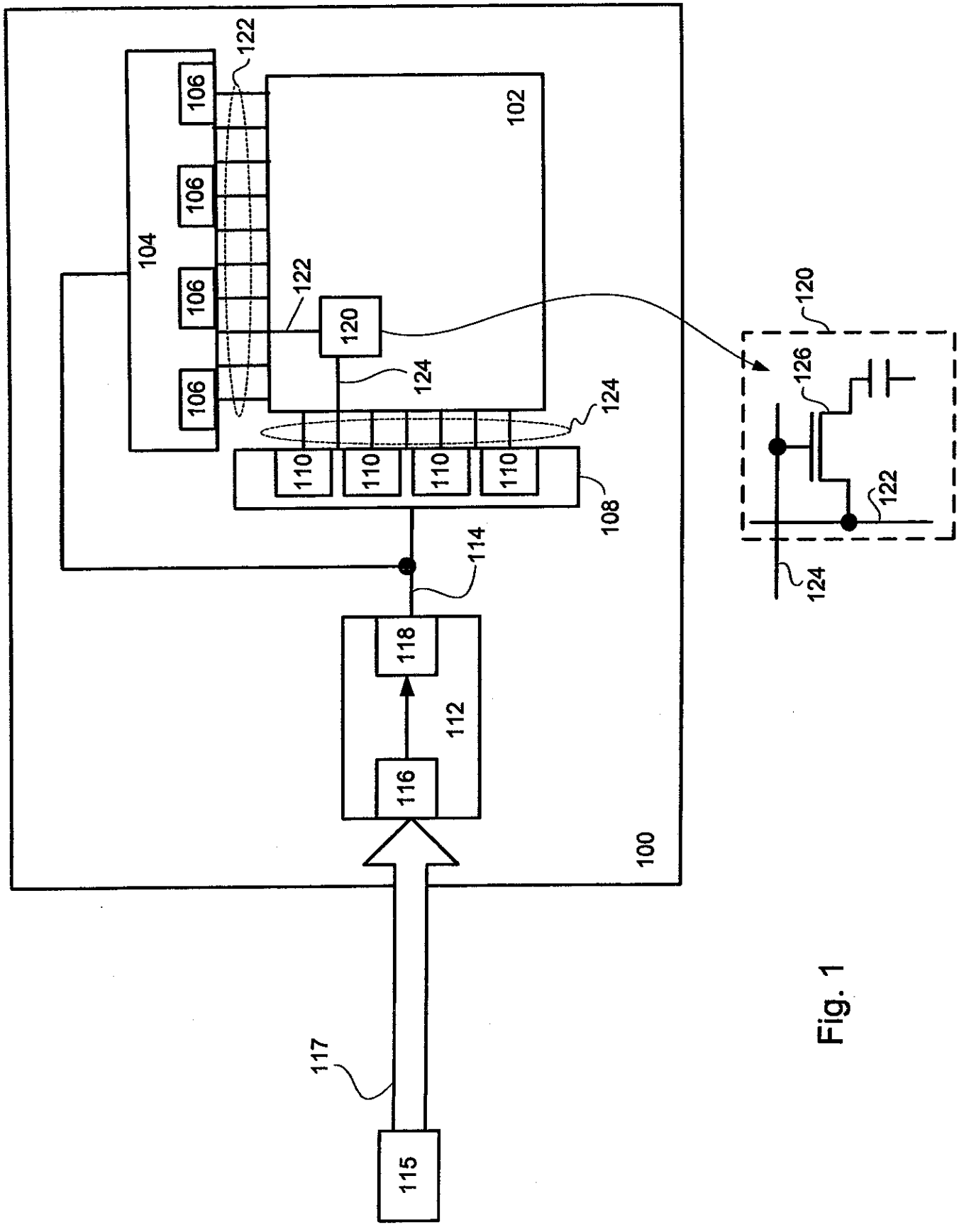

100
102
104
106
106
106
106
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110
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110
110
112
114
116
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118
120
120
122
122
122
124
124
124
126
115

Fig. 1

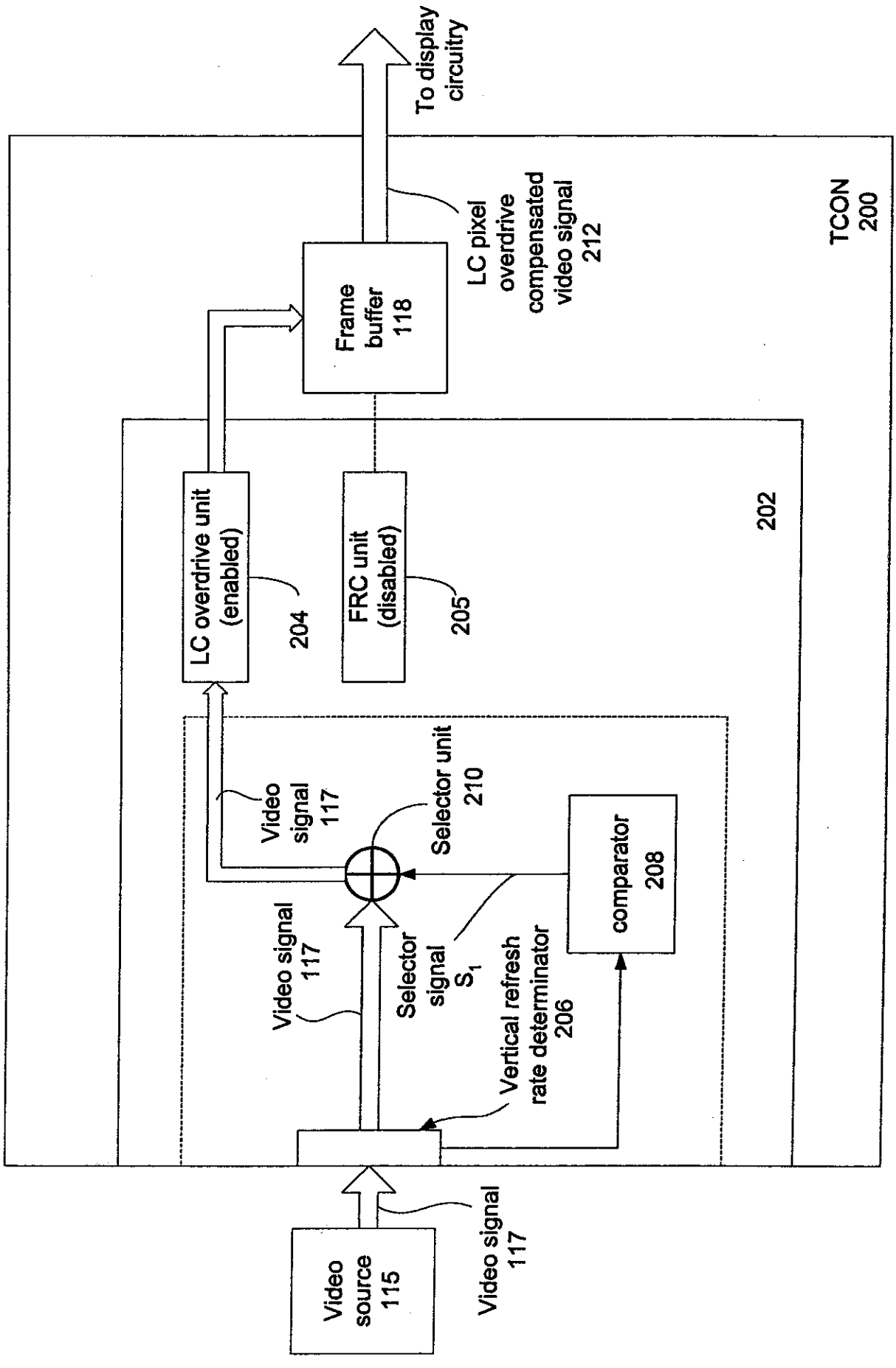

To display circuitry
TCON 200
LC pixel overdrive compensated video signal 212
Frame buffer 118
202
LC overdrive unit (enabled)
204
FRC unit (disabled)
205
Video signal 117
Selector unit 210
comparator 208
Video signal 117
Selector signal S_1
Vertical refresh rate determinator 206
Video source 115
Video signal 117

FIG. 2

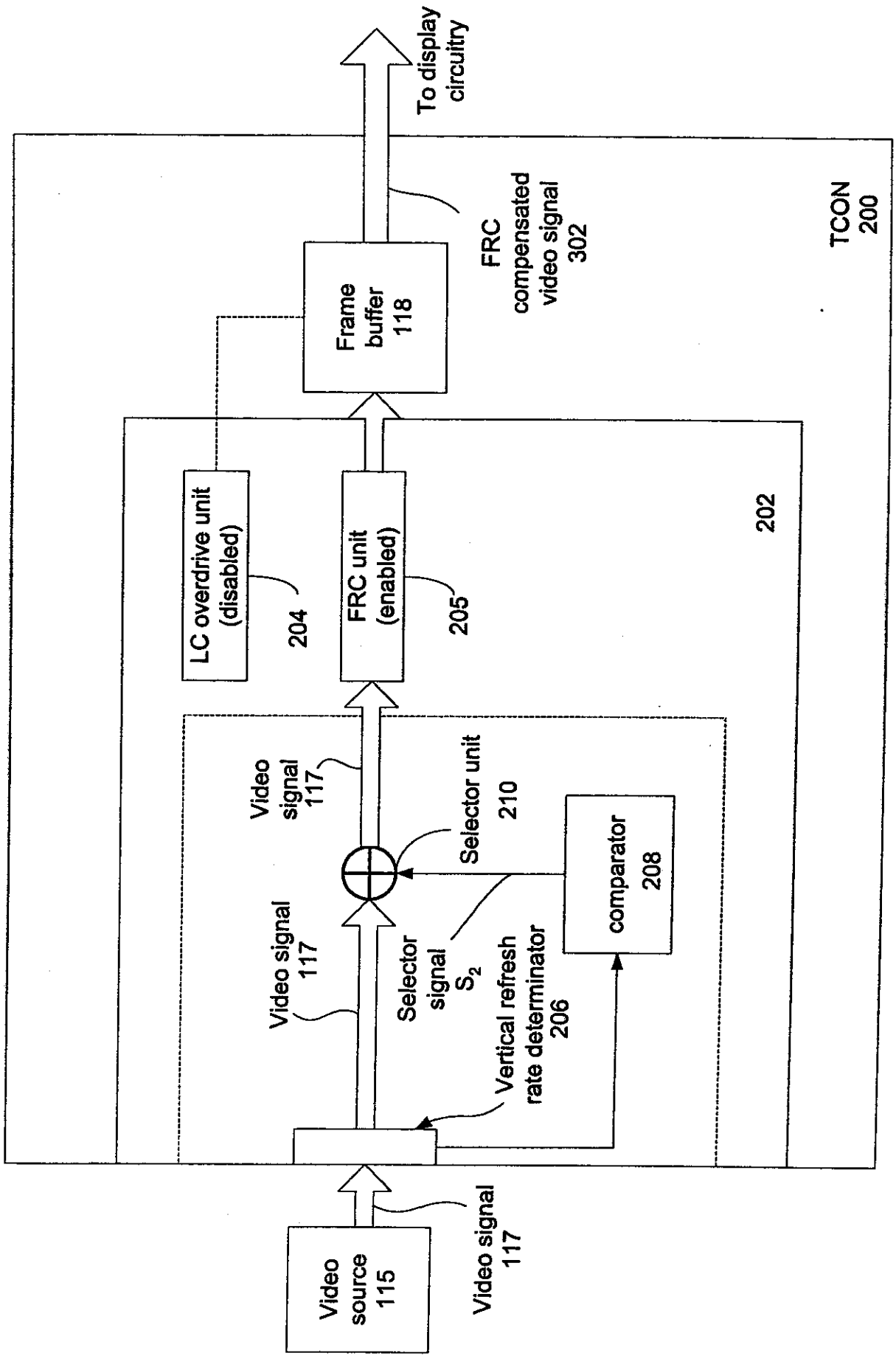

To display circuitry
FRC compensated video signal 302
TCON 200
Frame buffer 118
LC overdrive unit (disabled)
204
FRC unit (enabled)
205
202
Video signal 117
Selector unit 210
comparator 208
Video signal 117
Selector signal S_2
Vertical refresh rate determinator 206
Video source 115
Video signal 117

FIG. 3

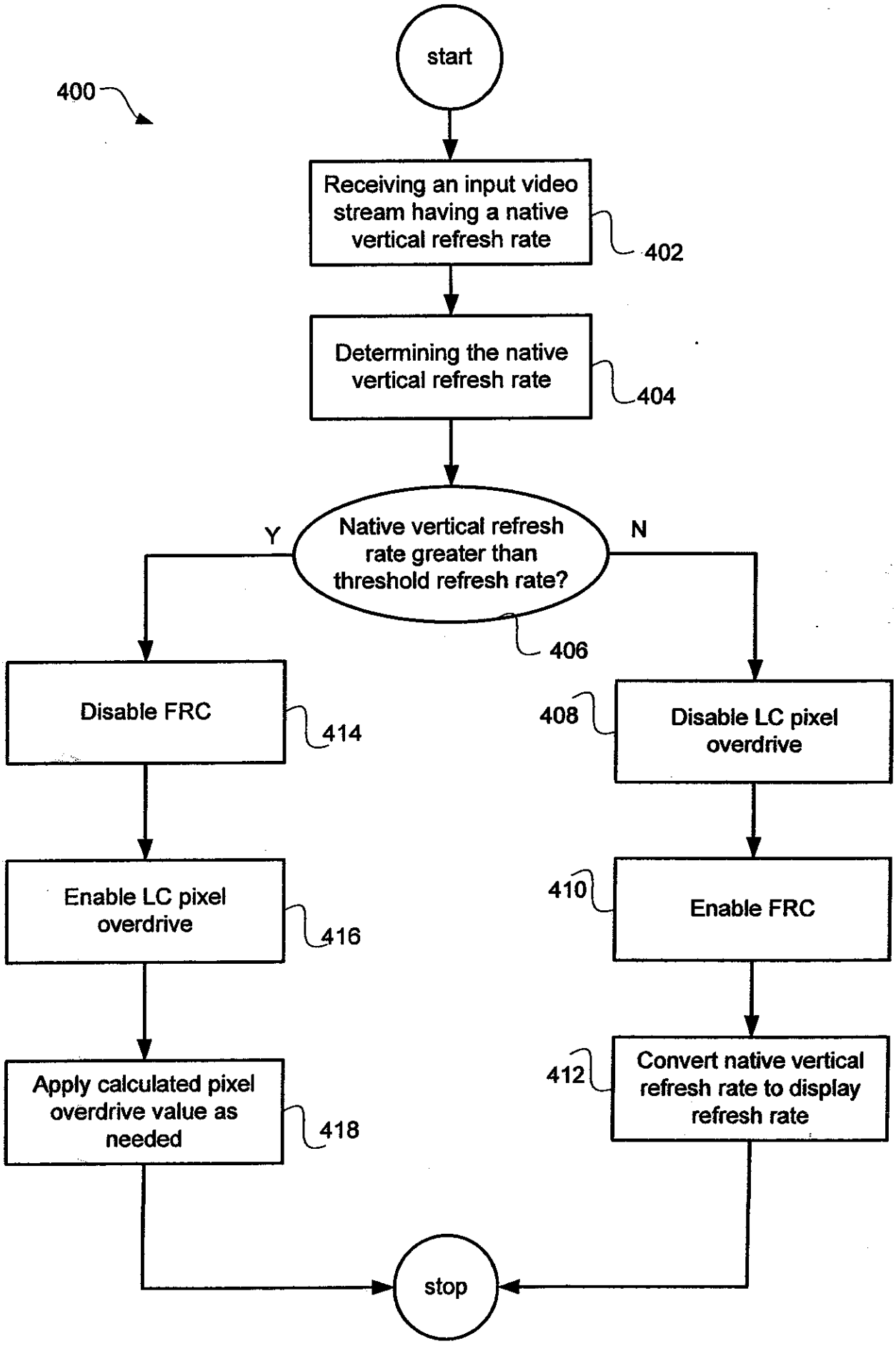

400
start
Receiving an input video stream having a native vertical refresh rate
402
Determining the native vertical refresh rate
404
Native vertical refresh rate greater than threshold refresh rate?
406
Y
N
Disable FRC
414
Enable LC pixel overdrive
416
Apply calculated pixel overdrive value as needed
418
408
Disable LC pixel overdrive
410
Enable FRC
412
Convert native vertical refresh rate to display refresh rate
stop

FIG. 4

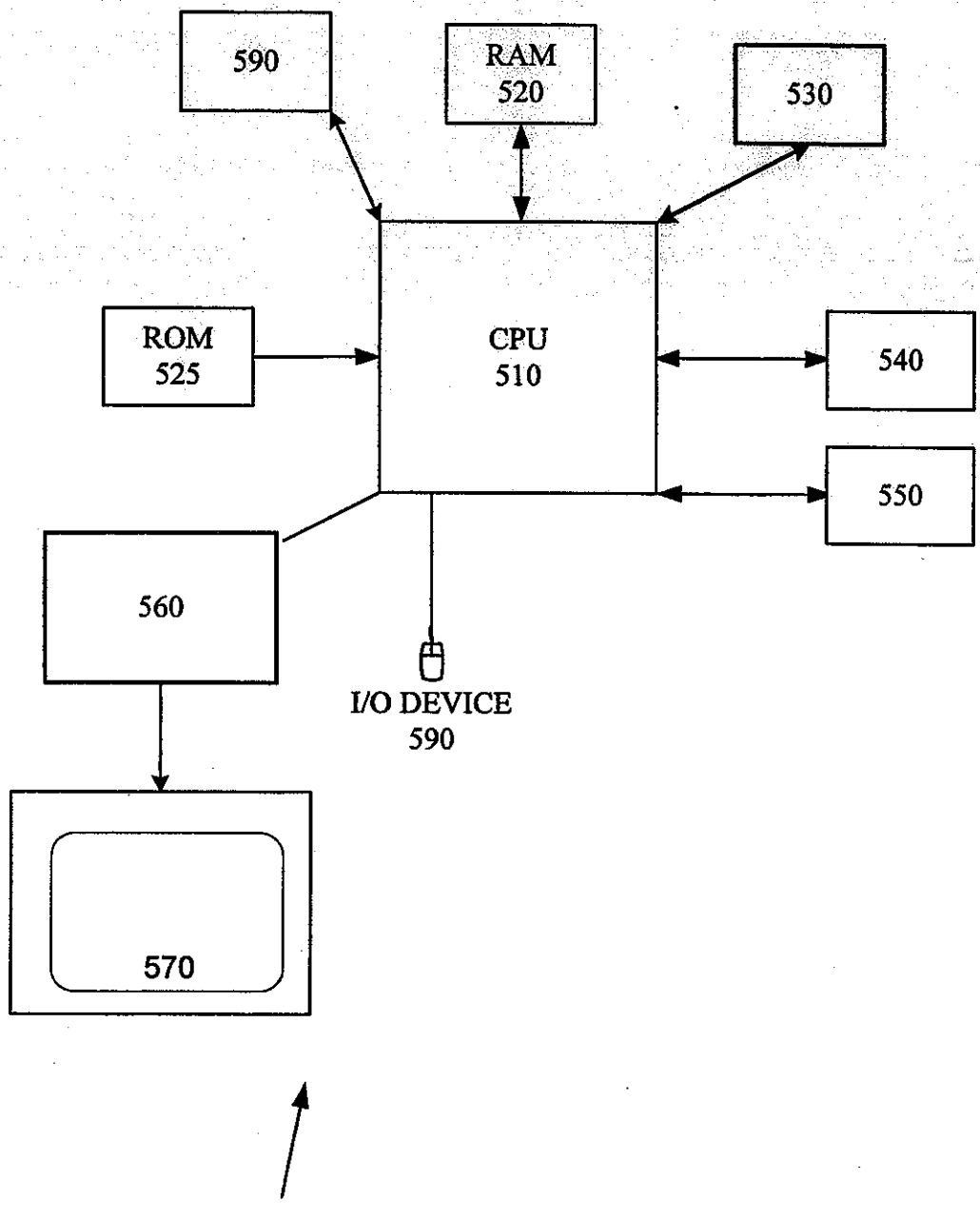

590
RAM
520
530
ROM
525
CPU
510
540
550
560
I/O DEVICE
590
570
500

Fig. 5