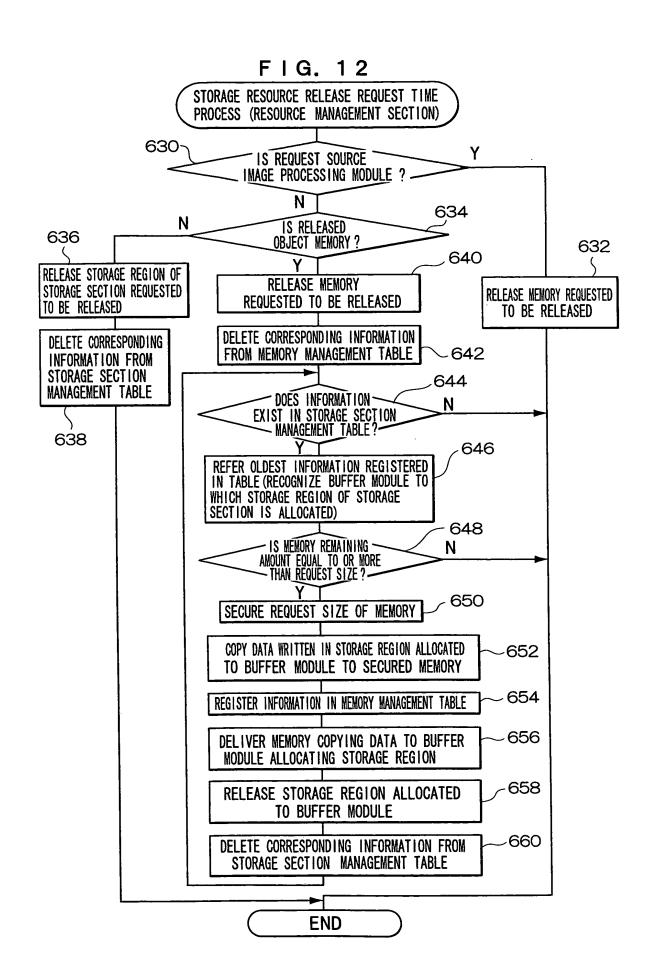
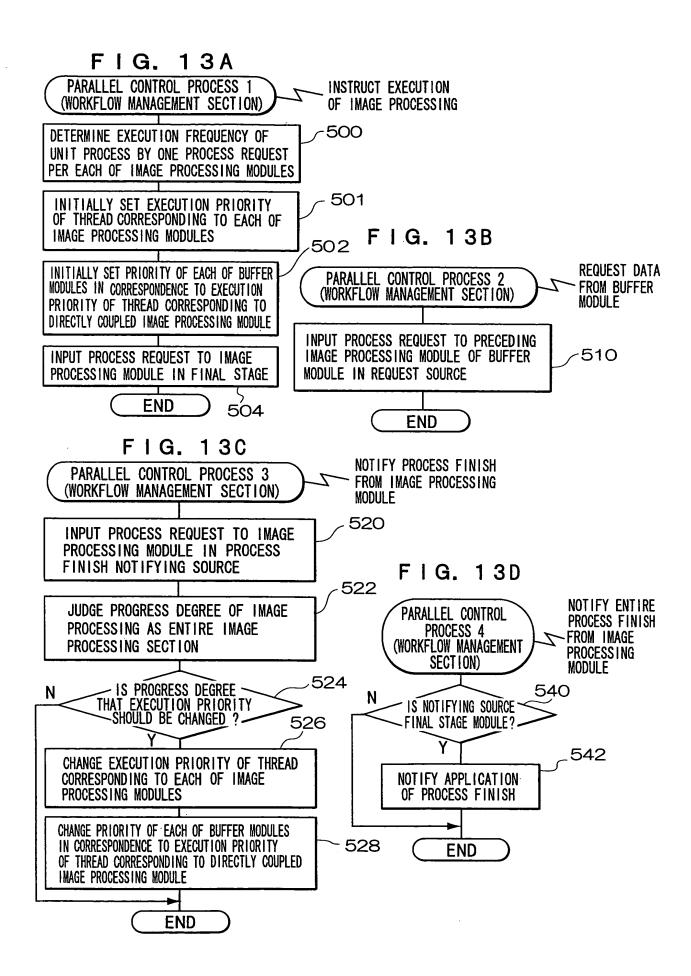
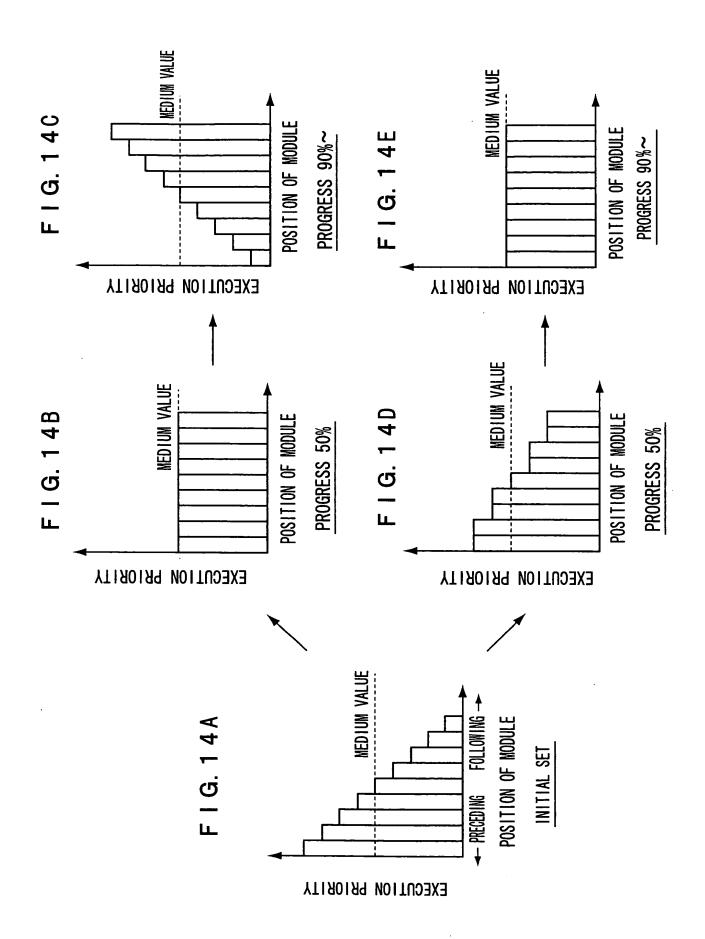


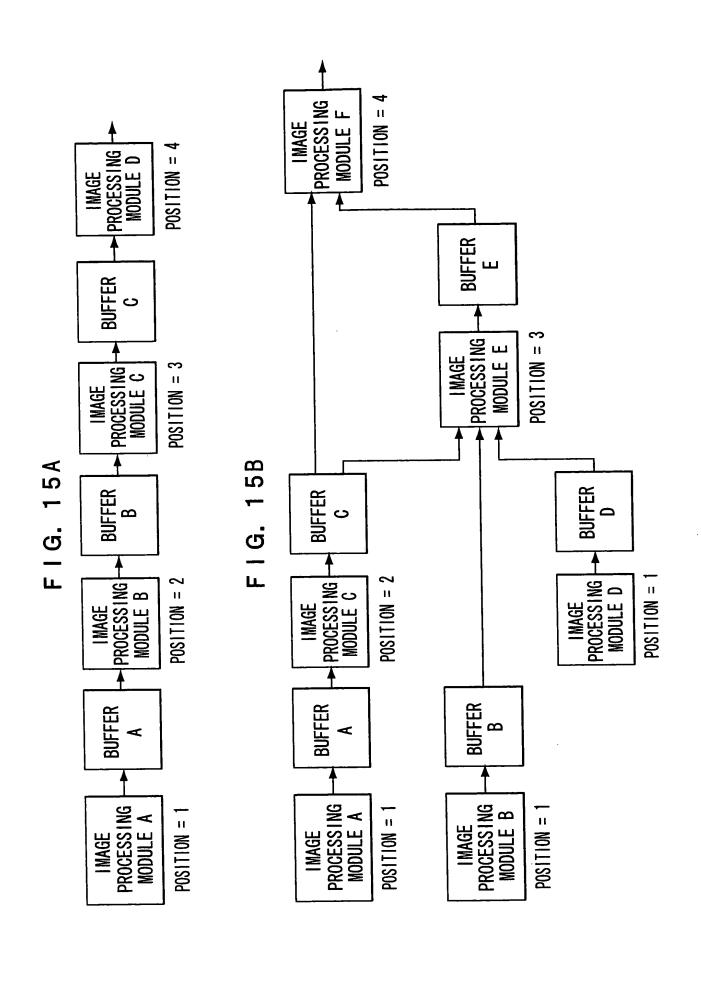
FIG. 11











F I G. 16 STORAGE RESOURCE ACQUIRING REQUEST TIME PROCESS (RESOURCE MANAGEMENT SECTION) 600 **IS REQUEST SOURCE** 602 IMAGE PROCESSING MODULE ? 606 SECURE REQUEST SIZE OF IS MEMORY REMAINING N MEMORY FROM MEMORY AMOUNT EQUAL TO OR MORE THAN 608 PREVIOUSLY SECURED FOR REQUEST SIZE ? IMAGE PROCESSING MODULE 620 SECURE REQUEST ACQUIRE PRIORITY OF BUFFER DELIVER SECURED MEMORY SIZE OF MEMORY MODULE IN REQUEST SOURCE TO IMAGE PROCESSING MODULE IN REQUEST SOURCE COMPARE WITH PRIORITY OF BUFFER REGISTER INFORMATION MODULE ALLOCATED MEMORY -621 IN MEMORY MANAGEMENT 604 622 610 TABLE DOES MODULE HAVING LOW PRIORITY AND ALLOCATED 614 Ν MEMORY SIZE EQUAL TO OR MORE DELIVER SECURED THAN REQUEST SIZE EXIST ?-MEMORY TO BUFFER SECURE REQUEST SIZE 623 MODULE IN REQUEST OF STORAGE REGION OF STORAGE SECTION SOURCE SECURE STORAGE REGION OF STORAGE 616 SECTION AT SAME SIZE AS ALLOCATED MEMORY REGISTER INFORMATION 612 IN STORAGE SECTION MANAGEMENT TABLE COPY DATA WRITTEN IN ALLOCATED 624 MEMORY IN SECURED STORAGE REGION DELIVER SECURED STORAGE REGION TO 625 ^ REGISTER INFORMATION IN STORAGE SECTION MANAGEMENT TABLE BUFFER MODULE IN REQUEST SOURCE DELIVER STORAGE REGION COPYING 626 DATA TO BUFFER MODULE ALLOCATED MEMORY 618 **CLEAR ALLOCATED MEMORY** 627 UPDATE REGISTERED INFORMATION 628 IN MEMORY MANAGEMENT TABLE DELIVER REQUEST SIZE OF MEMORY 629 TO BUFFER MODULE IN REQUEST SOURCE

END

