06 AUG 2004

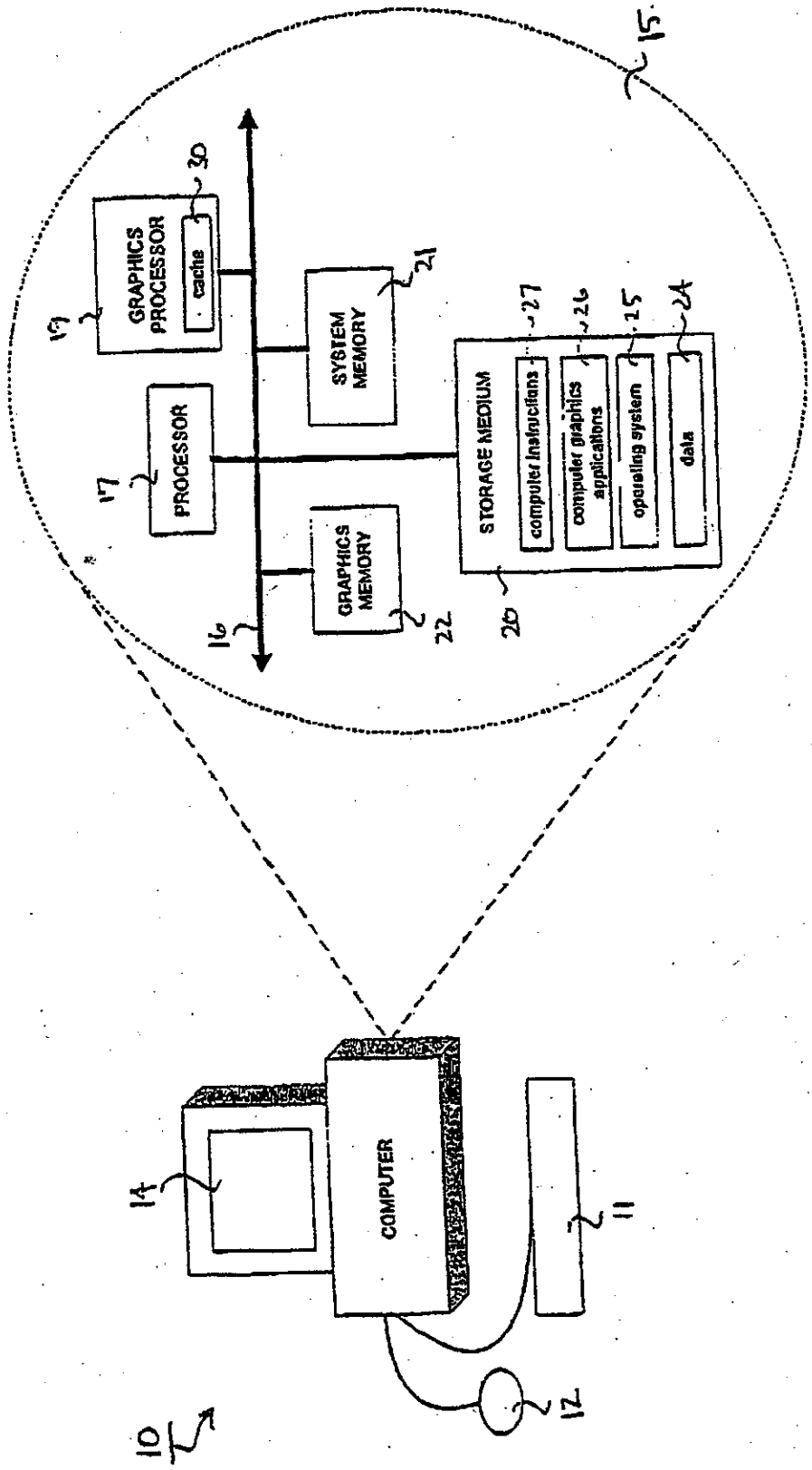


FIG. 1

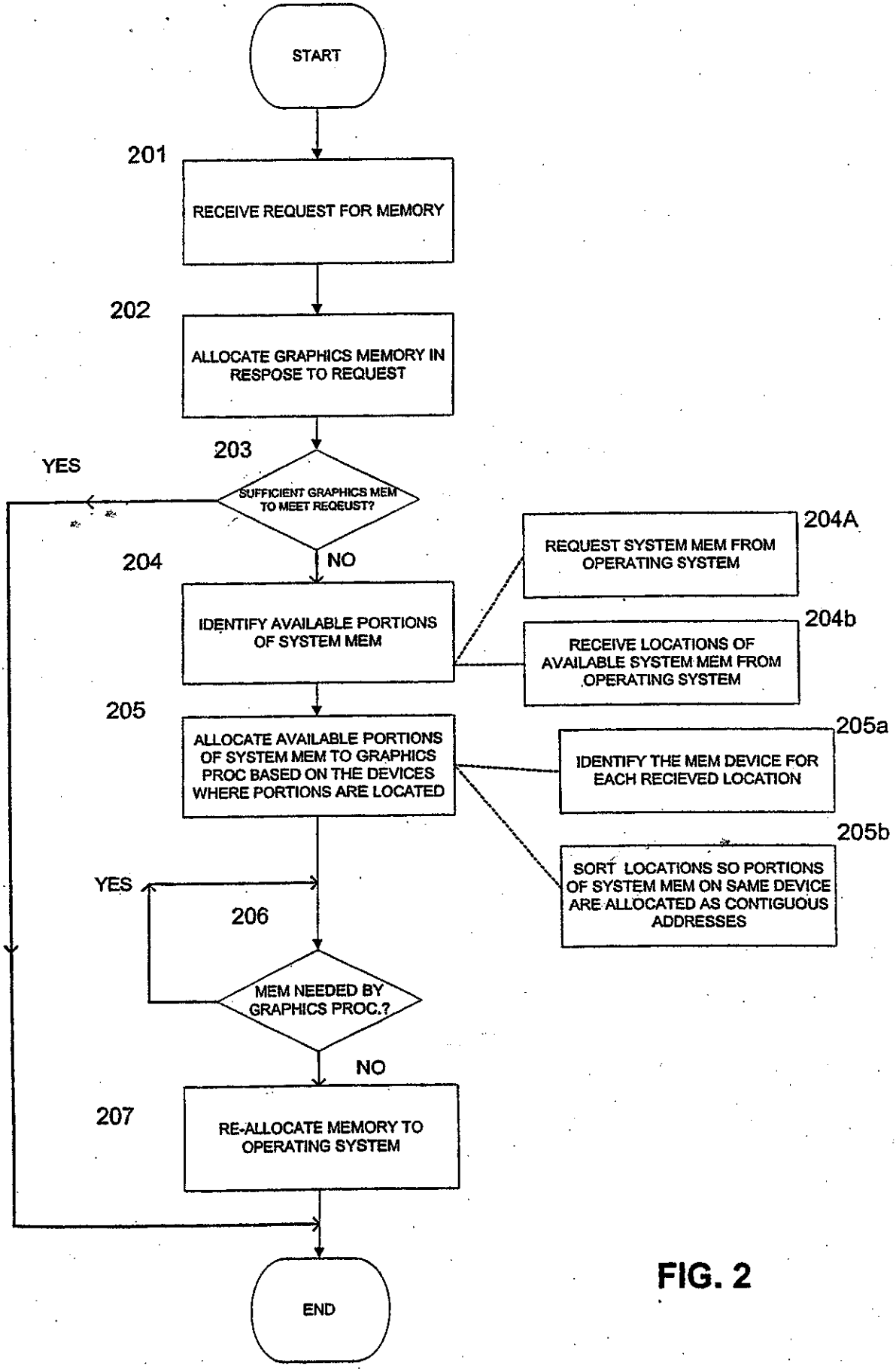

START
201
RECEIVE REQUEST FOR MEMORY
202
ALLOCATE GRAPHICS MEMORY IN RESPOSE TO REQUEST
203
YES
SUFFICIENT GRAPHICS MEM TO MEET REQEUST?
NO
204
IDENTIFY AVAILABLE PORTIONS OF SYSTEM MEM
204A
REQUEST SYSTEM MEM FROM OPERATING SYSTEM
204b
RECEIVE LOCATIONS OF AVAILABLE SYSTEM MEM FROM OPERATING SYSTEM
205
ALLOCATE AVAILABLE PORTIONS OF SYSTEM MEM TO GRAPHICS PROC BASED ON THE DEVICES WHERE PORTIONS ARE LOCATED
205a
IDENTIFY THE MEM DEVICE FOR EACH RECIEVED LOCATION
205b
SORT LOCATIONS SO PORTIONS OF SYSTEM MEM ON SAME DEVICE ARE ALLOCATED AS CONTIGUOUS ADDRESSES
YES
206
MEM NEEDED BY GRAPHICS PROC.?
NO
207
RE-ALLOCATE MEMORY TO OPERATING SYSTEM
END

FIG. 2

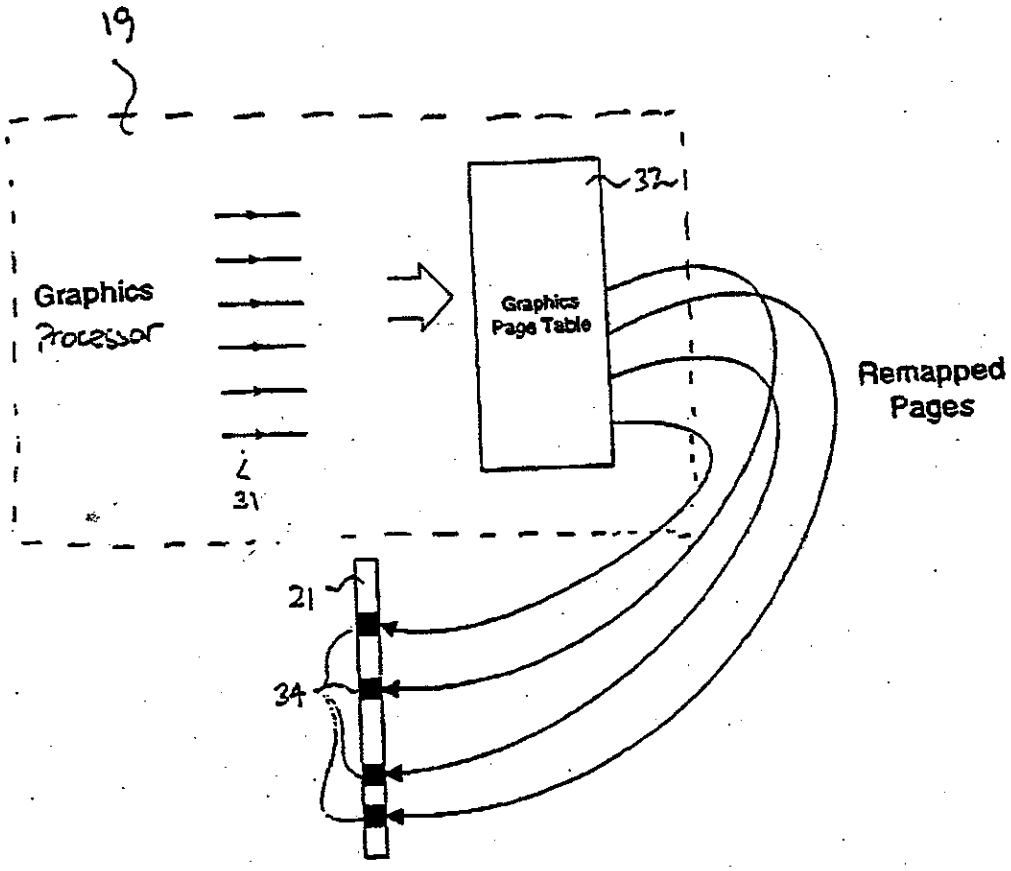

19
Graphics Processor
31
32
Graphics Page Table
Remapped Pages
21
34

FIG. 3

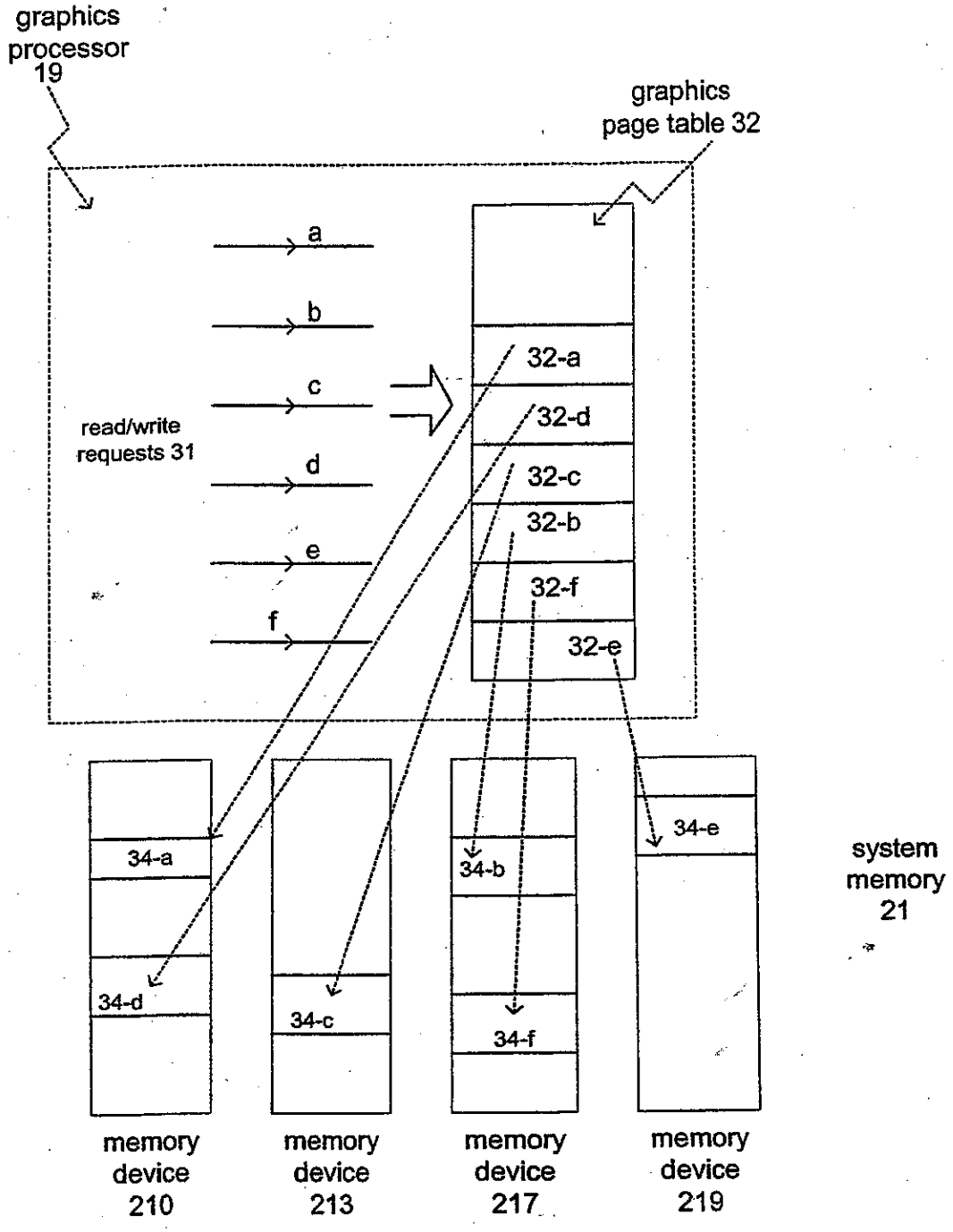

graphics processor 19
graphics page table 32
a
b
c
d
e
f
read/write requests 31
32-a
32-d
32-c
32-b
32-f
32-e
34-a
34-d
34-c
34-b
34-f
34-e
system memory 21
memory device 210
memory device 213
memory device 217
memory device 219

FIG. 4