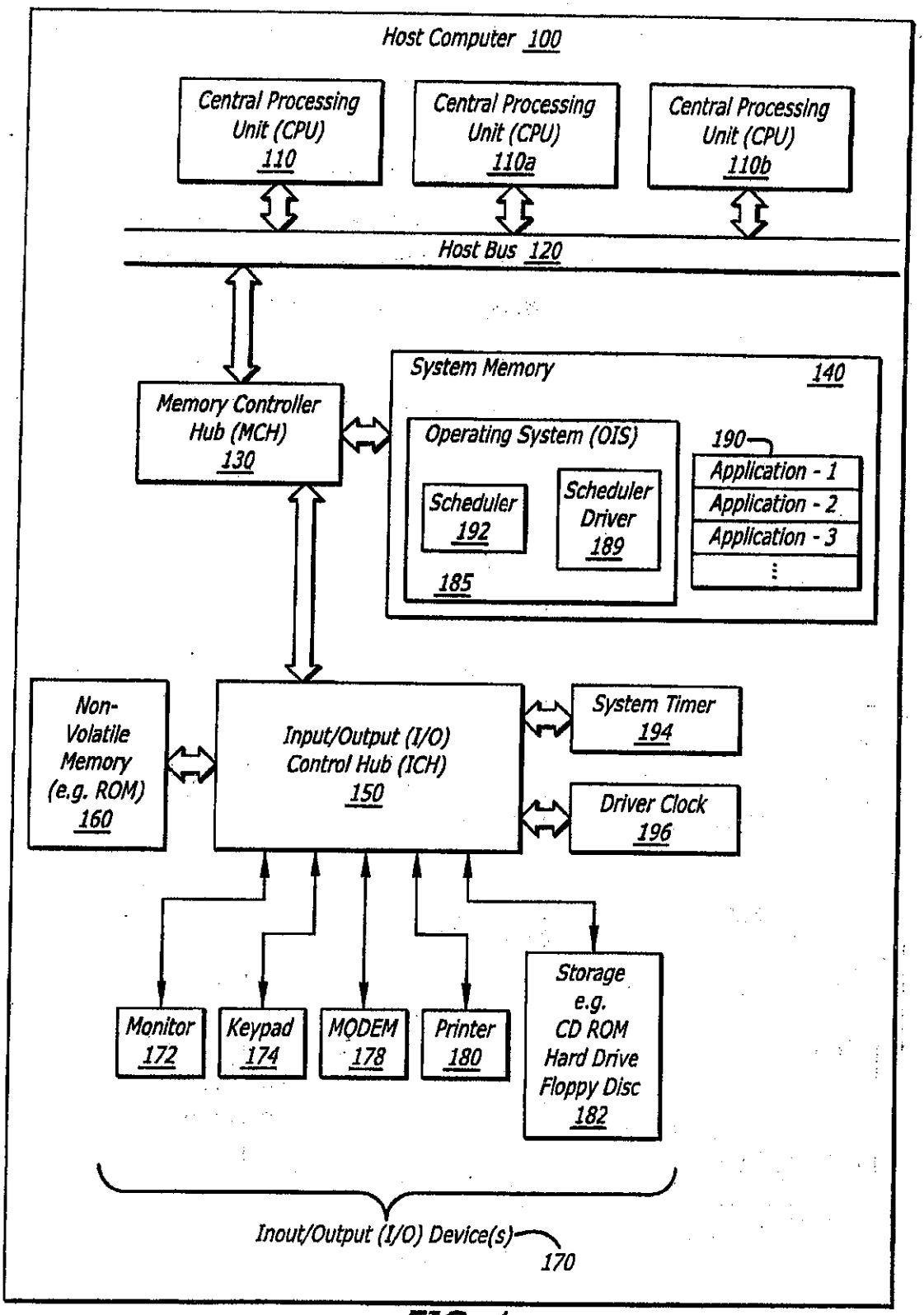

Host Computer 100
Central Processing Unit (CPU) 110
Central Processing Unit (CPU) 110a
Central Processing Unit (CPU) 110b
Host Bus 120
Memory Controller Hub (MCH) 130
System Memory 140
Operating System (OIS)
Scheduler 192
Scheduler Driver 189
185
190
Application - 1
Application - 2
Application - 3
Non-Volatile Memory (e.g. ROM) 160
Input/Output (I/O) Control Hub (ICH) 150
System Timer 194
Driver Clock 196
Monitor 172
Keypad 174
MODEM 178
Printer 180
Storage e.g. CD ROM Hard Drive Floppy Disc 182
Inout/Output (I/O) Device(s) 170

FIG. 1

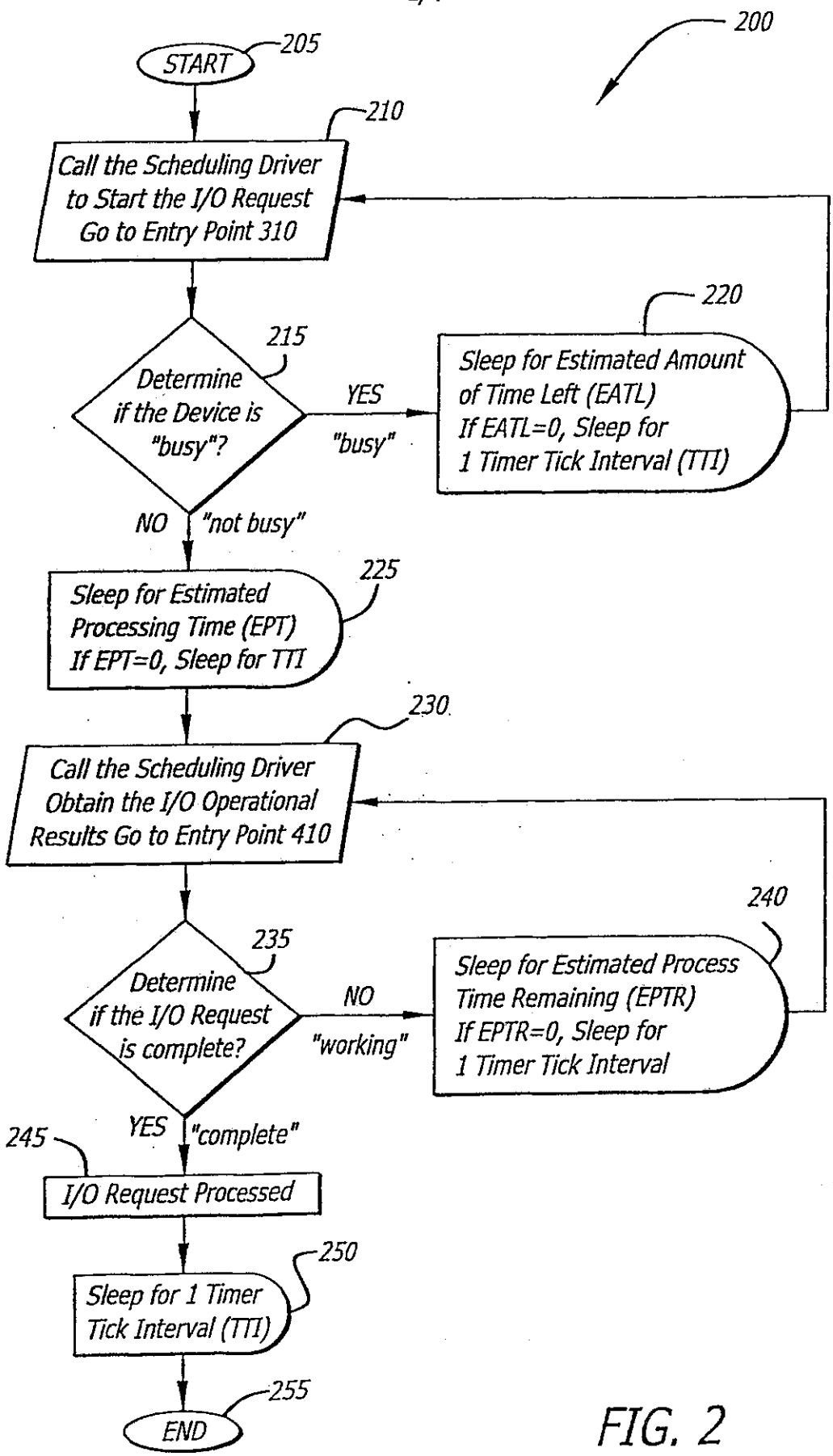

200
START
205
210
Call the Scheduling Driver to Start the I/O Request Go to Entry Point 310
215
Determine if the Device is "busy"?
YES
"busy"
220
Sleep for Estimated Amount of Time Left (EATL) If EATL=0, Sleep for 1 Timer Tick Interval (TTI)
NO
"not busy"
225
Sleep for Estimated Processing Time (EPT) If EPT=0, Sleep for TTI
230
Call the Scheduling Driver Obtain the I/O Operational Results Go to Entry Point 410
235
Determine if the I/O Request is complete?
NO
"working"
240
Sleep for Estimated Process Time Remaining (EPTR) If EPTR=0, Sleep for 1 Timer Tick Interval
YES
"complete"
245
I/O Request Processed
250
Sleep for 1 Timer Tick Interval (TTI)
255
END

FIG. 2

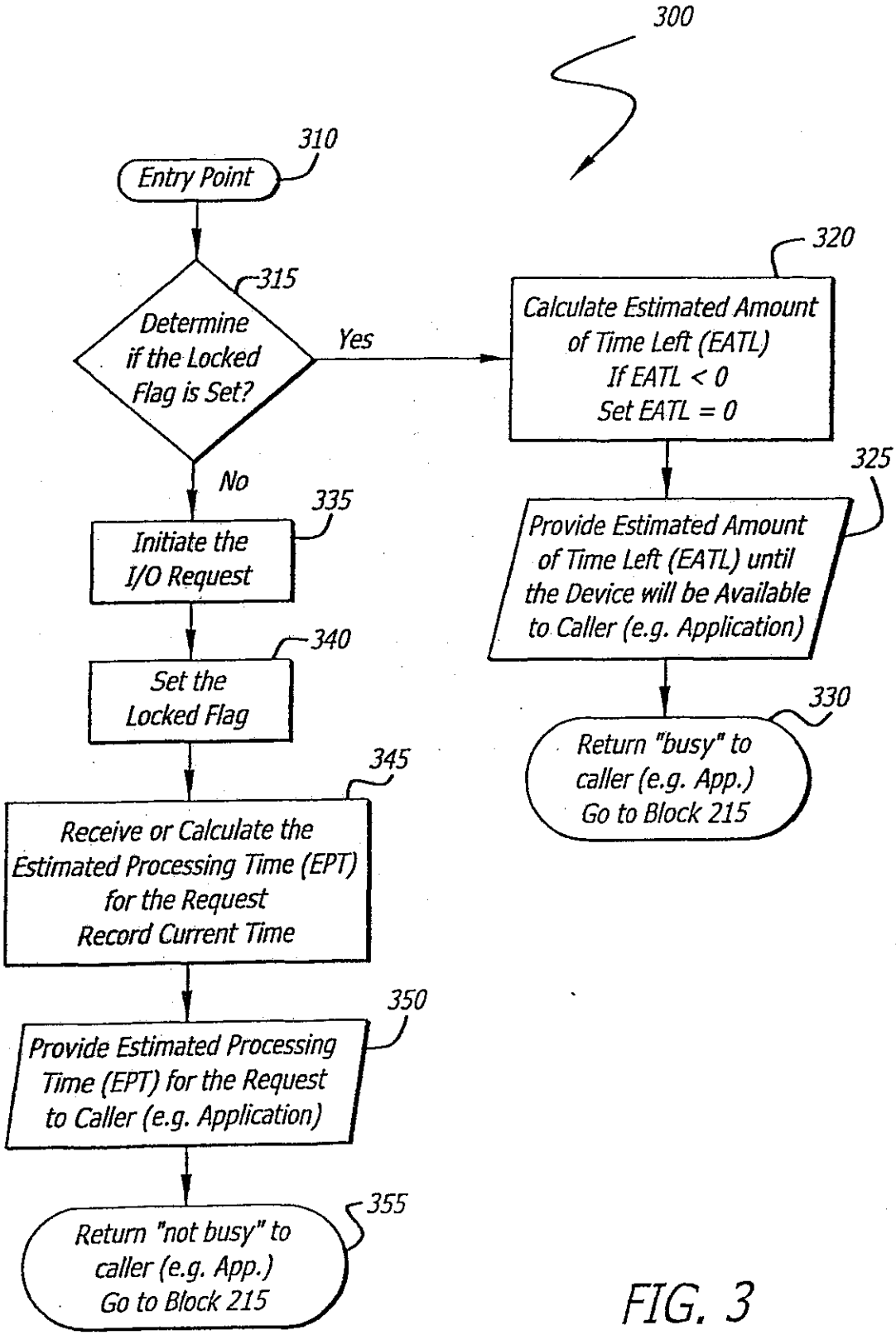

300
310
Entry Point
315
Determine if the Locked Flag is Set?
Yes
No
320
Calculate Estimated Amount of Time Left (EATL)
If EATL < 0
Set EATL = 0
325
Provide Estimated Amount of Time Left (EATL) until the Device will be Available to Caller (e.g. Application)
330
Return "busy" to caller (e.g. App.)
Go to Block 215
335
Initiate the I/O Request
340
Set the Locked Flag
345
Receive or Calculate the Estimated Processing Time (EPT) for the Request
Record Current Time
350
Provide Estimated Processing Time (EPT) for the Request to Caller (e.g. Application)
355
Return "not busy" to caller (e.g. App.)
Go to Block 215

FIG. 3

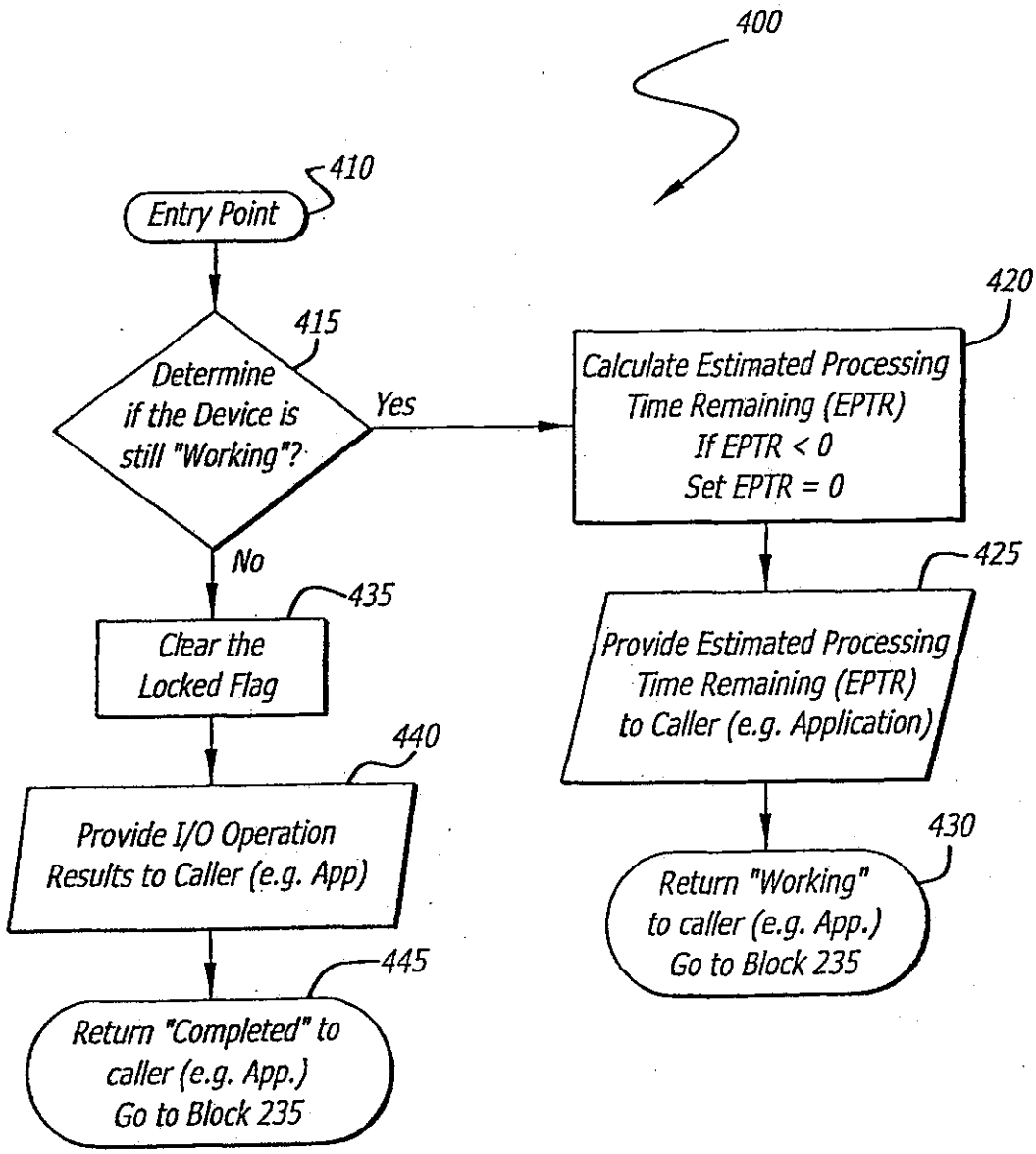

400
410
Entry Point
415
Determine if the Device is still "Working"?
Yes
No
420
Calculate Estimated Processing Time Remaining (EPTR)
If EPTR < 0
Set EPTR = 0
425
Provide Estimated Processing Time Remaining (EPTR) to Caller (e.g. Application)
430
Return "Working" to caller (e.g. App.) Go to Block 235
435
Clear the Locked Flag
440
Provide I/O Operation Results to Caller (e.g. App)
445
Return "Completed" to caller (e.g. App.) Go to Block 235

FIG. 4