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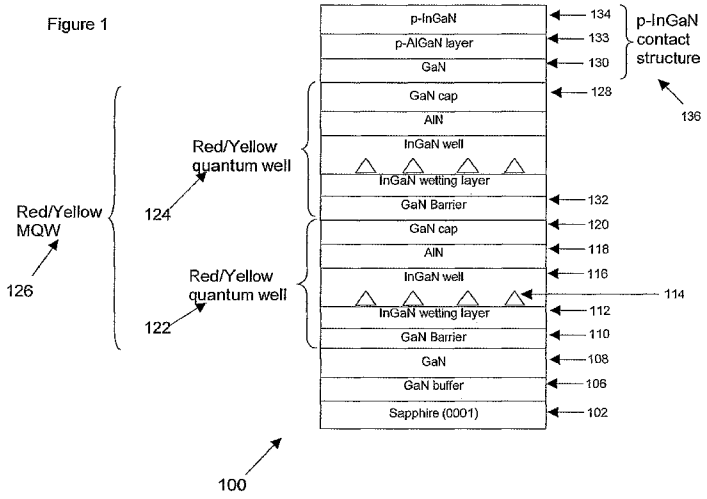
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(54) Title: FABRICATION OF PHOSPHOR FREE RED AND WHITE NITRIDE-BASED LEDs

Figure 1



(57) Abstract: A multiple quantum well (MQW) structure for a light emitting diode and a method for fabricating a MQW structure for a light emitting diode are provided. The MQW structure comprises a plurality of quantum well structures, each quantum well structure comprising: a barrier layer; and a well layer having quantum dot nanostructures embedded therein formed on the barrier layer, the barrier and the well layer comprising a first metal-nitride based material; wherein at least one of the quantum well structures further comprises a capping layer formed on the well layer, the capping layer comprising a second metal-nitride based material having a different metal element compared to the first metal-nitride based material.

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