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**G5C CHBN**

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**EP 1227467 A2                      WO 2001/027910 A1  
JP 2001236040 A                    US 5594463 A**

(58) Field of Search:  
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INT CL<sup>7</sup> **G09F 9/30 9/33, G09G 3/12 3/20 3/30 3/32  
3/36, H05B 33/12 33/14**  
Other: **Online: EPODOC, JAPIO, WPI**

(54) Abstract Title: **Driver circuits for electroluminescent displays with reduced power consumption**

(57) Display driver circuits for an organic light emitting diode display, particularly a passive matrix display with greater efficiency. The display 302 comprises at least one electroluminescent display element, and the driver including at least one constant current generator 520 for driving the display element. The display driver control circuitry comprises a drive voltage sensor 526 for sensing a voltage on a first line in which the current is regulated by said constant current generator. A voltage controller 528 is coupled to the drive voltage sensor for controlling the voltage of a supply 514, 515 for the constant current generator in response to the sensed voltage, and configured to control said supply voltage to increase the efficiency of the display driver. The voltage controller may be adapted to control the display on a row by row basis, or as a complete frame.

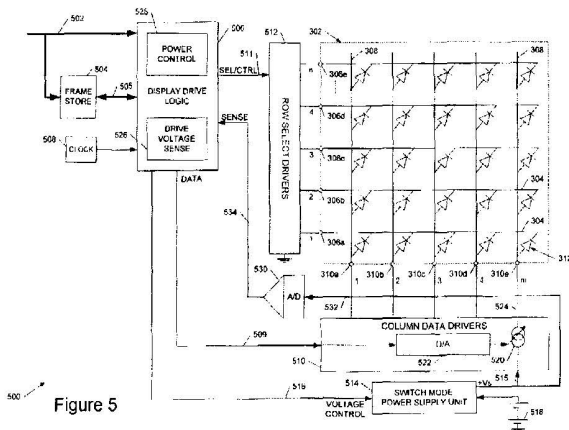


Figure 5

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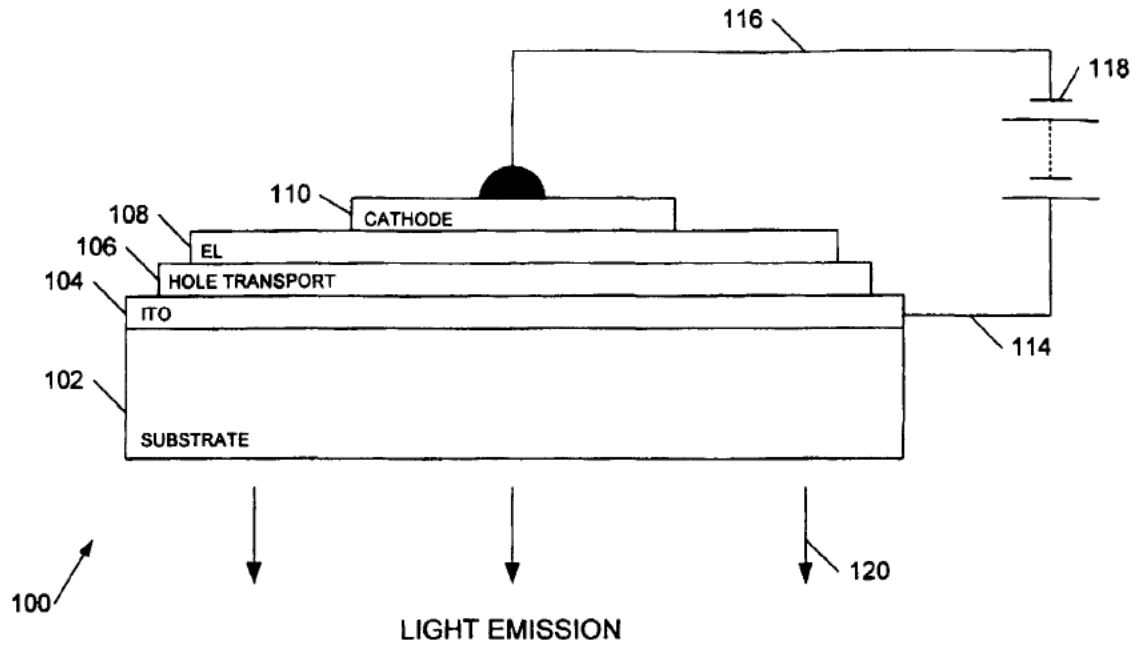


Figure 1a  
(PRIOR ART)

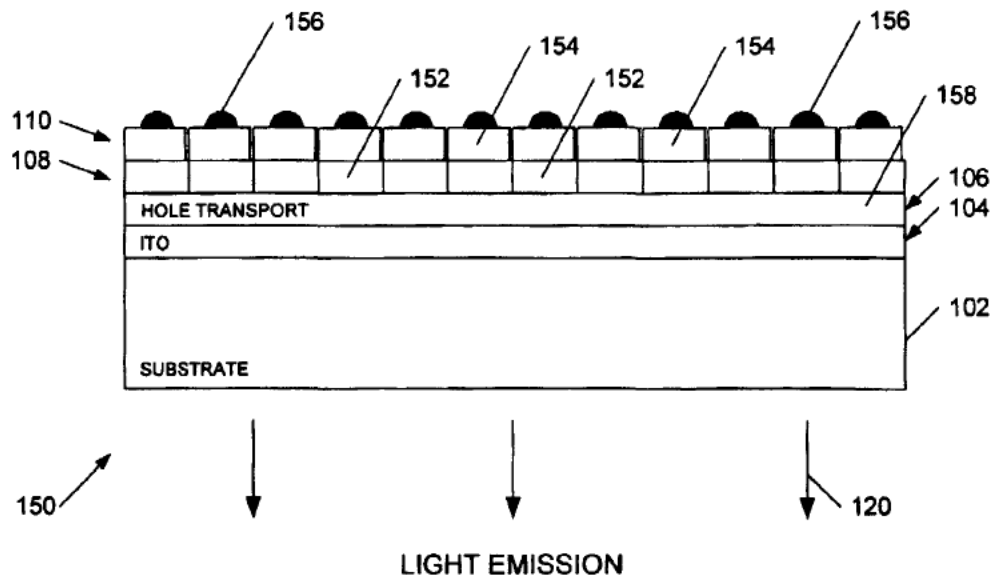


Figure 1b  
(PRIOR ART)

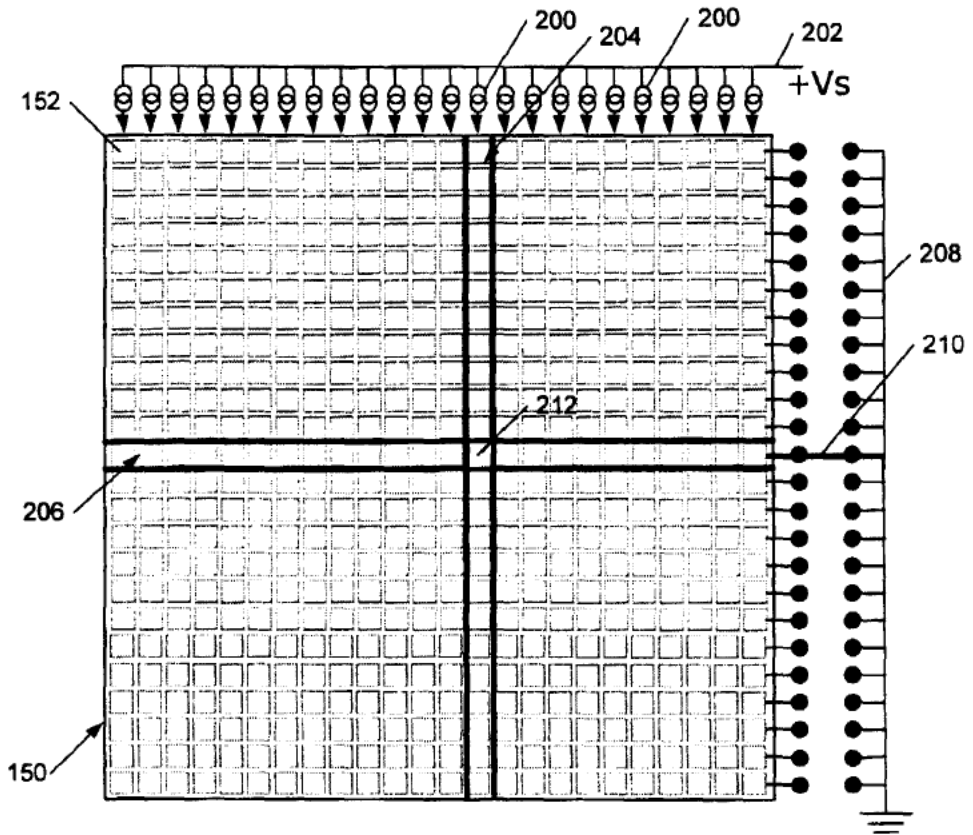


Figure 2a

Figure 2b

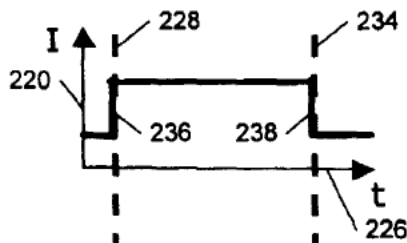


Figure 2c

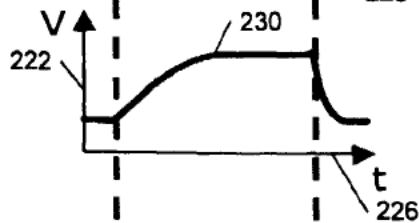
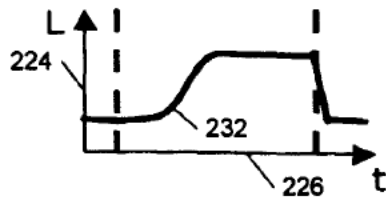


Figure 2d



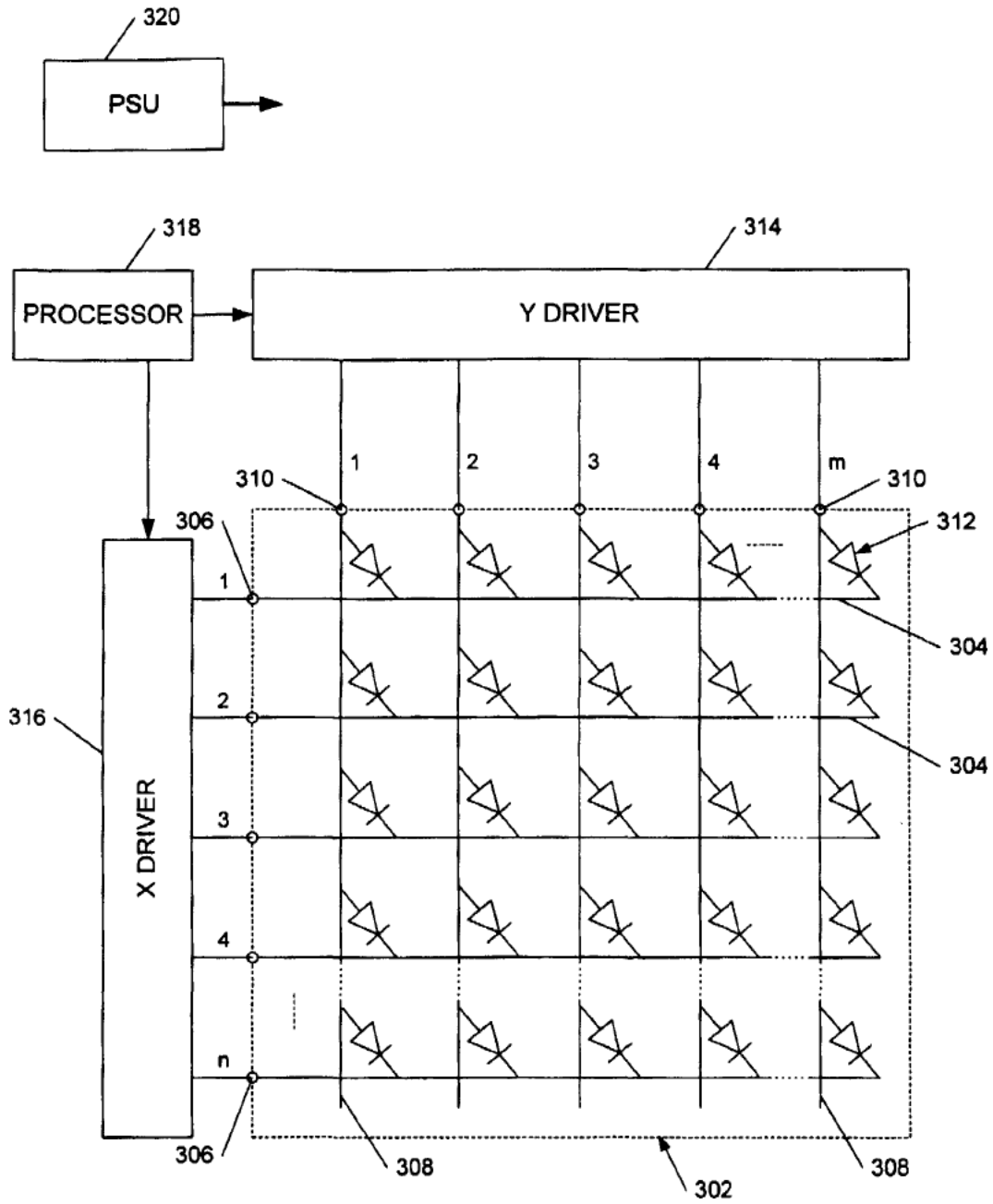


Figure 3  
(PRIOR ART)

300 ↗

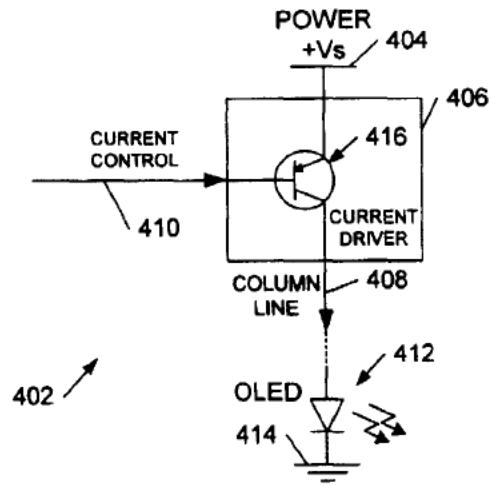
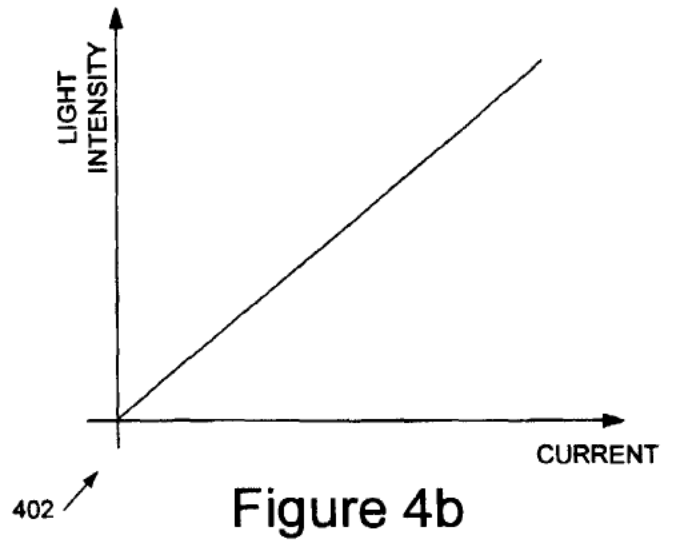
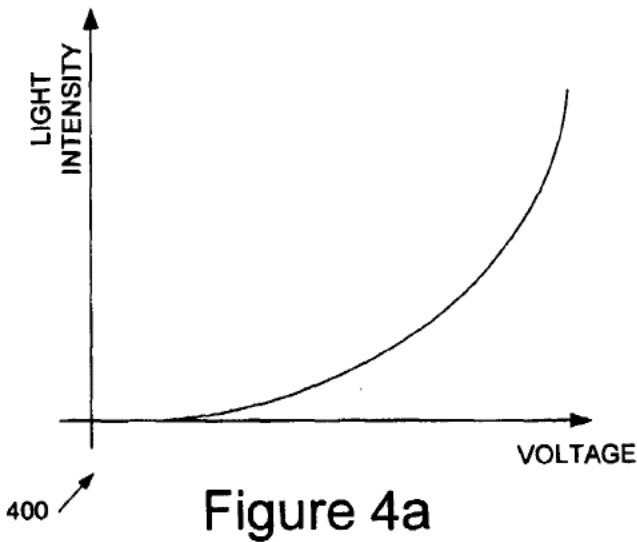
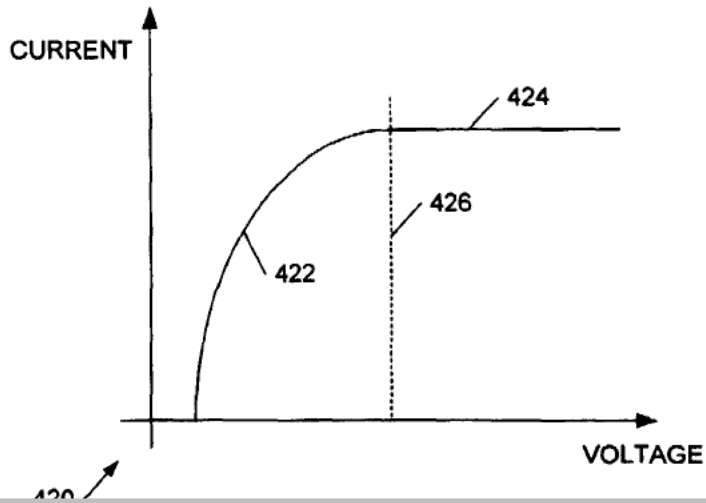


Figure 4c



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